

Info

Overview of machine thread-cutting taps/machine thread-forming taps (I)

Brand			ATORN®	ATORN®	ATORN®	ATORN®	ATORN®	NACHI	ATORN®	ATORN®	ATORN®	ATORN®	ATORN®
Core hole type	1 Through hole	M	14291	14292	14293	14294	14295	14343	14317	14318 1..	14318 2..	14341 1..	14341 2..
	2 Blind hole	MF											
	3 Blind and through	G											
Cooling lubricant	E Emulsion	UNC											
	0 Oil	UNF											
Suitability symbols	● Well-suited	Core hole type	1	1	1	1	1	1	1	1	1	1	1
	○ Limited suitability	Catalogue page	14.17	14.18	14.18	14.18	14.18	14.19	14.22	14.23	14.23	14.26	14.26

Material	Speed of cutting Vc m/min	Tolerance Base material Coating Emulsion/Oil	6 H HSS-E -	6 H HSS-E -	6 H HSS-E TiN	6 H HSS-E TiCN	6 H HSS-E-PM TiN	6 H HSS-E -	6 H HSS-E -	6 H HSS-E Vaporised	6 H HSS-E TiN	6 H HSS-E -	6 H HSS-E TiCN
	Uncoated	Coated											
Aluminium < 10% Si	20 - 40	30 - 60						○	○				
Aluminium > 10% Si	10 - 25	20 - 40						○	○				
Copper	10 - 12	10 - 20						○	○				
Plastic	20 - 30	-											
Graphite	5 - 15	5 - 30											
St < 520 N	5 - 20	5 - 40	●	●	●	●	●	●	●	●	●	●	●
St < 750 N	5 - 15	5 - 30	●	●	●	●	●	●	●	●	●	●	●
St < 900 N	5 - 12	5 - 24		●	●	●	●	●	●	●	●	●	●
St < 1100 N	4 - 10	4 - 15			●	●	●	●	●	●	●	●	●
St < 1200 N	2 - 8	2 - 12					●	●	●	●	●	●	●
St < 1400 N	2 - 8	2 - 12					○	●	●	●	●	●	●
Hardox	-	-											
< 52 HRC	-	2 - 6											
< 60 HRC	-	2 - 4											
< 65 HRC	-	1 - 3											
GG	8 - 20	8 - 30					●	●					
GGG	8 - 20	8 - 30					●	●					
VA < 900 N	5 - 12	5 - 20					●			●	●		
VA > 900 N	5 - 12	5 - 20					●			●	●		
Titanium	2 - 6	2 - 6								○	○		
Titanium alloy	2 - 6	2 - 6								○	○		
Nickel base	2 - 6	2 - 6								○	○		

Brand			ATORN®	ATORN®	ATORN®	ATORN®	ATORN®	ATORN®	ATORN®	ATORN®	ATORN®	ATORN®
Core hole type	1 Through hole	M	14344	14345	14346 0..	14346 2..	14347	14348	14349	14350/352	14498	14499
	2 Blind hole	MF										
	3 Blind and through	G										
Cooling lubricant	E Emulsion	UNC										
	0 Oil	UNF										
Suitability symbols	● Well-suited	Core hole type	1	1	1	1	1	1	1	1	1	1
	○ Limited suitability	Catalogue page	14.25	14.27	14.28	14.28	14.29	14.30	14.30	14.27	14.59	14.59

Material	Speed of cutting Vc m/min	Tolerance Base material Coating Emulsion/Oil	6 H HSS-E -	6 H HSS-E-PM TiCN	6 H HSS-E Vaporised	6 H HSS-E TiN	6 HX PM Hardlube	6 HX PM/IK Hardlube	6 GX PM Hardlube	6 H HSS-E OX	6 H HSS-E -	6 H HSS-E -	- HSS-E -
	Uncoated	Coated											
Aluminium < 10% Si	20 - 40	30 - 60	○	○	○	○	●	●	●	●	○	○	○
Aluminium > 10% Si	10 - 25	20 - 40	○	○	○	○	●	●	●	●	○	○	○
Copper	10 - 12	10 - 20		○	○	○	●	●	●	●	○	○	○
Plastic	20 - 30	-											
Graphite	5 - 15	5 - 30											
St < 520 N	5 - 20	5 - 40	●	●	●	●	●	●	●	●	●	●	●
St < 750 N	5 - 15	5 - 30	●	●	●	●	●	●	●	●	●	●	●
St < 900 N	5 - 12	5 - 24	●	●	●	●	●	●	●	●	●	●	●
St < 1100 N	4 - 10	4 - 15	●	●	●	●	●	●	●	●	●	●	●
St < 1200 N	2 - 8	2 - 12	●	●									
St < 1400 N	2 - 8	2 - 12											
Hardox	-	-											
< 52 HRC	-	2 - 6											
< 60 HRC	-	2 - 4											
< 65 HRC	-	1 - 3											
GG	8 - 20	8 - 30					●	●	●				
GGG	8 - 20	8 - 30			○	○	●	●	●				
VA < 900 N	5 - 12	5 - 20	○	○	○	○	●	●	●	●			
VA > 900 N	5 - 12	5 - 20	○	○	○	○	●	●	●	●			
Titanium	2 - 6	2 - 6											
Titanium alloy	2 - 6	2 - 6											
Nickel base	2 - 6	2 - 6											

Info

Overview of machine thread-cutting taps/machine thread-forming taps (II)

Brand			ATORN®	ATORN®	ATORN®	ATORN®	ATORN®	ATORN®	ATORN®	NACHI	NACHI	ATORN®	
Core hole type	1 Through hole	M											
	2 Blind hole	MF	14500	14505	14507	14516	14517	14512	14513	14513 0..	14520		
	3 Blind and through	G										14514	
Cooling lubricant	E Emulsion	UNC											
	O Oil	UNF											
Suitability symbols	● Well-suited	Core hole type Catalogue page	1	1	2	1	2	1	2	1	2	1	
	○ Limited suitability		14.59	14.62	14.60	14.64	14.64	14.65	14.65	14.65	14.66	14.66	
													
Material	Speed of cutting Vc m/min		Tolerance Base material Coating Emulsion/Oil	6 H HSS-E TiN	6 H HSS-E Vaporised	6 H HSS-E -	6 H HSS-E OX	6 H HSS-E OX	6 HX PM Hardlube	6 HX PM Hardlube	6 H HSS-PM TiCN	6 H HSS-PM -	6 HX HSS-E Nitrated
	Uncoated	Coated											
Aluminium < 10% Si	20 - 40	30 - 60	E/O	○		○	●	●	●	●	●	●	
Aluminium > 10% Si	10 - 25	20 - 40	E/O	○		○	●	●	●	●	●	●	
Copper	10 - 12	10 - 20	E/O	○		○	●	●	●	●	●	●	
Plastic	20 - 30	-	E/O										
Graphite	5 - 15	5 - 30	E/O										
St < 520 N	5 - 20	5 - 40	E/O	●		●	●	●	●	●	●	●	
St < 750 N	5 - 15	5 - 30	E/O	●		●	●	●	●	●	●	●	
St < 900 N	5 - 12	5 - 24	E/O	●		●	●	●	●	●	●	●	
St < 1100 N	4 - 10	4 - 15	E/O			●	●	●	●	●	●	●	
St < 1200 N	2 - 8	2 - 12	E/O								○	○	
St < 1400 N	2 - 8	2 - 12	E/O										
Hardox	-	-	0										
< 52 HRC	-	2 - 6	0										
< 60 HRC	-	2 - 4	0										
< 65 HRC	-	1 - 3	0										
GG	8 - 20	8 - 30	E						●	●			●
GGG	8 - 20	8 - 30	E						●	●	○	○	●
VA < 900 N	5 - 12	5 - 20	E		●		●	●	●	●	○	○	
VA > 900 N	5 - 12	5 - 20	E/O		●		●	●	●	●	○	○	
Titanium	2 - 6	2 - 6	E/O										
Titanium alloy	2 - 6	2 - 6	E/O										
Nickel base	2 - 6	2 - 6	E/O										

Brand	ATORN®											
Core hole type	1 Through hole 2 Blind hole 3 Blind and through	M MF G	14354	14355	14356	14358 1..	14358 2..	14393				
Cooling lubricant	E Emulsion O Oil	UNC UNF										
Suitability symbols	● Well-suited ○ Limited suitability	Core hole type Catalogue page	1 14.69	3 14.69	1 14.69	3 14.70	3 14.32	3 14.32	1 14.26	1 14.32	1 14.32	2 14.38
Material	Speed of cutting Vc m/min	Tolerance Base material Coating Emulsion/Oil	DIN 5156 HSS-E -	DIN 5156 HSS-E -	DIN 5156 HSS-E Nitrated	DIN 5156 HSS-E -	6 H HSS-E-PM TiAlN	6 H VHM TiAlN+C	6 H HSS-E-PM TiCN	6 HX HSS-E Nitrated	6 HX HSS-E TiN	6 H HSS-E TiN
	Uncoated	Coated										
Aluminium < 10% Si	20 - 40	30 - 60	E/O	○		○						○
Aluminium > 10% Si	10 - 25	20 - 40	E/O	○		○						○
Copper	10 - 12	10 - 20	E/O	○		○						○
Plastic	20 - 30	-	E/O									
Graphite	5 - 15	5 - 30	E/O									
St < 520 N	5 - 20	5 - 40	E/O	●		●						●
St < 750 N	5 - 15	5 - 30	E/O	●		●						●
St < 900 N	5 - 12	5 - 24	E/O	●		●						●
St < 1100 N	4 - 10	4 - 15	E/O		●	●						
St < 1200 N	2 - 8	2 - 12	E/O	●			●					
St < 1400 N	2 - 8	2 - 12	E/O				●					
Hardox	-	-	0									
< 52 HRC	-	2 - 6	0				●	●				
< 60 HRC	-	2 - 4	0					●				
< 65 HRC	-	1 - 3	0					●				
GG	8 - 20	8 - 30	E		●					●	●	○
GGG	8 - 20	8 - 30	E		●					●	●	
VA < 900 N	5 - 12	5 - 20	E									
VA > 900 N	5 - 12	5 - 20	E/O									
Titanium	2 - 6	2 - 6	E/O						●			
Titanium alloy	2 - 6	2 - 6	E/O						●			
Nickel base	2 - 6	2 - 6	E/O						●			



Overview of machine thread-cutting taps/machine thread-forming taps (III)

ATORN® 14394	UNIMA X 14342 14510	UNIMA X 14453 14511	HFW 14302/303 14501	HFW 14306/307	ATORN® 14360 2..	ATORN® 14360 1..	ATORN® 14362	NACHI 14366 0..	ATORN® 14363 1..	ATORN® 14364 1..	ATORN® 14364 2..	ATORN® 14364 3..	ATORN® 14366 1..	ATORN® 14363 2..
2 14.38	1 14.29/14.64	2 14.53/14.64	1 14.19/14.61	1 14.20	1 14.33	1 14.33	1 14.30	1 14.31	Moulder 14.33	Moulder 14.34	Moulder 14.34	Moulder 14.34	Moulder 14.34	Moulder 14.33
														
6 H HSS-E TiCN	6 HX HSS-E-PM Hardlube	6 HX HSS-E-PM Hardlube	6 H HSS-E -	6 H HSS-E OX	6 H HSS-E -	6 H HSS-E-PM CrN	6 HX PM TiCN	6 H HSS-PM TiCN	6 HX PM TiCN	6 HX HSS-E TiN	6 HX HSS-E TiAlN+C	6 HX HSS-E-PM TiCN	6 HX HSS-Co8 TiCN	6 HX HSS-Co8 TiCN IK
  	  	  	  		   	   	   	    	    	    	    	    	     	      
   	   	   	 				      	       	       	       	       	       	        	         
	   	   					   	   	   	   	   	   	   	

ATORN® 14373	ATORN® 14374	ATORN® 14367	ATORN® 14368	ATORN® 14372	ATORN® 14392	ATORN® 14599	ATORN® 14604	ATORN® 14606	ATORN® 14607	ATORN® 14608	ATORN® 14353	KW 14308	KW 14309/310	KW 14319/320
Moulder 14.37	Moulder 14.37	Moulder 14.36	1 14.36	1 14.38	2 14.38	2 14.70	1 14.71	2 14.71	1 14.71	2 14.71	1 14.26	1 14.21	1 14.21	1 14.23
														
6 HX HSS-Co8 TiCN	6 HX HSS-Co8 TiCN	6 HX VHM TiAlN+C	6 H HSS-E -	6 H HSS-E/left -	6 H HSS-E -	DIN 5156 HSS-E -	DIN 5156 PM Hardlube	DIN 5156 PM Hardlube	DIN 5156 HSS-E OX	DIN 5156 HSS-E OX	6 H HSS-E PM	6G HSS-E -	7 G HSS-E -	6 H HSS-E TiN
● ● ● ● ●	● ● ● ● ●		○ ○ ○	○ ○ ○	○ ○ ○	○ ○ ○	● ● ●	● ● ●	● ● ●	● ● ●		● ● ● ●	● ● ● ●	
● ● ● ● ● ○	● ● ● ● ● ○	● ● ● ● ●	● ●	● ●	● ●	● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●		● ●	● ●	● ● ● ●
●	●	● ●				○ ○	● ● ● ●	● ● ● ●		● ●				● ●
											● ● ●			

Brand			NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	
Core hole type	1 Through hole 2 Blind hole 3 Blind and through	M MF G	14330/331	14338/339	14361	14365	14406/407 14502		14408/409	14412/413	14436/437		14438	
Cooling lubricant	E Emulsion O Oil	UNC UNF						14570/571 14582				14601		
Suitability symbols	● Well-suited ○ Limited suitability	Core hole type Catalogue page	1 14.22	1 14.24	1 14.31	Moulder 14.35	2 14.41/14.61	2 14.67/14.68	2 14.42	2 14.43	2 14.45	2 14.70	2 14.45	
Material	Speed of cutting Vc m/min		Tolerance Base material Coating Emulsion/Oil	6 H HSS-E Nitrated	6 H HSS-E VA-OX	6 HX HSS-E-PM TiCN	6 HX HSS-E TiN	6 H HSS-E -	DIN 2184 HSS-E -	6 G HSS-E -	6 H HSS-E OX	6 H HSS-E VA-OX	DIN 5156 HSS-E VA-OX	6 G HSS-E VA-OX
	Uncoated	Coated												
Aluminium < 10% Si	20 - 40	30 - 60	E/O		●	○	●	○	○	○		●	●	●
Aluminium > 10% Si	10 - 25	20 - 40	E/O		●	○	●	○	○	○		●	●	●
Copper	10 - 12	10 - 20	E/O		●	○	●	○	○	○		●	●	●
Plastic	20 - 30	-	E/O					○	○	○				
Graphite	5 - 15	5 - 30	E/O											
St < 520 N	5 - 20	5 - 40	E/O	●	●	●	●	●	●	●	●	●	●	●
St < 750 N	5 - 15	5 - 30	E/O	●	●	●	●	●	●	●	●	●	●	●
St < 900 N	5 - 12	5 - 24	E/O	●	●	●	●	●	●	●	●	●	●	●
St < 1100 N	4 - 10	4 - 15	E/O		●	●	●				●	●	●	●
St < 1200 N	2 - 8	2 - 12	E/O											
St < 1400 N	2 - 8	2 - 12	E/O											
Hardox	-	-	O											
< 52 HRC	-	2 - 6	O											
< 60 HRC	-	2 - 4	O											
< 65 HRC	-	1 - 3	O											
GG	8 - 20	8 - 30	E			○								
GGG	8 - 20	8 - 30	E			○								
VA < 900 N	5 - 12	5 - 20	E		●	●	●					●		●
VA > 900 N	5 - 12	5 - 20	E/O		●	○	●					●		●
Titanium	2 - 6	2 - 6	E/O											
Titanium alloy	2 - 6	2 - 6	E/O											
Nickel base	2 - 6	2 - 6	E/O											

Brand			NACHI	NACHI	NEW	EMUGE	NACHI	NACHI	ATORN	ATORN	ATORN	ATORN	ATORN
Core hole type	1 Through hole 2 Blind hole 3 Blind and through	M MF G	14414	14411	14443/444	14506	14518	14519	14396 14508		14397 14509	14398	14399
Cooling lubricant	E Emulsion O Oil	UNC UNF								14565 14578			
Suitability symbols	● Well-suited ○ Limited suitability	Core hole type Catalogue page	1 14.46	2 14.46	2 14.47	2 14.62	1 14.63	2 14.63	2 14.39/14.60	2 14.67/14.68	2 14.39/14.60	2 14.39	2 14.40
Material	Speed of cutting Vc m/min		Tolerance Base material Coating Emulsion/Oil	6 H HSS-E -	6 H HSS-E -	6 H HSS-E VA-OX	6 H HSS-E -	6 H HSS-E -	6 H HSS-E -	- HSS-E -	6 H HSS-E TiN	6 H HSS-E TiCN	6 H HSS-E -
	Uncoated	Coated											
Aluminium < 10% Si	20 - 40	30 - 60	E/O	●	●	●	●	○	○	○	○	○	
Aluminium > 10% Si	10 - 25	20 - 40	E/O	●	●	●	●	○	○	○	○	○	
Copper	10 - 12	10 - 20	E/O	●	●	●	●	○	○	○	○	○	
Plastic	20 - 30	-	E/O	●	●			○	○				
Graphite	5 - 15	5 - 30	E/O										
St < 520 N	5 - 20	5 - 40	E/O	○	○	●	●	●	●	●	●	●	●
St < 750 N	5 - 15	5 - 30	E/O	○	○	●	●	●	●	●	●	●	●
St < 900 N	5 - 12	5 - 24	E/O	○	○	●	●	●	●	●	●	●	●
St < 1100 N	4 - 10	4 - 15	E/O	○	○	●	●	●	●	●	●	●	●
St < 1200 N	2 - 8	2 - 12	E/O	○	○			○	○				
St < 1400 N	2 - 8	2 - 12	E/O					○	○				
Hardox	-	-	O										
< 52 HRC	-	2 - 6	O										
< 60 HRC	-	2 - 4	O										
< 65 HRC	-	1 - 3	O										
GG	8 - 20	8 - 30	E										
GGG	8 - 20	8 - 30	E					●	●				
VA < 900 N	5 - 12	5 - 20	E	●	●	●	●						
VA > 900 N	5 - 12	5 - 20	E/O	●	●	●	●						
Titanium	2 - 6	2 - 6	E/O										
Titanium alloy	2 - 6	2 - 6	E/O										
Nickel base	2 - 6	2 - 6	E/O										

14333/334	14400/401	14402/403	14433	14449 1..	14449 2..	14450	14454	14455 0..	14455 2..	14456	14457	14458	14462	14466
1 14.24	2 14.41	2 14.42	2 14.51	2 14.49	2 14.49	2 14.52	2 14.56	2 14.52	2 14.52	2 14.53	2 14.54	2 14.54	2 14.56	2 14.55
														
6 H HSS-E TiCN	6 H HSS-E -	6 H HSS-E -	6 H HSS-E OX	6 H HSS-E blank	6 H HSS-E TiCN	6 H HSS-E-PM TiCN	6 H HSS-E-PM -	6 H HSS-E -	6 H HSS-E TiN	6 HX PM Hardlube	6 HX PM/IK Hardlube	6 GX PM Hardlube	6 H HSS-E -	6 HX HSS-E-PM TiCN
	○	○	●			○	○	○	○	●	●	●	●	○
	○	○	●			○	○			●	●	●	●	○
	○	○	●			○	○	○	○	●	●	●	●	○
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●		●	●	●	●	●	●	●	●	●	●	●	●
●			●	●	●	●	●	●	●	●	●	●	●	●
				●	●	●	●	●	●					
●			●			●		○	○	●	●	●		○
●			●			○		○	○	●	●	●		○

Overview of machine thread-cutting taps/machine thread-forming taps (VI)

Brand			EMUGE	EMUGE	ATORN®	NACHI	ATORN®	ATORN®				
Core hole type	1 Through hole		M	14315/316	14340	14404	14410	14425 1..	14425 2..		14429/430	
	2 Blind hole		MF									
	3 Blind and through		G									14602
Cooling lubricant	E Emulsion		UNC							14603		
	O Oil		UNF									
Suitability symbols	● Well-suited		Core hole type Catalogue page	1	1	2	2	2	2		2	3
	○ Limited suitability			14.21	14.25	14.39	14.40	14.44	14.44	14.72	14.44	14.72
Material	Speed of cutting Vc m/min		Tolerance	6 H	6 H	6 H	6 H	6 H	6 H	DIN 5156	6 H	DIN 5156
	Uncoated	Coated	Base material Coating Emulsion/Oil	HSS-E -	HSS-E -	HSS-E-PM TiN	HSS-E -	HSS-E Vaporised	HSS-E TiN	HSS-E -	HSS-E TiCN	HSS-E -
Aluminium < 10% Si	20 - 40	30 - 60	E/O				○			○		○
Aluminium > 10% Si	10 - 25	20 - 40	E/O				○			○		○
Copper	10 - 12	10 - 20	E/O				●			○		○
Plastic	20 - 30	-	E/O							○		
Graphite	5 - 15	5 - 30	E/O									
St < 520 N	5 - 20	5 - 40	E/O	●	○	●		●			○	●
St < 750 N	5 - 15	5 - 30	E/O	●	○	●	●	●		●	○	●
St < 900 N	5 - 12	5 - 24	E/O	●	○	●	●	●			○	●
St < 1100 N	4 - 10	4 - 15	E/O		○	●	●					
St < 1200 N	2 - 8	2 - 12	E/O				●					
St < 1400 N	2 - 8	2 - 12	E/O									
Hardox	-	-	O									
< 52 HRC	-	2 - 6	O									
< 60 HRC	-	2 - 4	O									
< 65 HRC	-	1 - 3	O									
GG	8 - 20	8 - 30	E		○	○						
GGG	8 - 20	8 - 30	E		○		●					
VA < 900 N	5 - 12	5 - 20	E		●	○		●	●		○	
VA > 900 N	5 - 12	5 - 20	E/O		●	○		●	●		○	
Titanium	2 - 6	2 - 6	E/O					○	○			
Titanium alloy	2 - 6	2 - 6	E/O					○	○			
Nickel base	2 - 6	2 - 6	F/O					○	○			

Info

The HHW colour guidance system

With the **HHW** colour guidance system you can see at first glance which materials the tool is suitable for. In most catalogue sections, the **HHW** also informs you about the application data for the corresponding tool. The **HHW** colour guidance system is logically structured according to the steel key. This means that you can select the appropriate tools in advance of the machining process, saving you time and money.

St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA-steel<900N	VA-steel>900N	Ti alloys	GG(G)	plastics
40-50	35-40	-	-	-	-	35-45	35-45	-	80-120	-

Use
HM grade
Coating

Designation	W ^{±0,1} mm	R ^{±0,05} mm		18674	...
GTN-2	2,2	0,16	10 pieces	113	
GTN-3	3,1	0,20	10 pieces	114	



Core hole dimensions for thread cutting

M	Ø mm	MF	Ø mm	MF	Ø mm	UNC	Ø mm	g	Ø mm	UNF	Ø mm	PG	Ø mm	NPT	Ø mm
M 1	0.75	M 2.5 x 0.35	2.15	M 22 x 1.5	20.50	No. 1	1.50	G 1/8	8.80	No. 4	2.40	PG7	11.40	1/16	6.30
M 1.1	0.85	M 3 x 0.35	2.65	M 22 x 2	20.00	No. 2	1.80	G 1/4	11.80	No. 5	2.70	PG9	14.00	1/8	8.50
M 1.2	0.95	M 3.5 x 0.35	3.15	M 24 x 1	23.00	No. 3	2.10	G 3/8	15.25	No. 6	3.00	PG11	17.25	1/4	11.10
M 1.4	1.10	M 4 x 0.35	3.65	M 24 x 1.5	22.50	No. 4	2.30	G 1/2	19.00	No. 8	3.50	PG13.5	19.00	3/8	14.50
M 1.6	1.25	M 4 x 0.5	3.50	M 24 x 2	22.00	No. 5	2.65	G 3/4	24.50	No. 10	4.10	PG16	21.25	1/2	17.75
M 1.8	1.45	M 5 x 0.5	4.50	M 25 x 1.5	23.50	No. 6	2.85	G 1	30.75	No. 12	4.65	PG21	27.00	3/4	23.00
M 2	1.60	M 6 x 0.5	5.50	M 26 x 1.5	24.50	No. 8	3.50	G 1 1/8	35.50	1/4	5.50	PG26	35.50	1	29.00
M 2.2	1.75	M 6 x 0.75	5.20	M 27 x 1.5	25.50	No. 10	3.90	G 1 1/4	39.50	5/16	6.90				
M 2.5	2.05	M 7 x 0.75	6.20	M 27 x 2	25.00	No. 12	4.50	G 1 1/2	45.00	3/8	8.50				
M 3	2.50	M 8 x 0.5	7.50	M 28 x 1.5	26.50	1/4	5.10			7/16	9.90				
M 3.5	2.90	M 8 x 0.75	7.20	M 30 x 1	29.00	5/16	6.60			1/2	11.50				
M 4	3.30	M 8 x 1	7.00	M 30 x 1.5	28.50	3/8	8.00			9/16	12.90				
M 4.5	3.80	M 9 x 1	8.00	M 30 x 2	28.00	7/16	9.40			5/8	14.50				
M 5	4.20	M 10 x 0.75	9.20	M 32 x 1.5	30.50	1/2	10.80			3/4	17.50				
M 6	5.00	M 10 x 1	9.00	M 33 x 2	31.00	9/16	12.2			7/8	20.50				
M 7	6.00	M 10 x 1.25	8.80	M 34 x 1.5	32.50	5/8	13.50			1	23.25				
M 8	6.80	M 11 x 1	10.00	M 36 x 1.5	34.50	3/4	16.50								
M 9	7.80	M 12 x 1	11.00	M 36 x 2	34.00	7/8	19.50								
M 10	8.50	M 12 x 1.25	10.80	M 36 x 3	33.00	1	22.25								
M 11	9.50	M 12 x 1.5	10.50	M 38 x 1.5	36.50										
M 12	10.20	M 14 x 1	13.00	M 40 x 1.5	38.50										
M 14	12.00	M 14 x 1.25	12.80	M 42 x 1.5	40.50										
M 16	14.00	M 14 x 1.5	12.50												
M 18	15.50	M 15 x 1	14.00												
M 20	17.50	M 15 x 1.5	13.50												
M 22	19.50	M 16 x 1	15.00												
M 24	21.00	M 16 x 1.5	14.50												
M 30	26.50	M 18 x 1.5	16.50												
M 33	29.50	M 20 x 1	19.00												
M 36	32.00	M 20 x 1.5	18.50												
M 39	35.00	M 20 x 2	18.00												
M 42	37.50	M 22 x 1	21.00												

Core hole dimensions for thread forming

M	Ø mm	M	Ø mm	MF	Ø mm	MF	Ø mm	MF	Ø mm
M 1	0.90	M 3.5	3.25	M 2.5 x 0.35	2.35	M 10 x 0.75	9.65	M 14 x 1.5	13.30
M 1.2	1.10	M 4	3.70	M 3 x 0.35	2.85	M 10 x 1	9.50	M 16 x 1	15.50
M 1.4	1.10	M 5	4.65	M 3.5 x 0.35	3.35	M 10 x 1.25	9.40	M 16 x 1.5	15.30
M 1.6	1.45	M 6	5.55	M 4 x 0.5	3.80	M 12 x 1	11.50	M 18 x 1.5	17.30
M 1.8	1.65	M 8	7.40	M 4.5 x 0.5	4.30	M 12 x 1.25	11.40	M 20 x 1.5	19.50
M 2	1.83	M 10	9.30	M 5 x 0.5	4.80	M 12 x 1.5	11.30	M 20 x 1.5	19.30
M 2.2	2.00	M 12	11.10	M 6 x 0.75	5.65	M 14 x 1	13.50	M 20 x 2	19.00
M 2.5	2.30	M 14	13.00	M 8 x 0.75	7.65				
M 3	2.80	M 16	15.00	M 8 x 1	7.50				

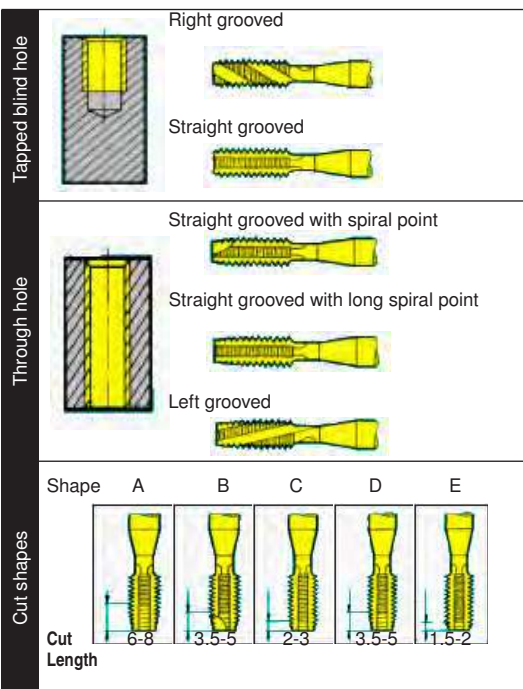
Cooling lubricants for thread cutting

The problem zone is reached as soon as the emulsion has a fat content of less than 5% - A pure cooling effect is created; the actual lubrication effect is dispensed with.

- The result is a build-up of cutting edges.
- The surface quality becomes very poor.
- The service life is reduced.
- Optimisation is achieved with IKZ (internal coolant supply).

Thread forming

- A highly compressible cooling lubricant is required for thread forming.
- The lubricating film must not tear off.
- If you form with emulsion, it should have a fat content of at least 8-10%.

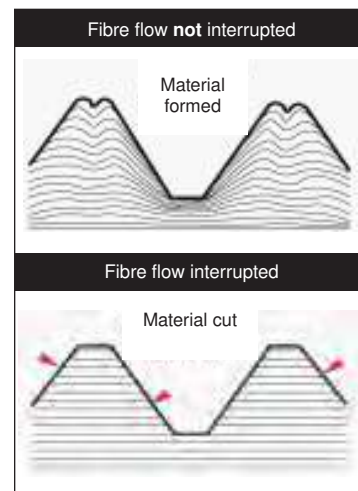


Minimum quantity lubrication (MMS)

- Lubrication of the tool and the workpiece through oil droplets finely distributed in an air flow.
- Feed of lubricant through internal or external MMS.

Advantage:

- Elimination of cooling lubricant.
 - No disposal costs for chips and cooling lubricants.
 - Elimination of workpiece cleaning.
- With cut threads, the permissible load values are affected by the cutting of the material fibres. In addition, flank angle errors, which cause unfavourable stress distributions and reduce the load-bearing percentage, can occur more easily. With formed threads, unbroken fibres and a cold-bonded material are produced, whereby the tear-out strength is considerably increased. Additional flank angle deviations are avoided because the material deforms without play on the flank of the tool. The incompletely formed core, a typical feature of shaped threads, has no effect the strength.



Thread-cutting machine | Hand taps

21470

Thread-cutting machine

ATORN®

Design

- Electrically driven motor
- For vertical and horizontal thread cutting
- Manual speed control by means of a potentiometer
- Operation with standard quick-change inserts

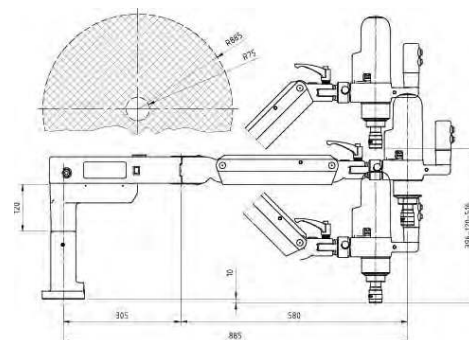
Scope of delivery:

- Basic tool chuck
- Articulated arm and swivel adapter for vertical and horizontal thread cutting

Options:

- Automatic tool lubrication
- Workbenches with wheels
- Magnetic holder
- Quick-change inserts (see art no. 21459–21460)

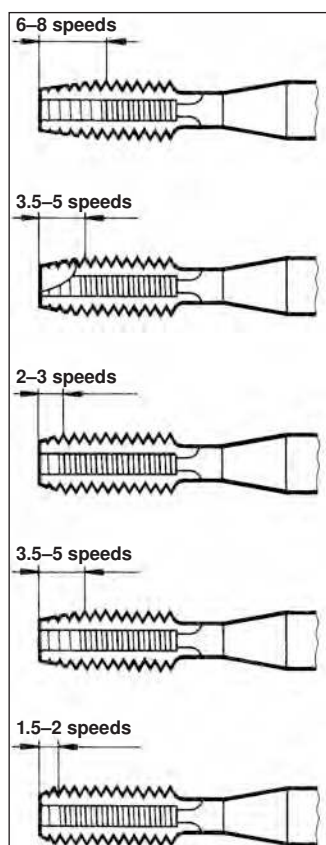
21470 101



d1 (H9)	Rotation speed rpm	Torque Nm	Connection V	Work area radius in mm	Work area height in mm	Tool chuck size in mm	21470	...
Thread-cutting performance								
Steel M2–M14/aluminium M2–M16	300/600	34	220	75–885	516	1/19	101	
							21470	...
Table clamp								201

Info

Cutting point shapes DIN screw taps



Type A



Type B



Type C



Type D



Type E





Design

Up to M 1.4 tolerance field ISO 1 (4H).

14010

Three pieces in set:
taper, second and third tap.

14018

Taper tap

14019

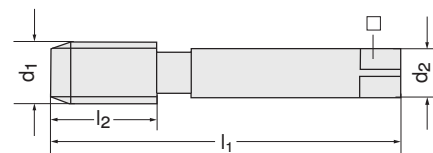
Second tap

14020

Third tap



14010



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x T mm	Set		No 1		No 2		F	
						14010	...	14018	...	14019	...	14020	...
M 1	0.75	0.25	5.5	32	2.5 x 2.1		301		101		101		101
M 1.1	0.85	0.25	5.5	32	2.5 x 2.1		302		102		102		102
M 1.2	0.95	0.25	5.5	32	2.5 x 2.1		303		103		103		103
M 1.4	1.10	0.30	7.0	32	2.5 x 2.1		304		104		104		104
M 1.6	1.25	0.35	8.0	32	2.5 x 2.1		305		105		105		105
M 1.8	1.45	0.35	8.0	32	2.5 x 2.1		306		106		106		106
M 2	1.60	0.40	8.0	36	2.8 x 2.1		307		107		107		107
M 2.2	1.75	0.45	9.0	36	2.8 x 2.1		308		108		108		108
M 2.5	2.05	0.45	9.0	40	2.8 x 2.1		309		109		109		109
M 3	2.50	0.50	11.0	40	3.5 x 2.7		310		110		110		110
M 3.5	2.90	0.60	12.0	45	4.0 x 3.0		311		111		111		111
M 4	3.30	0.70	13.0	45	4.5 x 3.4		312		112		112		112
M 4.5	3.70	0.75	16.0	50	6.0 x 4.9		313		113		113		113
M 5	4.20	0.80	16.0	50	6.0 x 4.9		314		114		114		114
M 6	5.00	1.00	19.0	56	6.0 x 4.9		315		115		115		115
M 7	6.00	1.00	19.0	56	6.0 x 4.9		316		116		116		116
M 8	6.80	1.25	22.0	63	6.0 x 4.9		317		117		117		117
M 9	7.80	1.25	22.0	63	7.0 x 5.5		318		118		118		118
M 10	8.50	1.50	24.0	70	7.0 x 5.5		319		119		119		119
M 11	9.50	1.50	24.0	70	8.0 x 6.2		320		120		120		120
M 12	10.20	1.75	28.0	75	9.0 x 7.0		321		121		121		121
M 14	12.00	2.00	30.0	80	11.0 x 9.0		322		123		123		123
M 16	14.00	2.00	32.0	80	12.0 x 9.0		323		125		125		125
M 18	15.50	2.50	34.0	95	14.0 x 11.0		324		127		127		127
M 20	17.50	2.50	34.0	95	16.0 x 12.0		325		129		129		129
M 22	19.50	2.50	34.0	100	18.0 x 14.5		326		131		131		131
M 24	21.00	3.00	38.0	110	18.0 x 14.5		327		133		133		133
M 27	24.00	3.00	38.0	110	20.0 x 16.0		328		136		136		136
M 30	26.50	3.50	45.0	125	22.0 x 18.0		329		139		139		139
M 33	29.50	3.50	50.0	125	25.0 x 20.0		330		142		142		142
M 36	32.00	4.00	56.0	150	28.0 x 22.0		331		145		145		145
M 39	35.00	4.00	60.0	150	32.0 x 24.0		332		148		148		148
M 42	37.50	4.50	60.0	150	32.0 x 24.0		333		151		151		151

Hand taps

14014 - 14028

Hand taps

M

6H

DIN
352

≤2,5xD

HSS

≤ 800
N/mm²

Design

Up to M 1.4 tolerance field ISO 1 (4H).

Note:

Cost-effective design.

14014

Three pieces in set:
taper, second and third tap.

14026

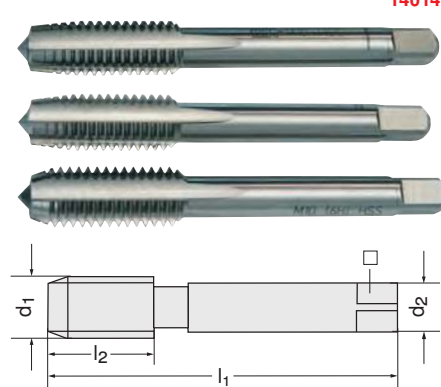
Taper tap

14027

Second tap

14028

Third tap



14014

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	Set		No 1		No 2		F	
						14014	...	14026	...	14027	...	14028	...
M 3	2.50	0.50	11.0	40	3.5 x 2.7			310		110		110	
M 4	3.30	0.70	13.0	45	4.5 x 3.4			312		112		112	
M 5	4.20	0.80	16.0	50	6.0 x 4.9			314		114		114	
M 6	5.00	1.00	19.0	56	6.0 x 4.9			315		115		115	
M 8	6.80	1.25	22.0	63	6.0 x 4.9			317		117		117	
M 10	8.50	1.50	24.0	70	7.0 x 5.5			319		119		119	
M 12	10.20	1.75	28.0	75	9.0 x 7.0			321		121		121	
M 14	12.00	2.00	30.0	80	11.0 x 9.0			322		122		122	
M 16	14.00	2.00	32.0	80	12.0 x 9.0			323		123		123	
M 18	15.50	2.50	34.0	95	14.0 x 11.0			324		124		124	
M 20	17.50	2.50	34.0	95	16.0 x 12.0			325		125		125	
M 22	19.50	2.50	34.0	100	18.0 x 14.5			326		126		126	
M 24	21.00	3.00	38.0	110	18.0 x 14.5			327		127		127	
M 27	24.00	3.00	38.0	110	20.0 x 16.0			328		128		128	
M 30	26.50	3.50	45.0	125	22.0 x 18.0			329		129		129	

14016 - 14025

Hand taps

M

6H

DIN
352

≤2,5xD

HSS-E

VA-OX

≤ 1200
N/mm²

Design

Up to M 1.4 tolerance field ISO 1 (4H).

14016

Three pieces in set:
taper, second and third tap.

14023

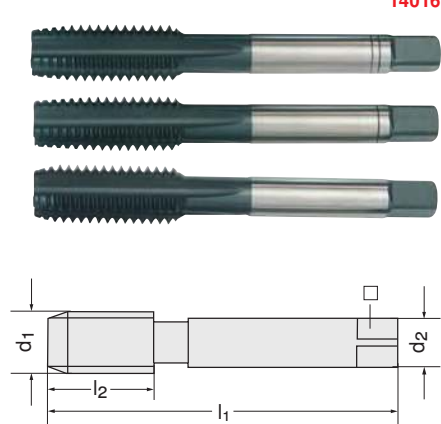
Taper tap

14024

Second tap

14025

Third tap



14016

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	Set		No 1		No 2		F	
						14016	...	14023	...	14024	...	14025	...
M 2	1.60	0.40	8.0	36	2.8 x 2.1			307		101		101	
M 2.5	2.05	0.45	9.0	40	2.8 x 2.1			309		103		103	
M 3	2.50	0.50	11.0	40	3.5 x 2.7			310		104		104	
M 3.5	2.90	0.60	12.0	45	4.0 x 3.0			311		105		105	
M 4	3.30	0.70	13.0	45	4.5 x 3.4			312		106		106	
M 5	4.20	0.80	16.0	50	6.0 x 4.9			314		107		107	
M 6	5.00	1.00	19.0	56	6.0 x 4.9			315		108		108	
M 8	6.80	1.25	22.0	63	6.0 x 4.9			317		109		109	
M 10	8.50	1.50	24.0	70	7.0 x 5.5			319		110		110	
M 12	10.20	1.75	28.0	75	9.0 x 7.0			321		111		111	
M 14	12.00	2.00	30.0	80	11.0 x 9.0			322		112		112	
M 16	14.00	2.00	32.0	80	12.0 x 9.0			323		113		113	



14037

Hand tap set with left-hand thread

M

6H

DIN
352

HSS

**HHW**

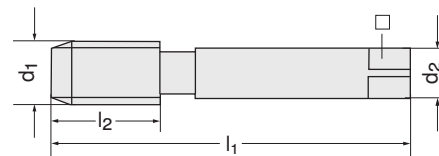
Design

Three pieces in set:

Taper, second and third tap.



14037



HSS

14037

...

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	
M 3	2.50	0.50	11	40	3.5 x 2.7	301
M 4	3.30	0.70	13	45	4.5 x 3.4	302
M 5	4.20	0.80	16	50	6.0 x 4.9	303
M 6	5.00	1.00	19	56	6.0 x 4.9	304
M 8	6.80	1.25	22	63	6.0 x 4.9	305
M 10	8.50	1.50	24	70	7.0 x 5.5	306
M 12	10.20	1.75	28	75	9.0 x 7.0	307
M 14	12.00	2.00	30	80	11.0 x 9.0	308
M 16	14.00	2.00	32	80	12.0 x 9.0	309
M 18	15.50	2.50	34	95	14.0 x 11.0	310
M 20	17.50	2.50	34	95	16.0 x 12.0	311

Hand taps

14052 - 14054

Hand taps

**HHW**

14052

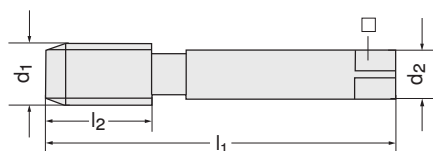
Two pieces in set:
taper and third tap.

14054 101-191

Taper tap

14054 102-192

Third tap



14052



d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x Ø mm	Set		No 1		F	
					14052	...	14054	...	14054	...
M 3 x 0.35	2.65	8	40	3.5 x 2.7		304		101		102
M 3.5 x 0.35	3.15	9	45	4.0 x 3.0		305		103		104
M 4 x 0.50	3.50	10	45	4.5 x 3.4		307		107		108
M 5 x 0.50	4.50	12	50	6.0 x 4.9		308		111		112
M 6 x 0.50	5.50	14	56	6.0 x 4.9		309				
M 6 x 0.75	5.20	14	56	6.0 x 4.9		310		115		116
M 7 x 0.75	6.20	14	56	6.0 x 4.9		311		119		120
M 8 x 0.50	7.50	18	56	6.0 x 4.9		312				
M 8 x 0.75	7.20	18	56	6.0 x 4.9		313		121		122
M 8 x 1.00	7.00	22	63	6.0 x 4.9		314		123		124
M 9 x 1.00	8.00	22	63	7.0 x 5.5		315		125		126
M 10 x 0.75	9.20	20	63	7.0 x 5.5		316				
M 10 x 1.00	9.00	20	63	7.0 x 5.5		317		129		130
M 10 x 1.25	8.80	24	70	7.0 x 5.5		318				
M 11 x 1.00	10.00	20	63	8.0 x 6.2		319		133		134
M 12 x 1.00	11.00	22	70	9.0 x 7.0		320		135		136
M 12 x 1.25	10.75	22	70	9.0 x 7.0		321				
M 12 x 1.25	10.80	22	70	9.0 x 7.0				137		138
M 12 x 1.50	10.50	22	70	9.0 x 7.0		322		139		140
M 14 x 1.00	13.00	22	70	11.0 x 9.0		323				
M 14 x 1.25	12.80	22	70	11.0 x 9.0		324				
M 14 x 1.50	12.50	22	70	11.0 x 9.0		325		145		146
M 15 x 1.00	14.00	22	70	12.0 x 9.0		326				
M 15 x 1.50	13.50	22	70	12.0 x 9.0		327				
M 16 x 1.00	15.00	22	70	12.0 x 9.0		328				
M 16 x 1.50	14.50	22	70	12.0 x 9.0		329		153		154
M 18 x 1.00	17.00	22	80	14.0 x 11.0		330				
M 18 x 1.50	16.50	22	80	14.0 x 11.0		331		157		158
M 18 x 2.00	16.00	22	80	14.0 x 11.0		332				
M 20 x 1.00	19.00	22	80	16.0 x 12.0		333				
M 20 x 1.50	18.50	22	80	16.0 x 12.0		334		163		164
M 20 x 2.00	18.00	22	80	16.0 x 12.0		335				
M 22 x 1.00	21.00	22	80	18.0 x 14.5		336				
M 22 x 1.50	20.50	22	80	18.0 x 14.5		337		169		170
M 22 x 2.00	20.00	22	80	18.0 x 14.5		338				
M 24 x 1.00	23.00	22	90	18.0 x 14.5		339				
M 24 x 1.50	22.50	22	90	18.0 x 14.5		340		175		176
M 24 x 2.00	22.00	22	90	18.0 x 14.5		341				
M 25 x 1.50	23.50	22	90	18.0 x 14.5		342				
M 26 x 1.50	24.50	22	90	18.0 x 14.5		343		181		182
M 27 x 1.50	25.50	22	90	20.0 x 16.0		344				
M 27 x 2.00	25.00	22	90	20.0 x 16.0		345				
M 28 x 1.50	26.50	22	90	20.0 x 16.0		346				
M 30 x 1.00	29.00	22	90	22.0 x 18.0		347				
M 30 x 1.50	28.50	22	90	22.0 x 18.0		348		191		192
M 30 x 2.00	28.00	22	90	22.0 x 18.0		349				
M 32 x 1.50	30.50	22	90	22.0 x 18.0		350				
M 33 x 2.00	31.00	25	100	25.0 x 20.0		352				
M 34 x 1.50	32.50	25	100	28.0 x 22.0		353				
M 36 x 1.50	34.50	25	100	28.0 x 22.0		354				
M 36 x 2.00	34.00	40	125	28.0 x 22.0		355				
M 36 x 3.00	33.00	40	125	28.0 x 22.0		356				
M 38 x 1.50	36.50	25	100	28.0 x 22.0		357				
M 40 x 1.50	38.50	25	110	32.0 x 24.0		358				
M 42 x 1.50	40.50	25	110	32.0 x 24.0		359				



14055 - 14058

Tool manufacturer hand taps

HHW

Design

Taper tap with pilot.

14055

Three pieces in set:
taper, second and third tap.

14056

Taper tap

14057

Second tap

14058

Third tap

M

6H

DIN
352

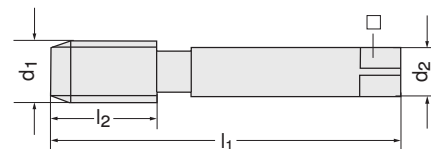


HSS-E

VA-OX



14055



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	Set 14055	...	No 1 14056	...	No 2 14057	...	F 14058	...
M 2	1.60	0.40	8	36	2.8 x 2.1	201		201		201		201	
M 2.5	2.05	0.45	9	40	2.8 x 2.1	204		204		204		204	
M 3	2.50	0.50	11	40	3.5 x 2.7	206		206		206		206	
M 4	3.30	0.70	13	45	4.5 x 3.4	208		208		208		208	
M 5	4.20	0.80	16	50	6.0 x 4.9	209		209		209		209	
M 6	5.00	1.00	19	56	6.0 x 4.9	210		210		210		210	
M 8	6.80	1.25	22	63	6.0 x 4.9	211		211		211		211	
M 10	8.50	1.50	24	70	7.0 x 5.5	212		212		212		212	
M 12	10.20	1.75	28	75	9.0 x 7.0	213		213		213		213	
M 14	12.00	2.00	30	80	11.0 x 9.0	214		214		214		214	
M 16	14.00	2.00	32	80	12.0 x 9.0	215		215		215		215	

14060

Tool manufacturer hand taps

ATORN®

Design

Taper tap with pilot.

14060 103-112

Three pieces in set:
taper, second and third tap.

14060 203-212

Taper tap

14060 303-312

Second tap

14060 403-412

Third tap

M

6H

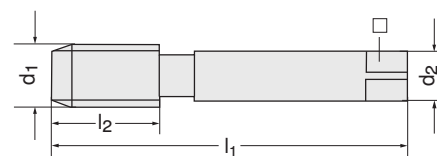
DIN
352



HSS-E
PM



14060



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	Set 14060	...	No 1 14060	...	No 2 14060	...	F 14060	...
M 3	2.50	0.50	10	40	3.5 x 2.7	103		203		303		403	
M 4	3.30	0.70	12	45	4.5 x 3.4	104		204		304		404	
M 5	4.20	0.80	14	50	6.0 x 4.9	105		205		305		405	
M 6	5.00	1.00	16	56	6.0 x 4.9	106		206		306		406	
M 8	6.80	1.25	18	63	6.0 x 4.9	108		208		308		408	
M 10	8.50	1.50	20	70	7.0 x 5.5	110		210		310		410	
M 12	10.20	1.75	24	75	9.0 x 7.0	112		212		312		412	

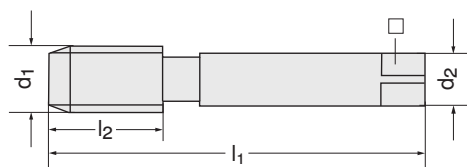
Hand taps | Machine taps

14059

Hand tap set

HHW

Design

Three pieces in set:
taper, second and third tap.

d ₁	Core hole Ø mm	Pitch TPI	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	HSS 14059	...
BSW 1/8	2.50	40	11	40	3.5 x 2.7	201	
BSW 3/16	3.70	24	16	50	6.0 x 4.9	202	
BSW 1/4	5.10	20	19	56	6.0 x 4.9	203	
BSW 5/16	6.50	18	22	63	6.0 x 4.9	204	
BSW 3/8	7.90	16	22	63	7.0 x 5.5	205	

BSW

DIN
352 $\leq 3xD$

HSS

 ≤ 800
N/mm²

14059



d ₁	Core hole Ø mm	Pitch TPI	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	HSS 14059	...
BSW 1/2	10.50	12	28	75	9.0 x 7.0	206	
BSW 5/8	13.50	11	32	80	12.0 x 9.0	207	
BSW 3/4	16.50	10	34	95	14.0 x 11.0	208	
BSW 7/8	19.25	9	34	100	18.0 x 14.5	209	
BSW 1.	22.00	8	38	110	20.0 x 16.0	210	

14068 - 14069

Hand taps

14068

Two pieces in set:
taper and third tap.

Note:

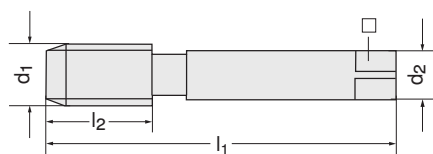
Cost-effective design.

14069 101-109

Taper tap

14069 201-209

Third tap



G

DIN
5157 $\leq 3xD$

HSS

 ≤ 800
N/mm²

14068



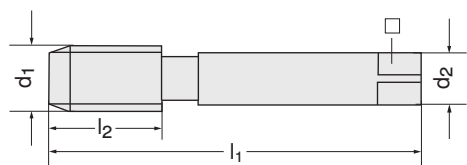
d ₁	Core hole Ø mm	Pitch TPI	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	Set 14068	...	No 1 14069	...	F 14069	...
G 1/8	8.80	28	20	63	7 x 5.5	101		101		201	
G 1/4	11.80	19	22	70	11 x 9.0	102		102		202	
G 3/8	15.25	19	22	70	12 x 9.0	103		103		203	
G 1/2	19.00	14	22	80	16 x 12.0	104		104		204	
G 5/8	21.00	14	22	80	18 x 15.5			105		205	
G 3/4	24.50	14	22	90	20 x 16.0	106		106		206	
G 7/8	28.25	14	22	90	22 x 18.0			107		207	
Thread 1.	30.75	11	25	100	25 x 20.0	108		108		208	
G 1.1/4	39.50	11	40	125	32 x 24.0			109		209	

14070

Hand tap set

HHW

Design

Three pieces in set:
taper, second and third tap.

d ₁	Core hole Ø mm	Pitch TPI	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	HSS 14070	...
No. 5	2.65	40	11	40	3.5 x 2.7	105	
No. 6	2.85	32	12	45	4.0 x 3.0	106	
No. 8	3.50	32	13	45	4.5 x 3.4	107	
No. 10	3.90	24	16	50	6.0 x 4.9	108	
No. 12	4.50	24	17	56	6.0 x 4.9	109	
1/4	5.10	20	19	56	6.0 x 4.9	110	
5/16	6.60	18	22	63	6.0 x 4.9	111	
3/8	8.00	16	24	70	7.0 x 5.5	112	

UNC

DIN
2184-2 $\leq 2.5xD$

HSS

 ≤ 800
N/mm²

14070



d ₁	Core hole Ø mm	Pitch TPI	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	HSS 14070	...
7/16	9.40	14	24	70	8.0 x 6.2	113	
1/2	10.80	13	28	75	9.0 x 7.0	114	
9/16	12.20	12	30	80	11.0 x 9.0	115	
5/8	13.50	11	32	80	12.0 x 9.0	116	
3/4	16.50	10	34	95	14.0 x 11.0	117	
7/8	19.50	9	34	100	18.0 x 14.5	118	
1.	22.25	8	38	110	20.0 x 16.0	119	

14071

Hand tap set

UNF

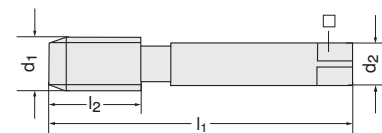
DIN
2181

≤2.5xD

HSS

≤ 800
N/mm²**HHW**

Design

Two pieces in set:
taper and third tap.

14071

d ₁	Core hole Ø mm	Pitch TPI	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	HSS	
						14071	...
No. 5	2.70	44	8	40	3.5 x 2.7		306
No. 6	3.00	40	9	45	4.0 x 3.0		307
No. 8	3.50	36	10	45	4.5 x 3.4		308
No. 10	4.10	32	12	50	6.0 x 4.9		309
No. 12	4.65	28	12	56	6.0 x 4.9		310
1/4	5.50	28	19	56	6.0 x 4.9		311
5/16	6.90	24	22	63	6.0 x 4.9		312
3/8	8.50	24	20	63	7.0 x 5.5		313

d ₁	Core hole Ø mm	Pitch TPI	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	HSS	
						14071	...
7/16	9.90	20	20	70	8.0 x 6.2		314
1/2	11.50	20	22	70	9.0 x 7.0		315
9/16	12.90	18	22	70	11.0 x 9.0		316
5/8	14.50	18	22	70	12.0 x 9.0		317
3/4	17.50	16	22	80	14.0 x 11.0		318
7/8	20.50	14	22	80	18.0 x 14.5		319
1.	23.25	12	22	80	20.0 x 16.0		320

14110 - 14112

Short machine taps

HHW

14110

Design

- With spiral point
- Notch shape B

Applications

For through-hole thread.

14112

Design

- With 15° spiral
- Notch shape C

Applications

For blind-hole thread.

M

6H

DIN
352

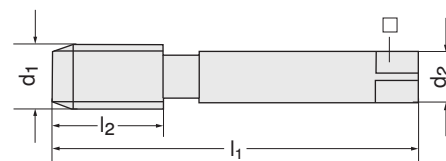
HSS-E

≤ 800
N/mm²

14110



14112



Straight-grooved

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	Straight-grooved	
						14110	...
M 2	1.60	0.40	8	36	2.8 x 2.1		201
M 2.5	2.05	0.45	9	40	2.8 x 2.1		203
M 3	2.50	0.50	11	40	3.5 x 2.7		204
M 4	3.30	0.70	13	45	4.5 x 3.4		206
M 5	4.20	0.80	16	50	6.0 x 4.9		208
M 6	5.00	1.00	19	56	6.0 x 4.9		209
M 8	6.80	1.25	22	63	6.0 x 4.9		210
M 10	8.50	1.50	24	70	7.0 x 5.5		211
M 12	10.20	1.75	28	75	9.0 x 7.0		212

Spiral-fluted

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	Spiral-fluted	
						14112	...
M 4	3.30	0.70	7	45	4.5 x 3.4		206
M 5	4.20	0.80	8	50	6.0 x 4.9		208
M 6	5.00	1.00	10	56	6.0 x 4.9		209
M 8	6.80	1.25	13	63	6.0 x 4.9		210
M 10	8.50	1.50	15	70	7.0 x 5.5		211
M 12	10.20	1.75	18	75	9.0 x 7.0		212

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
14110																	
15-22	15-18	12-18	8-12	8-12	-	-	-	-	-	-	-	-	-	-	-	-	25-30
14112																	
12-18	12-15	10-15	8-10	8-10	-	-	-	-	-	-	-	-	-	-	-	-	20-25

Machine taps | Through-hole screw taps

14114 - 14115

Short machine taps

M

6H

DIN
352

HSS-E

800
N/mm²

14114

Design

- With spiral point
- Notch shape B

Applications

For through-hole thread.

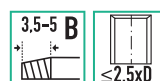
14115

Design

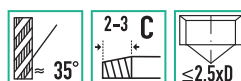
- With 35° spiral
- Notch shape C

Applications

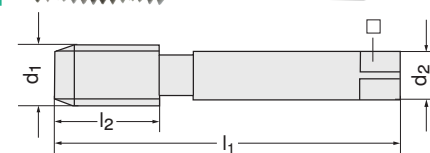
For blind-hole thread.



14114



14115



Straight-grooved

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	14114	...
M 3	2.50	0.50	11	40	3.5 x 2.7	104	
M 4	3.30	0.70	13	45	4.5 x 3.4	106	
M 5	4.20	0.80	16	48	6.0 x 4.9	108	
M 6	5.00	1.00	19	50	6.0 x 4.9	109	
M 8	6.80	1.25	22	56	6.0 x 4.9	110	
M 10	8.50	1.50	24	70	7.0 x 5.5	111	
M 12	10.20	1.75	29	75	9.0 x 7.0	112	

Spiral-fluted

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	14115	...
M 3	2.50	0.50	11	40	3.5 x 2.7	104	
M 4	3.30	0.70	13	45	4.5 x 3.4	106	
M 5	4.20	0.80	16	48	6.0 x 4.9	108	
M 6	5.00	1.00	19	50	6.0 x 4.9	109	
M 8	6.80	1.25	22	56	6.0 x 4.9	110	
M 10	8.50	1.50	24	70	7.0 x 5.5	111	
M 12	10.20	1.75	29	75	9.0 x 7.0	112	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
14114																	
15-22	15-18	12-18	8-12	8-12	-	-	-	-	-	-	-	-	-	-	-	-	25-30
14115																	
12-18	12-15	10-15	8-10	8-10	-	-	-	-	-	-	-	-	-	-	-	-	20-25

14265

Short machine taps

PG

DIN
40432

2-3 C

≤2xD

≤2xD

HSS-E

800
N/mm²


Applications

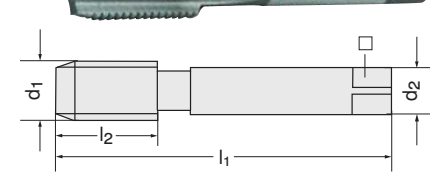
For through-hole and blind-hole threads.

HSS-E

d ₁	Core hole Ø mm	Pitch TPI	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	14265	...
PG 7	11.40	20	22	70	9 x 7.0	101	
PG 9	14.00	18	22	70	12 x 9.0	102	
PG 11	17.25	18	22	80	14 x 11.0	103	
PG 13.5	19.00	18	22	80	16 x 12.0	104	
PG 16	21.25	18	22	80	18 x 14.5	105	
PG 21	27.00	16	22	90	22 x 18.0	106	
PG 29	35.50	16	25	100	28 x 22.0	107	



14265



Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
14265																	
10-15	12-15	5-12	8-12	8-12	-	-	-	-	-	-	-	-	-	-	-	-	20-25

14270

Short machine taps

NPT

DIN
2181

2-3 C

≤2xD

≤2xD

HSS-E

800
N/mm²


Applications

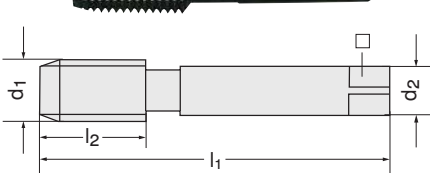
For through-hole and blind-hole threads.

HSS-E

d ₁	Core hole Ø mm	Pitch TPI	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	14270	...
NPT 1/16	6.40	27	14	56	6 x 4.9	101	
NPT 1/8	8.70	27	15	63	7 x 5.5	102	
NPT 1/4	11.40	18	21	63	11 x 9.0	103	
NPT 3/8	14.70	18	21	70	12 x 9.0	104	
NPT 1/2	18.30	14	27	80	16 x 12.0	105	
NPT 3/4	23.70	14	27	100	20 x 16.0	106	
NPT 1.	29.70	11.1/2	32	110	25 x 20.0	107	



14270



Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
14270																	
10-15	12-15	5-12	8-12	8-12	-	-	-	-	-	-	-	-	-	-	-	-	20-25

14291

Through-hole screw tap

M

6H

DIN
371DIN
376

HSS-E

**ATORN®**

Design

- Without spiral point

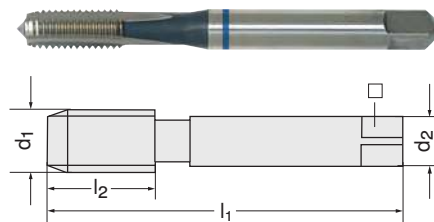
14291 101-110

M 2–M 10, DIN 371.

14291 204-220

M 4–M 20, DIN 376.

14291



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	DIN 371	DIN 376	DIN 371	DIN 376	
					d ₂ x  mm	d ₂ x  mm	14291	...	14291
M 2	1.60	0.40	8	45	2.8 x 2.1	-		101	
M 2.5	2.05	0.45	9	50	2.8 x 2.1	-		102	
M 3	2.50	0.50	10	56	3.5 x 2.7	-		103	
M 4	3.30	0.70	12	63	4.5 x 3.4	2.8 x 2.1		104	204
M 5	4.20	0.80	14	70	6.0 x 4.9	3.5 x 2.7		105	205
M 6	5.00	1.00	16	80	6.0 x 4.9	4.5 x 3.4		106	206
M 7	6.00	1.00	16	80	7.0 x 5.5	-		107	
M 8	6.80	1.25	18	90	8.0 x 6.2	6.0 x 4.9		108	208
M 10	8.50	1.50	20	100	10.0 x 8.0	7.0 x 5.5		110	210
M 12	10.20	1.75	22	110	-	9.0 x 7.0			212
M 14	12.00	2.00	25	110	-	11.0 x 9.0			214
M 16	14.00	2.00	28	110	-	12.0 x 9.0			216
M 20	17.50	2.50	32	140	-	16.0 x 12.0			220

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	5-20	5-15	-	-	-	-	-	-	-	-	-	-	-	-	-

Through-hole screw tap

14292 - 14295

Through-hole screw tap

M

6H

DIN
371DIN
376

3,5-5 B

≤ 3xD

ATORN®

Design

Strong spiral point.
Up to M 10 DIN 371.
From M 12 DIN 376.

HSS-E



14292 300

HSS-E

HSS-E
TiNHSS-E
TiCNHSS-E-PM
TiN

14292



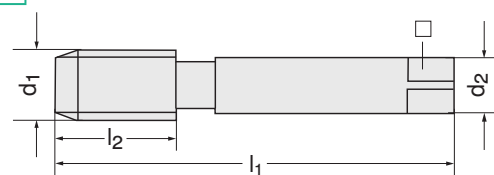
14293



14294



14295



14292

Applications

For steels up to 800 N/mm².

14293

Applications

Low build-up of material deposits thanks to TiN coating.

For steels up to 850 N/mm².

14294

Applications

Excellent emergency running properties and performs well for the most demanding applications thanks to special TiCN coating.

For steels up to 1000 N/mm².

14295

Applications

For steels up to 1000 N/mm².

Also suitable for synchro chucks.



HSS-E

14292

...

Set contents

7 pieces

M 3-M 12

300

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN	HSS-E		HSS-E/TiN		HSS-E/TiCN		HSS-E-PM/TiN		...
							14292	...	14293	...	14294	...	14295	...	
M 2	1.60	0.40	8	45	2.8 x 2.1	371		100							102
M 2.5	2.05	0.45	9	50	2.8 x 2.1	371		101							
M 3	2.50	0.50	10	56	3.5 x 2.7	371		102		102		102			103
M 3.5	2.90	0.60	11	56	4.0 x 3.0	371		103		103		103			
M 4	3.30	0.70	12	63	4.5 x 3.4	371		104		104		104			104
M 5	4.20	0.80	14	70	6.0 x 4.9	371		105		105		105			105
M 6	5.00	1.00	16	80	6.0 x 4.9	371		106		106		106			106
M 7	6.00	1.00	16	80	7.0 x 5.5	371		107							
M 8	6.80	1.25	18	90	8.0 x 6.2	371		108		108		108			108
M 10	8.50	1.50	20	100	10.0 x 8.0	371		110		110		110			110
M 12	10.20	1.75	22	110	9.0 x 7.0	376		112		112		112			112
M 14	12.00	2.00	25	110	11.0 x 9.0	376		114		114		114			114
M 16	14.00	2.00	28	110	12.0 x 9.0	376		116		116		116			116
M 18	15.50	2.50	32	125	14.0 x 11.0	376		118		118		118			118
M 20	17.50	2.50	32	140	16.0 x 12.0	376		120		120		120			120
M 22	19.50	2.50	32	140	18.0 x 14.5	376		122							
M 24	21.00	3.00	36	160	18.0 x 14.5	376		124		124		124			
M 27	24.00	3.00	36	160	20.0 x 16.0	376		127		127					
M 30	26.50	3.50	40	180	22.0 x 18.0	376		130							

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
14292+14293																	
-	-	-	5-20	5-15	5-12	-	-	-	-	-	-	-	-	-	-	-	-
14294																	
-	-	-	5-40	5-30	5-24	5-18	-	-	-	-	-	-	-	-	-	-	-
14295																	
-	-	-	5-40	5-30	5-24	2-12	-	-	-	-	-	-	5-20	5-20		8-30	-



14343

Through-hole screw tap Hyper Z Series

M

6H

DIN
371DIN
376

3,5-5 B

HSS-E



14343

NACHI

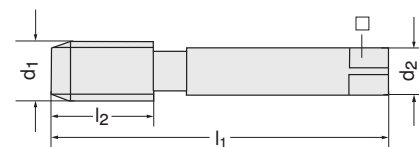
Design

- Metric thread
- Through-hole thread
- Right cutting with spiral point
- Up to M 10 DIN 371
- From M 12 DIN 376

Note:

UNI High Performance screw taps with optimum cutting geometry, long service life and process reliability!

NEW



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	Z	DIN	14343	...
M 3	2.50	0.50	10	56	3.5 x 2.7	3	371		005
M 4	3.30	0.70	12.5	63	4.5 x 3.4	3	371		006
M 5	4.20	0.80	14.5	70	6.0 x 4.9	3	371		007
M 6	5.00	1.00	17	80	6.0 x 4.9	3	371		008
M 8	6.80	1.25	22	90	8.0 x 6.2	3	371		009
M 10	8.50	1.50	27	100	10.0 x 8.0	3	371		010
M 12	10.20	1.75	32	110	9.0 x 7.0	3	376		011
M 14	12.00	2.00	32	110	11.0 x 9.0	3	376		012
M 16	14.00	2.00	32	110	12.0 x 9.0	3	376		013
M 18	15.50	2.50	37.5	125	14.0 x 11.0	3	376		014
M 20	17.50	2.50	37.5	140	16.0 x 12.0	3	376		015
M 22	19.50	2.50	37.5	140	18.0 x 14.5	3	376		016
M 24	21.00	3.00	45	160	18.0 x 14.5	3	376		017

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10-25	10-25	-	5-20	5-20	5-20	5-20	5-20	5-10	-	-	-	-	-	-	-	5-20	10-20

14302 - 14303

Through-hole screw tap

M

6H

DIN
371DIN
376

3,5-5 B

HSS-E

≤ 800 N/mm²

14302

HHW

Design

With spiral point.

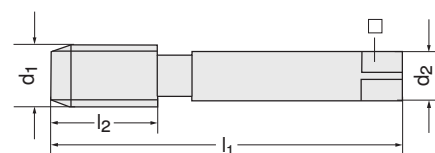
M 1.4 tolerance field ISO 1 (4H).

14302

M 1.4–M 10, DIN 371.

14303

M 4–M 42, DIN 376.



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	DIN 371 14302	...
M 1.4	1.10	0.30	7	40	2.5 x 2.1		102
M 1.6	1.25	0.35	8	40	2.5 x 2.1		103
M 1.8	1.45	0.35	8	40	2.5 x 2.1		104
M 2	1.60	0.40	8	45	2.8 x 2.1		105
M 2.5	2.05	0.45	9	50	2.8 x 2.1		107
M 3	2.50	0.50	11	56	3.5 x 2.7		108
M 4	3.30	0.70	13	63	4.5 x 3.4		110
M 5	4.20	0.80	16	70	6.0 x 4.9		112
M 6	5.00	1.00	19	80	6.0 x 4.9		113
M 8	6.80	1.25	22	90	8.0 x 6.2		114
M 10	8.50	1.50	24	100	10.0 x 8.0		115

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	DIN 376 14303	...
M 4	3.30	0.70	13	63	2.8 x 2.1		110
M 5	4.20	0.80	16	70	3.5 x 2.7		112
M 6	5.00	1.00	19	80	4.5 x 3.4		113
M 8	6.80	1.25	22	90	6.0 x 4.9		114
M 10	8.50	1.50	24	100	7.0 x 5.5		115
M 12	10.20	1.75	28	110	9.0 x 7.0		116
M 14	12.00	2.00	30	110	11.0 x 9.0		117
M 16	14.00	2.00	32	110	12.0 x 9.0		118
M 18	15.50	2.50	34	125	14.0 x 11.0		119
M 20	17.50	2.50	34	140	16.0 x 12.0		120
M 22	19.50	2.50	34	140	18.0 x 14.5		121
M 24	21.00	3.00	38	160	18.0 x 14.5		122
M 27	24.00	3.00	38	160	20.0 x 16.0		123
M 30	26.50	3.50	45	180	22.0 x 18.0		125
M 33	29.50	3.50	50	180	25.0 x 20.0		126
M 36	32.00	4.00	56	200	28.0 x 22.0		127
M 42	37.50	4.50	60	200	32.0 x 24.0		129

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
18-25	10-25	10-15	5-25	5-20	-	-	-	-	-	-	-	-	-	-	-	-	-

Through-hole screw tap

14304 - 14305

Through-hole screw tap

M

6H

DIN
371DIN
376

3.5-5 B

≤1.5xD

HSS-E

≤ 800
N/mm²

Design

With spiral point.

Note:

Cost-effective design.

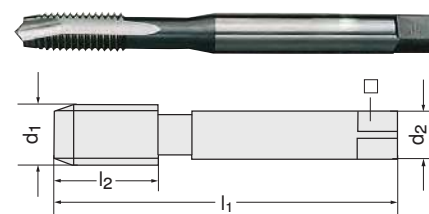
14304

M 2–M 10, DIN 371.

14305

M 3–M 24, DIN 376.

14304



DIN 371

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	14304	...
M 2	1.60	0.40	9	45	2.8 x 2.1		105
M 2.5	2.05	0.45	9	50	2.8 x 2.1		107
M 3	2.50	0.50	10	56	3.5 x 2.7		108
M 4	3.30	0.70	12	63	4.5 x 3.4		110
M 5	4.20	0.80	14	70	6.0 x 4.9		112
M 6	5.00	1.00	16	80	6.0 x 4.9		113
M 8	6.80	1.25	18	90	8.0 x 6.2		114
M 10	8.50	1.50	20	100	10.0 x 8.0		115

DIN 376

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	14305	...
M 3	2.50	0.50	10	56	2.2 x -		108
M 4	3.30	0.70	12	63	2.8 x 2.1		110
M 5	4.20	0.80	14	70	3.5 x 2.7		112
M 6	5.00	1.00	16	80	4.5 x 3.4		113
M 8	6.80	1.25	18	90	6.0 x 4.9		114
M 10	8.50	1.50	20	100	7.0 x 5.5		115
M 12	10.20	1.75	28	110	9.0 x 7.0		116
M 14	12.00	2.00	26	110	11.0 x 9.0		117
M 16	14.00	2.00	28	110	12.0 x 9.0		118
M 20	17.50	2.50	32	140	16.0 x 12.0		120
M 24	21.00	3.00	34	160	18.0 x 14.5		122

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
18-25	10-25	10-15	5-25	5-20	-	-	-	-	-	-	-	-	-	-	-	-	20-30

14306 - 14307

Through-hole screw tap

M

6H

DIN
371DIN
376

3.5-5 B

≤1.5xD

HSS-E
OX≤ 800
N/mm²

Design

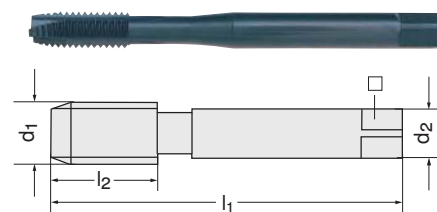
With spiral point.

Special OX coating for soft and lubricated steels
(St 33/St 37).

Up to M 10 DIN 371.

From M 12 DIN 376.

14306



DIN 371

DIN 376

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	14306	...	14307	...
M 3	2.50	0.50	11	56	3.5 x 2.7		201		
M 4	3.30	0.70	13	63	4.5 x 3.4		202		
M 5	4.20	0.80	16	70	6.0 x 4.9		203		
M 6	5.00	1.00	19	80	6.0 x 4.9		204		
M 8	6.80	1.25	22	90	8.0 x 6.2		205		
M 10	8.50	1.50	24	100	10.0 x 8.0		206		
M 12	10.20	1.75	28	110	9.0 x 7.0				201
M 14	12.00	2.00	30	110	11.0 x 9.0				202
M 16	14.00	2.00	32	110	12.0 x 9.0				203
M 18	15.50	2.50	34	125	14.0 x 11.0				204
M 20	17.50	2.50	34	140	16.0 x 12.0				205

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	15-20	15-20	-	-	-	-	-	-	-	-	-	-	-	-	-



14308 - 14310

Through-hole screw tap



Design

With spiral point.
Up to M 10 DIN 371.
From M 12 DIN 376.

Note:

For workpieces that are retrofitted with
a galvanic coating.

14308

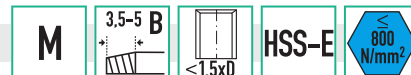
6G tolerance class.

14309

7G tolerance class.

14310

7G tolerance class.



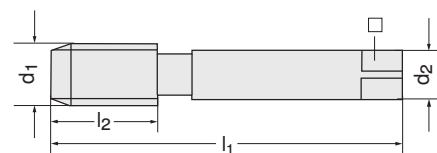
14308



14309



14310



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	DIN 371/6G		DIN 371/7G		DIN 376/7G	
						14308	...	14309	...	14310	...
M 2	1.60	0.40	8	45	2.8 x 2.1			105			
M 2.5	2.05	0.45	9	50	2.8 x 2.1			107			
M 3	2.50	0.50	11	56	3.5 x 2.7			108		108	
M 4	3.30	0.70	13	63	4.5 x 3.4			110		110	
M 5	4.20	0.80	16	70	6.0 x 4.9			112		112	
M 6	5.00	1.00	19	80	6.0 x 4.9			113		113	
M 8	6.80	1.25	22	90	8.0 x 6.2			114		114	
M 10	8.50	1.50	24	100	10.0 x 8.0			115		115	
M 12	10.20	1.75	28	110	9.0 x 7.0						116
M 16	14.00	2.00	32	110	12.0 x 9.0						118
M 20	17.50	2.50	34	140	16.0 x 12.0						120

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
18-25	10-25	10-15	5-25	5-20	-	-	-	-	-	-	-	-	-	-	-	-	20-30

14315 - 14316

Through-hole screw tap



Design

With spiral point.
Up to M 10 DIN 371.
From M 12 DIN 376.

14315

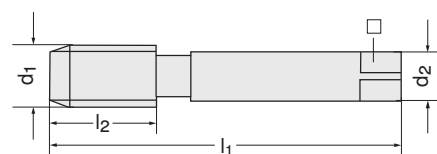
Record-1 B.

14316

Record-2 B.



14315



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	DIN 371		DIN 376	
						14315	...	14316	...
M 3	2.50	0.50	11	56	3.5 x 2.7			107	
M 4	3.30	0.70	13	63	4.5 x 3.4			109	
M 5	4.20	0.80	15	70	6.0 x 4.9			111	
M 6	5.00	1.00	17	80	6.0 x 4.9			112	
M 8	6.80	1.25	20	90	8.0 x 6.2			113	
M 10	8.50	1.50	22	100	10.0 x 8.0			114	
M 12	10.20	1.75	24	110	9.0 x 7.0				115
M 14	12.00	2.00	26	110	11.0 x 9.0				116
M 16	14.00	2.00	27	110	12.0 x 9.0				117
M 20	17.50	2.50	32	140	16.0 x 12.0				119

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	10-40	5-25	5-20	5-15	-	-	-	-	-	-	-	-	-	-	-	-

Through-hole screw tap

14317

Through-hole screw tap

M

6H

DIN
371DIN
376

3.5-5 B

≤ 3x0

HSS-E

≤ 800
N/mm²**ATORN®**

Design

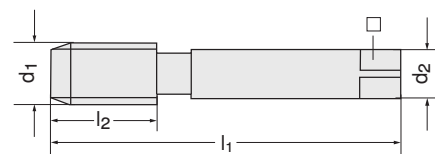
With strong spiral point and extra-long shank.

Up to M 10 DIN 371.

From M 12 DIN 376.



14317



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN 371		DIN 376	
						14317	...	14317	...
M 3	2.50	0.50	10	112	3.5 x 2.7		103		
M 4	3.30	0.70	12	126	4.5 x 3.4		104		
M 5	4.20	0.80	14	140	6.0 x 4.9		105		
M 6	5.00	1.00	16	160	6.0 x 4.9		106		
M 8	6.80	1.25	18	180	8.0 x 6.2		108		
M 10	8.50	1.50	20	200	10.0 x 8.0		110		
M 12	10.20	1.75	22	220	9.0 x 7.0				112
M 14	12.00	2.00	25	220	11.0 x 9.0				114
M 16	14.00	2.00	28	220	12.0 x 9.0				116
M 20	17.50	2.50	32	280	16.0 x 12.0				120

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	-	-	-	-	-	-	-	-	-	-	-	-

14330 - 14331

Through-hole screw tap

M

6H

DIN
371DIN
376

3.5-5 B

≤ 1.5x0

HSS-E

≤ 800
N/mm²**HHW**

Design

With spiral point and lubrication grooves.

Reduced build-up of material deposits thanks to nitriding and steam treatment.

Up to M 10 DIN 371.

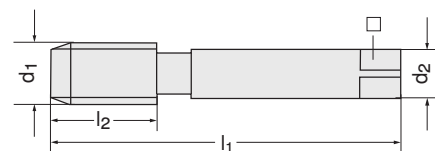
From M 12 DIN 376.

Note:

Ideal for creating eyelets in sheet metal.



14330



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN 371		DIN 376	
						14330	...	14331	...
M 2	1.60	0.40	8	45	2.8 x 2.1		101		
M 3	2.50	0.50	11	56	3.5 x 2.7		104		
M 4	3.30	0.70	13	63	4.5 x 3.4		106		
M 5	4.20	0.80	16	70	6.0 x 4.9		107		
M 6	5.00	1.00	19	80	6.0 x 4.9		108		
M 8	6.80	1.25	22	90	8.0 x 6.2		109		
M 10	8.50	1.50	24	100	10.0 x 8.0		110		
M 12	10.20	1.75	28	110	9.0 x 7.0				112
M 16	14.00	2.00	32	110	12.0 x 9.0				114
M 20	17.50	2.50	34	140	16.0 x 12.0				116

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	15-20	15-20	15-20	-	-	-	-	-	-	-	-	-	-	-	-



14318

Through-hole screw tap

M

6H

DIN
371DIN
376

3.5-5 B

≤ 3xD

≤ 1200
N/mm²**ATORN®****Design**

With spiral point.
Up to M 10 DIN 371.
From M 12 DIN 376.

Note:

Very well suited for machining VA.

14318 101-120+300**Design**

Reduced build-up of material deposits
due to vaporisation.

Quality

HSS-E, vaporised.

14318 203-210**Design**

TiN-coated for an even longer service life.

Quality

HSS-E/TiN-coated.

14318 300

HSS-E

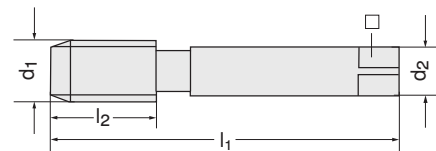


HSS-E

14318 101-120

HSS-E
TiN

14318 203-210

**Vaporised**

Set contents	14318	...
7 pieces	M 3-M 12	300

Vaporised**TiN-coated**

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x Ø mm	DIN	14318	...	14318	...
M 2	1.60	0.40	8	45	2.8 x 2.1	371		101		
M 2.5	2.05	0.45	9	50	2.8 x 2.1	371		102		
M 3	2.50	0.50	10	56	3.5 x 2.7	371		103		203
M 4	3.30	0.70	12	63	4.5 x 3.4	371		104		204
M 5	4.20	0.80	14	70	6.0 x 4.9	371		105		205
M 6	5.00	1.00	16	80	6.0 x 4.9	371		106		206
M 8	6.80	1.25	18	90	8.0 x 6.2	371		108		207
M 10	8.50	1.50	20	100	10.0 x 8.0	371		110		208
M 12	10.20	1.75	22	110	9.0 x 7.0	376		112		209
M 16	14.00	2.00	28	110	12.0 x 9.0	376		116		210
M 20	17.50	2.50	32	140	16.0 x 12.0	376		120		

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
14318 101-120 + 300	-	-	-	50-20	5-15	5-12	-	-	-	-	-	-	5-12	5-12	2-6	-	-
14318 203-210	-	-	-	5-40	5-30	5-24	-	-	-	-	-	-	5-20	5-20	2-6	-	-

14319 - 14320

Through-hole screw tap

M

6H

DIN
371DIN
376

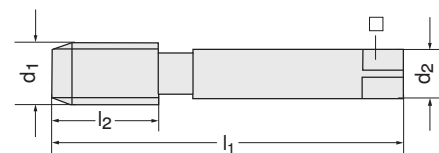
3.5-5 B

≤ 1.5xD

HSS-E
TiN≤ 1200
N/mm²**HHW****Design**

With spiral point.
Improved wear characteristics thanks to the
TiN coating.
Up to M 10 DIN 371.
From M 12 DIN 376.

14319

**DIN 371****DIN 376**

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x Ø mm	14319	...	14320	...
M 3	2.50	0.50	11	56	3.5 x 2.7		101		
M 4	3.30	0.70	13	63	4.5 x 3.4		102		
M 5	4.20	0.80	16	70	6.0 x 4.9		103		
M 6	5.00	1.00	19	80	6.0 x 4.9		104		
M 8	6.80	1.25	22	90	8.0 x 6.2		105		
M 10	8.50	1.50	24	100	10.0 x 8.0		106		
M 12	10.20	1.75	28	110	9.0 x 7.0				107
M 14	12.00	2.00	30	110	11.0 x 9.0				108
M 16	14.00	2.00	32	110	12.0 x 9.0				109
M 20	17.50	2.50	34	140	16.0 x 12.0				110

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	10-40	10-35	10-30	8-20	8-20	-	-	-	-	-	8-20	5-15	-	-	25-30

Through-hole screw tap

14333 - 14334

Through-hole screw tap

Design

With spiral point.

Long service life thanks to TiCN coating.

Note:

Cost-effective design.

14333

M 2–M 10, DIN 371.

14334

M 3–M 24, DIN 376.

M

6H

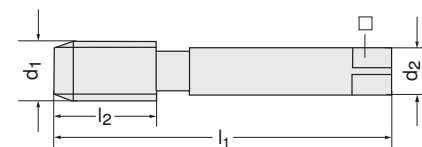
DIN
371DIN
376

3.5-5 B

≤ 2xD

HSS-E
TiCN≤ 1000
N/mm²

14333



DIN 371

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	14333	...
M 2	1.60	0.40	8	45	2.8 x 2.1		201
M 2.5	2.05	0.45	9	50	2.8 x 2.1		202
M 3	2.50	0.50	10	56	3.5 x 2.7		203
M 4	3.30	0.70	12	63	4.5 x 3.4		204
M 5	4.20	0.80	14	70	6.0 x 4.9		205
M 6	5.00	1.00	16	80	6.0 x 4.9		206
M 8	6.80	1.25	18	90	8.0 x 6.2		207
M 10	8.50	1.50	20	100	10.0 x 8.0		208

DIN 376

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	14334	...
M 3	2.50	0.50	10	56	2.2 x -		203
M 4	3.30	0.70	12	63	2.8 x 2.1		204
M 5	4.20	0.80	14	70	3.5 x 2.7		205
M 6	5.00	1.00	16	80	4.5 x 3.4		206
M 8	6.80	1.25	18	90	6.0 x 4.9		207
M 10	8.50	1.50	20	100	7.0 x 5.5		208
M 12	10.20	1.75	28	110	9.0 x 7.0		209
M 14	12.00	2.00	26	110	11.0 x 9.0		210
M 16	14.00	2.00	28	110	12.0 x 9.0		211
M 20	17.50	2.50	32	140	16.0 x 12.0		212
M 24	21.00	3.00	34	160	18.0 x 14.5		213

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	10-40	10-35	10-30	10-30	-	-	-	-	-	-	8-20	5-15	-	-	-

14338 - 14339

Through-hole screw tap



Design

With spiral point.

Increased wear resistance thanks to the OX coating.

Up to M 10 DIN 371.

From M 12 DIN 376.

Note:

Very well suited for machining VA.

M

6H

DIN
371DIN
376

3.5-5 B

≤ 2xD

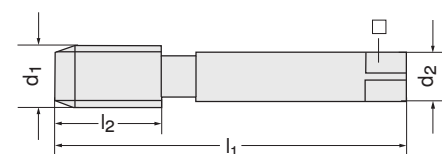
HSS-E

VA-OX

≤ 1200
N/mm²

Uni

14338



DIN 371

DIN 376

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	14338	...	14339	...
M 2	1.60	0.40	8	45	2.8 x 2.1				101
M 2.5	2.05	0.45	9	50	2.8 x 2.1				103
M 3	2.50	0.50	11	56	3.5 x 2.7				104
M 3.5	2.90	0.60	12	56	4.0 x 3.0				105
M 4	3.30	0.70	13	63	4.5 x 3.4				106
M 5	4.20	0.80	16	70	6.0 x 4.9				107
M 6	5.00	1.00	19	80	6.0 x 4.9				108
M 8	6.80	1.25	22	90	8.0 x 6.2				109
M 10	8.50	1.50	24	100	10.0 x 8.0				110
M 12	10.20	1.75	28	110	9.0 x 7.0				111
M 14	12.00	2.00	30	110	11.0 x 9.0				112
M 16	14.00	2.00	32	110	12.0 x 9.0				113
M 18	15.50	2.50	34	125	14.0 x 11.0				114
M 20	17.50	2.50	34	140	16.0 x 12.0				115
M 22	19.50	2.50	34	140	18.0 x 14.5				116
M 24	21.00	3.00	38	160	18.0 x 14.5				117
M 30	26.50	3.50	45	180	22.0 x 18.0				118

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
18-25	10-25	10-15	5-25	5-20	5-15	5-15	5-10	-	-	-	-	-	5-15	5-12	-	-	-

14340

Through-hole screw tap

M

6H

DIN
371DIN
376

3.5-5 B

≤ 3xD

HSS-E

EMUGE

Design

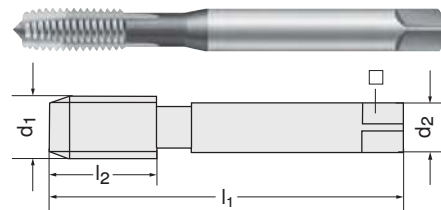
With spiral point.
Up to M 10 DIN 371.
From M 12 DIN 376.

14340 104-110
Record 1B-VA.

14340 111-117
Record 2B-VA.

1100
N/mm²

14340



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN 371 14340	...	DIN 376 14340	...
M 3	2.50	0.50	11	56	3.5 x 2.7		104		
M 4	3.30	0.70	13	63	4.5 x 3.4		106		
M 5	4.20	0.80	15	70	6.0 x 4.9		107		
M 6	5.00	1.00	17	80	6.0 x 4.9		108		
M 8	6.80	1.25	20	90	8.0 x 6.2		109		
M 10	8.50	1.50	22	100	10.0 x 8.0		110		
M 12	10.20	1.75	24	110	9.0 x 7.0				111
M 14	12.00	2.00	26	110	11.0 x 9.0				112
M 16	14.00	2.00	27	110	12.0 x 9.0				113
M 20	17.50	2.50	32	140	16.0 x 12.0				115
M 24	21.00	3.00	34	160	18.0 x 14.5				117

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	5-25	5-20	5-15	5-12	5-10	-	-	-	-	-	5-15	2-10	-	5-20	-

14344

Through-hole screw tap

M

6H

DIN
371DIN
376

3.5-5 B

≤ 3xD

HSS-E

ATORN®

Design

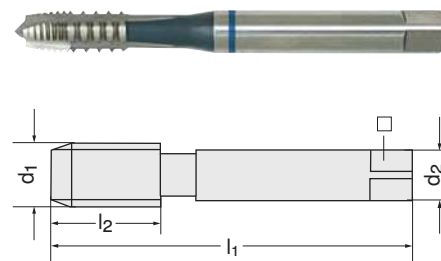
With spiral point.
With offset teeth to reduce the torque and for better
distribution of the lubricant.
Up to M 10 DIN 371.
From M 12 DIN 376.

Applications

Particularly suitable for materials that tend to jam
and thin-walled parts, since there is no material
deformation thanks to the reduced frictional resis-
tance.

1200
N/mm²

14344



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN 371 14344	...	DIN 376 14344	...
M 3	2.50	0.50	10	56	3.5 x 2.7		103		
M 4	3.30	0.70	12	63	4.5 x 3.4		104		
M 5	4.20	0.80	14	70	6.0 x 4.9		105		
M 6	5.00	1.00	16	80	6.0 x 4.9		106		
M 8	6.80	1.25	18	90	8.0 x 6.2		108		
M 10	8.50	1.50	20	100	10.0 x 8.0		110		
M 12	10.20	1.75	22	110	9.0 x 7.0				112
M 16	14.00	2.00	25	110	12.0 x 9.0				116
M 20	17.50	2.50	32	140	16.0 x 12.0				120

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	-	5-20	5-15	5-12	4-10	2-8	-	-	-	-	-	5-12	5-12	-	-	-

Through-hole screw tap

14341

Through-hole screw tap

M

6H

DIN
371DIN
376

3,5-5 B

≤ 3xD

ATORN®

Design

With spiral point.
Up to M 10 DIN 371.
From M 12 DIN 376.

14341 103-120
Quality
HSS-E.

14341 203-220
Quality
HSS-E/TiCN-coated.

Applications

Special grinding for steels up to 1400 N/mm².

Note:

The problem solver for high-strength materials.

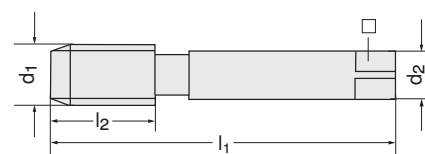
≤ 1400
N/mm²

HSS-E

14341 103-120

HSS-E
TiCN

14341 203-220



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN	HSS-E		HSS-E/TiCN	
							14341	...	14341	...
M 3	2.50	0.50	10	56	3.5 x 2.7	371		103		203
M 4	3.30	0.70	12	63	4.5 x 3.4	371		104		204
M 5	4.20	0.80	14	70	6.0 x 4.9	371		105		205
M 6	5.00	1.00	16	80	6.0 x 4.9	371		106		206
M 8	6.80	1.25	18	90	8.0 x 6.2	371		108		208
M 10	8.50	1.50	20	100	10.0 x 8.0	371		110		210
M 12	10.20	1.75	22	110	9.0 x 7.0	376		112		212
M 16	14.00	2.00	28	110	12.0 x 9.0	376		116		216
M 20	17.50	2.50	32	140	16.0 x 12.0	376		120		220

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	-	-	5-12	4-10	2-8	2-8	-	-	-	-	-	-	-	-	-

14353 - 14356

Through-hole screw tap

M

DIN
371DIN
376

3,5-5 B

ATORN®

Design

With strong spiral point.
Up to M 10 DIN 371.
From M 12 DIN 376.

14353

Applications

For an especially long service life.

Quality

HSS-E-PM.

14356

Applications

For an even longer service life.

Quality

HSS-E-PM/TiCN coated.

6H

≤ 3xD

HSS-E
PM

Ti/Ni

14353

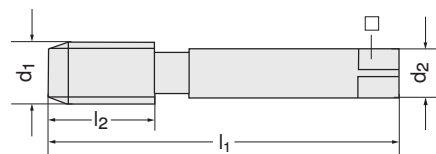


6H

≤ 3xD

HSS-E-PM
TiCN

14356



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN	HSS-E/PM		HSS-E/PM-TiCN	
							14353	...	14356	...
M 2	1.60	0.40	8	45	2.8 x 2.1	371				202
M 3	2.50	0.50	10	56	3.5 x 2.7	371		203		203
M 4	3.30	0.70	12	63	4.5 x 3.4	371		204		204
M 5	4.20	0.80	14	70	6.0 x 4.9	371		205		205
M 6	5.00	1.00	16	80	6.0 x 4.9	371		206		206
M 8	6.80	1.25	18	90	8.0 x 6.2	371		208		208
M 10	8.50	1.50	20	100	10.0 x 8.0	371		210		210
M 12	10.20	1.75	22	110	9.0 x 7.0	376		212		212
M 16	14.00	2.00	28	110	12.0 x 9.0	376		216		216

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	Ni alloy	Plastic
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2-10	2-10	-

14350 - 14352

Through-hole screw tap

ATORN®**Design**

- Strong spiral point
- Vaporised
- For minimal wear
- Improved coolant transport

Applications

All-rounder for universal machining.

Also very well suited to the machining of VA.

Note:

Outstanding value for money.

High profitability.

14350

M 2–M 10, DIN 371.

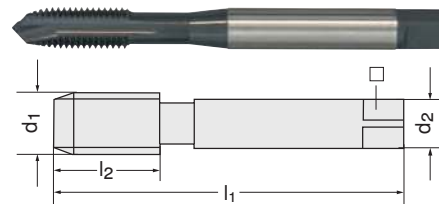
14352

M 3–M 36, DIN 376.

M**6H****DIN 371****DIN 376**

3.5-5 B

≤ 2xD

HSS-E
OX**14350****DIN 371**

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	14350	...
M 2	1.60	0.40	8	45	2.8 x 2.1		101
M 2.5	2.05	0.45	9	50	2.8 x 2.1		102
M 3	2.50	0.50	11	56	3.5 x 2.7		103
M 3.5	2.90	0.60	12	56	4.0 x 3.0		104
M 4	3.30	0.70	13	63	4.5 x 3.4		105
M 5	4.20	0.80	16	70	6.0 x 4.9		106
M 6	5.00	1.00	19	80	6.0 x 4.9		107
M 8	6.80	1.25	22	90	8.0 x 6.2		108
M 10	8.50	1.50	24	100	10.0 x 8.0		109

DIN 376

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	14352	...
M 3	2.50	0.50	11	56	2.2 x -		103
M 4	3.30	0.70	13	63	2.8 x 2.1		105
M 5	4.20	0.80	16	70	3.5 x 2.7		106
M 6	5.00	1.00	19	80	4.5 x 3.4		107
M 8	6.80	1.25	22	90	6.0 x 4.9		108
M 10	8.50	1.50	24	100	7.0 x 5.5		109
M 12	10.20	1.75	28	110	9.0 x 7.0		110
M 14	12.00	2.00	30	110	11.0 x 9.0		111
M 16	14.00	2.00	32	110	12.0 x 9.0		112
M 18	15.50	2.50	34	125	14.0 x 11.0		113
M 20	17.50	2.50	34	140	16.0 x 12.0		114
M 22	19.50	2.50	34	140	18.0 x 14.5		115
M 24	21.00	3.00	38	160	18.0 x 14.5		116
M 27	24.00	3.00	38	160	20.0 x 16.0		117
M 30	26.50	3.50	45	180	22.0 x 18.0		118
M 33	29.50	3.50	50	180	25.0 x 20.0		119
M 36	32.00	4.00	56	200	28.0 x 22.0		120

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
18-25	10-25	10-15	5-25	5-20	5-15	5-15	5-10	-	-	-	-	-	5-12	5-12	-	-	-

14345

Through-hole screw tap Uni

ATORN®**Design**

With spiral point.
Extra-robust PM screw taps.
Up to M 10 DIN 371.
From M 12 DIN 376.

Note:

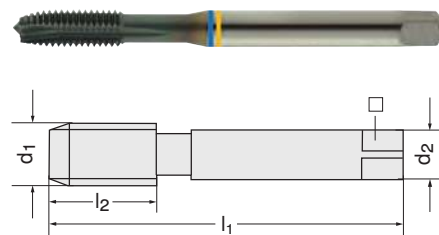
Outstanding value for money.

Maximum profitability.

M**6H****DIN 371****DIN 376**

2-3 C

≤ 2.5xD

HSS-E-PM
TiCN**14345****DIN 371****DIN 376**

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	14345	...	14345	...
M 3	2.50	0.50	10	56	3.5 x 2.7			203	
M 4	3.30	0.70	12	63	4.5 x 3.5			204	
M 5	4.20	0.80	14	70	6.0 x 4.9			205	
M 6	5.00	1.00	16	80	6.0 x 4.9			206	
M 8	6.80	1.25	18	90	8.0 x 6.2			208	
M 10	8.50	1.50	20	100	10.0 x 8.0			210	
M 12	10.20	1.75	22	110	12.0 x 9.0				212
M 16	14.00	2.00	28	110	12.0 x 9.0				216

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-25	5-20	5-12	4-10	2-8	-	-	-	-	-	5-20	5-20	-	-	-

Through-hole screw tap

14346

Through-hole screw tap Uni

ATORN®

Design

Straight-grooved with spiral point.
The spiral point causes strong
chip transport forwards.
Up to M 10 DIN 371.
From M 12 DIN 376.

14346 092-130+300

Quality

HSS-E, vaporised.

14346 203-220

Quality

HSS-E/TiN-coated.

14346 300

HSS-E



M

6H

DIN
371DIN
376

3.5-5 B

≤ 3xD

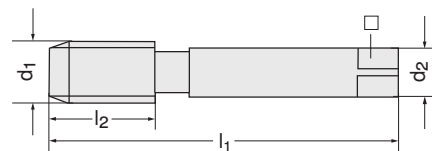


14346 092-130

HSS-E

HSS-E
TiN

14346 203-220



Vaporised

TiN-coated

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN	Vaporised 14346	...	TiN-coated 14346	...
M 1	0.75	0.25	5.5	32	2.5 x 2.1	371		092		
M 1.2	0.85	0.25	5.5	32	2.5 x 2.1	371		093		
M 1.4	1.10	0.30	7	32	2.5 x 2.1	371		094		
M 1.6	1.25	0.35	8	32	2.5 x 2.1	371		095		
M 1.7	1.30	0.35	8	32	2.5 x 2.1	371		096		
M 1.8	1.45	0.35	8	32	2.5 x 2.1	371		097		
M 2	1.60	0.40	8	36	2.5 x 2.1	371		098		
M 2.2	1.75	0.45	8	36	2.8 x 2.1	371		099		
M 2.3	1.90	0.40	8	36	2.8 x 2.1	371		100		
M 2.5	2.05	0.45	9	40	2.8 x 2.1	371		101		
M 2.6	2.10	0.45	9	40	2.8 x 2.1	371		102		
M 3	2.50	0.50	10	56	3.5 x 2.7	371		103		203
M 4	3.30	0.70	12	63	4.5 x 3.4	371		104		204
M 5	4.20	0.80	14	70	6.0 x 4.9	371		105		205
M 6	5.00	1.00	16	80	6.0 x 4.9	371		106		206
M 8	6.80	1.25	18	90	8.0 x 6.2	371		108		208
M 10	8.50	1.50	20	100	10.0 x 8.0	371		110		210
M 12	10.25	1.75	22	110	9.0 x 7.0	376		112		212
M 16	14.00	2.00	28	110	12.0 x 9.0	376		116		216
M 20	17.50	2.50	32	140	16.0 x 12.0	376		120		220
M 24	21.00	3.00	38	110	18.0 x 14.5	376		124		
M 27	24.00	3.00	45	110	20.0 x 16.0	376		127		
M 30	26.50	3.50	45	125	22.0 x 18.0	376		130		

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
14346 092-130+300																	
10-15	-	10-15	5-15	5-15	5-15	5-15	-	-	-	-	-	-	4-6	4-6	-	5-8	-
14346 203-220																	
10-15	-	10-20	10-20	10-20	5-20	5-20	-	-	-	-	-	-	5-8	5-8	-	8-12	-



14342

Through-hole screw tap Unimaxx

M

6HX

DIN
371DIN
376

3.5-5 B

≤ 2xD

HSS-E-PM
HARDLUBE**UNIMAXX**

Design

With spiral point.

HSS-E-PM steel and HARDLUBE coating for particularly high wear resistance and minimised surface friction.

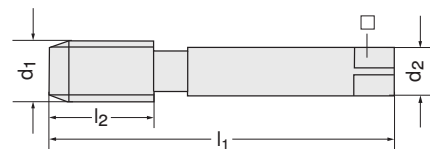
Note:

50% higher cutting values and service life possible.
All-rounder suitable for a wide variety of materials.
Excellent value for money, higher profitability.



14342

Up to M 10 DIN 371.
From M 12 DIN 376.



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	DIN 371 14342	...	DIN 376 14342	...
M 2	1.60	0.40	8	45	2.8 x 2.1		099		
M 2.5	2.05	0.45	9	50	2.8 x 2.1		100		
M 3	2.50	0.50	11	56	3.5 x 2.7		101		
M 4	3.30	0.70	13	63	4.5 x 3.4		102		
M 5	4.20	0.80	16	70	6.0 x 4.9		103		
M 6	5.00	1.00	19	80	6.0 x 4.9		104		
M 8	6.80	1.25	22	90	8.0 x 6.2		106		
M 10	8.50	1.50	24	100	10.0 x 8.0		108		
M 12	10.20	1.75	28	110	9.0 x 7.0				110
M 16	14.00	2.00	32	110	12.0 x 9.0				112
M 20	17.50	2.50	34	140	16.0 x 12.0				114
M 24	21.00	3.00	38	160	18.0 x 14.5				116
M 27	24.00	3.00	38	160	20.0 x 16.0				117
M 30	26.50	3.50	45	180	22.0 x 18.0				118

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10-45	10-45	15-40	15-40	15-35	10-30	10-25	8-20	-	-	-	-	-	8-20	5-15	-	15-40	-

14347

Through-hole screw tap

M

6HX

DIN
371DIN
376

3.5-5 B

≤ 2xD

PM
HARDLUBE**ATORN®**

Design

- Powder-metallurgical steel (PM) with **HARDLUBE coating**
- High edge stability for particularly high wear resistance and minimised surface friction
- With spiral point

Applications

All-rounder for universal machining.
Also very well suited to the machining of VA.

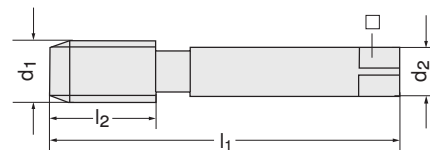
Note:

Outstanding value for money.
Maximum profitability.



14347

Up to M 10 DIN 371.
From M 12 DIN 376.



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	DIN 371 14347	...	DIN 376 14347	...
M 2	1.60	0.40	8	45	2.8 x 2.1		101		
M 2.5	2.05	0.45	9	50	2.8 x 2.1		102		
M 3	2.50	0.50	11	56	3.5 x 2.7		103		
M 4	3.30	0.70	13	63	4.5 x 3.4		104		
M 5	4.20	0.80	16	70	6.0 x 4.9		105		
M 6	5.00	1.00	19	80	6.0 x 4.9		106		
M 8	6.80	1.25	22	90	8.0 x 6.2		107		
M 10	8.50	1.50	24	100	10.0 x 8.0		108		
M 12	10.20	1.75	28	110	9.0 x 7.0				109
M 14	12.00	2.00	30	110	11.0 x 9.0				110
M 16	14.00	2.00	32	110	12.0 x 9.0				111
M 20	17.50	2.50	34	140	16.0 x 12.0				112
M 24	21.00	3.00	38	160	18.0 x 14.5				113
M 27	24.00	3.00	38	160	20.0 x 16.0				114
M 30	26.50	3.50	45	180	22.0 x 18.0				115

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10-45	10-45	15-40	15-40	15-35	10-30	10-25	8-20	-	-	-	-	-	8-20	5-15	-	15-40	-

Through-hole screw tap

14348 - 14349

Through-hole screw tap

M

DIN
371DIN
3763.5-5 B
≤ 2xDPM
HARDLUBE

VA

Uni

ATORN®

Design

- Powder-metallurgical steel (PM) with **HARDLUBE** coating

- High edge stability for particularly high wear resistance and minimised surface friction

Up to M 10 DIN 371.

From M 12 DIN 376.

Applications

All-rounder for universal machining.
Also very well suited to the machining of VA.

Note:

Excellent value
for money. Maximum
profitability.

6HX

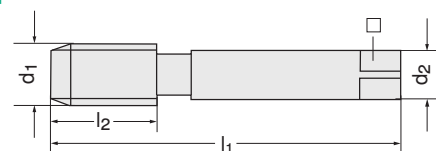


14348

6GX



14349



6HX with internal cooling supply

6GX

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\pi}{4}$ mm	DIN	14348	...	14349	...
M 3	2.50	0.50	11	56	3.5 x 2.7	371				101
M 4	3.30	0.70	13	63	4.5 x 3.4	371				102
M 5	4.20	0.80	16	70	6.0 x 4.9	371				103
M 6	5.00	1.00	19	80	6.0 x 4.9	371		104		104
M 8	6.80	1.25	22	90	8.0 x 6.2	371		105		105
M 10	8.50	1.50	24	100	10.0 x 8.0	371		106		106
M 12	10.20	1.75	28	110	9.0 x 7.0	376		107		107
M 16	14.00	2.00	32	110	12.0 x 9.0	376		108		108
M 20	17.50	2.50	34	140	16.0 x 12.0	376		109		109

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10-45	10-45	15-40	15-40	15-35	10-30	10-25	8-20	-	-	-	-	-	8-20	5-15	-	15-40	-

14362

Through-hole screw tap Uni

M

6HX

DIN
371DIN
3763.5-5 B
≤ 2xDPM
TiCN

Uni

ATORN®

Design

Straight-grooved with spiral point.

The spiral point causes strong chip transport forwards. Synchro tool for CNC machines (clamp rigidly or with minimal length compensation).

Up to M 10 DIN 371.

From M 12 DIN 376.

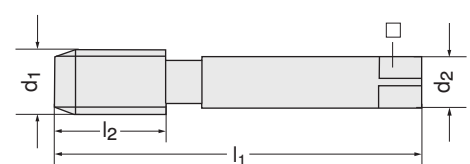
Note:

Synchro chuck, see art. no. 21453,
21457 and 21837.

Suitable inserts, see art. no. 21465-21466.



14362



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\pi}{4}$ mm	DIN 371 14362	...	DIN 376 14362	...
M 3	2.50	0.50	5	56	3.5 x 2.7		103		
M 4	3.30	0.70	6	63	4.5 x 3.4		104		
M 5	4.20	0.80	7	70	6.0 x 4.9		105		
M 6	5.00	1.00	8	80	6.0 x 4.9		106		
M 8	6.80	1.25	10	90	8.0 x 6.2		108		
M 10	8.50	1.50	12	100	10.0 x 8.0		110		
M 12	10.20	1.75	18	110	9.0 x 7.0				112
M 16	14.00	2.00	20	110	12.0 x 9.0				116

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10-30	-	10-25	15-35	15-30	15-30	10-25	5-15	2-10	-	-	-	-	5-15	5-15	-	10-15	-

14366

Through-hole screw tap SGPO (PM)

M

6H

DIN
371DIN
376

3.5-5 B

HSS
PM-SG

≤ 3xD



14366

NACHI

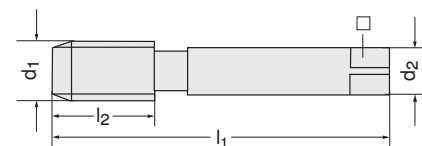
Design

- Metric thread
- Through-hole thread
- Right cutting with spiral point
- Up to M 10 DIN 371
- From M 12 DIN 376

Note:

Screw tap for the most demanding applications.
For a long service life and process reliability!

NEW



HSS-PM-SG

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	Z	DIN	14366	...
M 3	2.50	0.50	10.0	56	3.5 x 2.7	3	371		005
M 4	3.30	0.70	12.5	63	4.5 x 3.4	3	371		006
M 5	4.20	0.80	14.5	70	6.0 x 4.9	3	371		007
M 6	5.00	1.00	17.0	80	6.0 x 4.9	3	371		008
M 8	6.80	1.25	22.0	90	8.0 x 6.2	3	371		009
M 10	8.50	1.50	27.0	100	10.0 x 8.0	3	371		010
M 12	10.20	1.75	32.0	110	9.0 x 7.0	3	376		011
M 14	12.00	2.00	32.0	110	11.0 x 9.0	3	376		012
M 16	14.00	2.00	32.0	110	12.0 x 9.0	3	376		013
M 18	15.50	2.50	37.5	125	14.0 x 11.0	3	376		014
M 20	17.50	2.50	37.5	140	16.0 x 12.0	3	376		015
M 22	19.50	2.50	37.5	140	18.0 x 14.5	3	376		016
M 24	21.00	3.00	45.0	160	18.0 x 14.5	3	376		017

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
15-50	15-50	6-15	15-30	15-30	8-30	8-30	8-30	5-10	-	-	-	-	5-10	5-10	-	10-30	-

14361

Through-hole screw tap Synchro

M

6HX

DIN
371DIN
376

3.5-5 B

≤ 3xD

HSS-E-PM
TiCN

14361

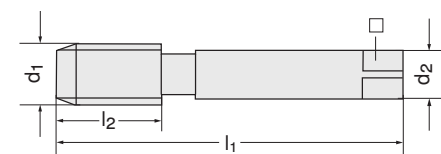
HHW

Design

Extra-robust PM screw taps with h6 shank for shrinking and with clamping surface for fitting in the surface chuck. Special geometry for universal use on machines with synchronised spindle drive. Up to M 10 DIN 371. From M 12 DIN 376.

Note:

The emulsion ratio should be min. 8%.
To increase the service life of the screw tap, we recommend the use of the Synchro tapping chuck (see art. no. 21449 ff.).



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	DIN 371		DIN 376	
						14361	...	14361	...
M 2	1.60	0.40	4	70	6 x 4.9		101		
M 2.5	2.05	0.45	5	70	6 x 4.9		102		
M 3	2.50	0.50	5	70	6 x 4.9		103		
M 4	3.30	0.70	7	70	6 x 4.9		104		
M 5	4.20	0.80	8	70	6 x 4.9		105		
M 6	5.00	1.00	10	80	6 x 4.9		106		
M 8	6.80	1.25	13	90	8 x 6.2		108		
M 10	8.50	1.50	15	100	10 x 8.0		110		
M 12	10.20	1.75	18	110	12 x 9.0				112
M 14	12.00	2.00	20	110	14 x 11.0				114
M 16	14.00	2.00	20	110	16 x 12.0				116
M 20	17.50	2.50	25	140	16 x 12.0				120

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
60-80	40-50	25-70	50-60	40-50	30-40	20-30	20-30	20-30	-	-	-	-	10-20	10-20	10-25	-	40-50

Through-hole screw taps | Blind-hole screw taps | Machine thread moulds

14354 - 14355

Through-hole and blind-hole screw taps

M

6H

DIN 371

DIN 376

≤ 2xD

≤ 2xD

ATORN®

Design

Up to M 10 DIN 371.
From M 12 DIN 376.

Note:

In the case of very hard steels, we recommend, in a deviation from the DIN, to drill the core hole larger by 0.1 to 0.3 mm.

14354

Design

HSS-E-PM-TiAlN screw tap
with long notch.

Applications

For steels up to 52 HRC.

14355

Design

Solid carbide ultra-fine grain screw tap
with TiAlN+C coating.

From M 6 with internal coolant supply (ICS).

Applications

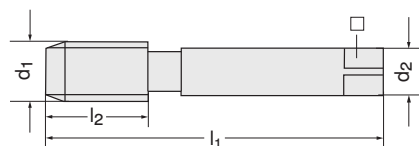
For steels up to 67 HRC.

HSS-E-PM
TiAlN52
HRC

14354

VHM
TiAlN+C67
HRC

14355



PM/TiAlN

Solid carbide/TiAlN+C

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN	14354	...	14355	...
M 3	2.50	0.50	10	56	3.5 x 2.7	371				103
M 4	3.30	0.70	12	63	4.5 x 3.4	371				104
M 5	4.20	0.80	14	70	6.0 x 4.9	371				105
M 6	5.50	1.00	16	80	6.0 x 4.9	371		106		106
M 8	6.80	1.25	18	90	8.0 x 6.2	371		108		108
M 10	8.50	1.50	20	100	10.0 x 8.0	371		110		110
M 12	10.20	1.75	22	110	9.0 x 7.0	376		112		112
M 16	14.00	2.00	28	110	12.0 x 9.0	376		116		116
M 20	17.50	2.50	32	140	16.0 x 12.0	376		120		

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
14354	-	-	-	-	5-24	4-10	2-12	2-8	2-5	2-5	-	-	-	-	-	-	-
14355	-	-	-	-	-	-	-	-	-	2-5	1-4	1-3	-	-	-	-	-

14358

Through-hole screw tap

M

6HX

DIN 371

DIN 376

2-3 C

≤ 2xD

GG(G)

ATORN®

Design

Without spiral point.
Up to M 10 DIN 371.
From M 12 DIN 376.

14358 103-120

Applications

For high machining performance
in grey cast iron.

Quality

HSS-E, nitrided.

14358 203-220

Applications

For an even longer service life.

Quality

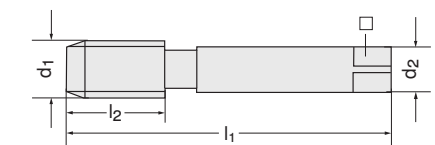
HSS-E/TiN-coated.

HSS-E

14358 103-120

HSS-E
TiN

14358 203-220



HSS-E nitrided

HSS-E/TiN

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN	14358	...	14358	...
M 3	2.50	0.50	10	56	3.5 x 2.7	371			103	203
M 4	3.30	0.70	12	63	4.5 x 3.4	371			104	204
M 5	4.20	0.80	14	70	6.0 x 4.9	371			105	205
M 6	5.00	1.00	16	80	6.0 x 4.9	371			106	206
M 8	6.80	1.25	18	90	8.0 x 6.2	371			108	208
M 10	8.50	1.50	20	100	10.0 x 8.0	371			110	210
M 12	10.20	1.75	22	110	9.0 x 7.0	376			112	212
M 16	14.00	2.00	28	110	12.0 x 9.0	376			116	216
M 20	17.50	2.50	32	140	16.0 x 12.0	376			120	220

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8-20	-

14360

Through-hole screw tap

ATORN®**Design**

- With strong spiral point and larger chip space
- Up to M 10 DIN 371
- From M 12 DIN 376

Applications

For through-hole threads in long-chipping non-ferrous metals.

M

6H

DIN
371DIN
376

3.5-5 B

≤ 3xD

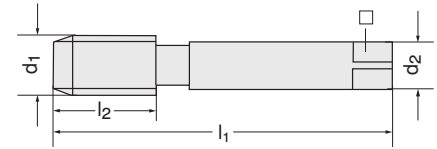
ALU

HSS-E

14360 203-212

HSS-E-PM
CrN

14360 103-116



HSS-E/polished

HSS-E/PM-CrN

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	DIN	14360	...	14360	...
M 3	2.5	0.50	10	56	3.5 x 2.7	371		203		103
M 4	3.3	0.70	12	63	4.5 x 3.4	371		204		104
M 5	4.2	0.80	14	70	6.0 x 4.9	371		205		105
M 6	5.0	1.00	16	80	6.0 x 4.9	371		206		106
M 8	6.8	1.25	18	90	8.0 x 6.2	371		208		108
M 10	8.5	1.50	20	100	10.0 x 8.0	371		210		110
M 12	10.2	1.75	22	110	9.0 x 7.0	376		212		112
M 16	14.0	2.00	28	110	12.0 x 9.0	376				116

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	-	-	-	-	-	-	-	-	-	-	-	-	-	20-30

14363

Machine thread mould Uni

ATORN®**Design**

- Innovative mould geometry according to DIN 2174
- With lubrication grooves for optimum lubrication effect even in deeper threads
- Up to M 10 DIN 371.
- From M 12 DIN 376.

Applications

For through holes and blind holes.

For producing metric threads on CNC and conventional machines. For the material groups steel, stainless steel and non-ferrous metals. Also suitable for materials up to 1300 N/mm².

Quality

Finished **TiCN coating** for the best sliding properties.

Note:

For all materials with a minimum expansion of 8%. M 1 = tolerance field 4HX.

M

6HX

DIN
371DIN
376

2-3 C

≤ 3xD

≤ 3xD

HSS-Co8
TiCN

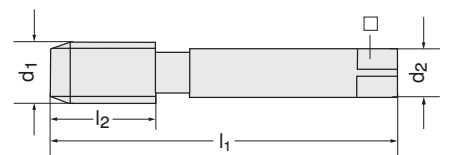
Uni

NEW

14363 204-212



14363 213-220



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	DIN	14363	...
M 1	0.90	0.25	5.5	40	2.5 x 2.1	371		204
M 2	1.85	0.40	8	45	2.8 x 2.1	371		205
M 2.5	2.33	0.45	9	50	2.8 x 2.1	371		206
M 3	2.80	0.50	8	56	3.5 x 2.7	371		207
M 4	3.70	0.70	11	63	4.5 x 3.4	371		208
M 5	4.65	0.80	12	70	6.0 x 4.9	371		209
M 6	5.55	1.00	10	80	6.0 x 4.9	371		210
M 8	7.40	1.25	12	90	8.0 x 6.2	371		211
M 10	9.30	1.50	15	100	10.0 x 8.0	371		212
M 12	11.20	1.75	17	110	9.0 x 7.0	376		213
M 14	13.00	2.00	20	110	11.0 x 9.0	376		214
M 16	15.00	2.00	20	110	12.0 x 9.0	376		216
M 20	18.80	2.50	20	140	16.0 x 12.0	376		220

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-40	20-40	15-22	20-30	20-30	20-30	8-15	8-15	8-15	-	-	-	-	8-10	-	-	-	-

Machine thread mould

14366

Machine thread mould Uni

ATORN®

Design

- Innovative mould geometry according to DIN 2174
 - With radial internal cooling
 - With lubrication grooves for optimum lubrication effect even in deeper threads
- Up to M 10 DIN 371.
From M 12 DIN 376.

Applications

For through holes and blind holes.
For producing metric threads on CNC and conventional machines. For the material groups steel, stainless steel and non-ferrous metals.
Also suitable for materials up to 1300 N/mm².

Quality

Finished **TiCN coating** for the best sliding properties.

Note:

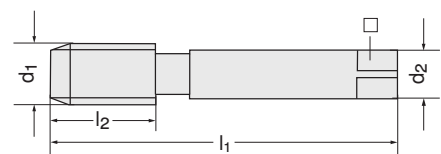
For all materials with a minimum expansion of 8%.

**NEW****HSS-Co8
TiCN**

14366 106-110



14366 112-116



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	DIN	14366	...
M 6	5.55	1.00	10	80	6.0 x 4.9	371		106
M 8	7.40	1.25	12	90	8.0 x 6.2	371		108
M 10	9.30	1.50	15	100	10.0 x 8.0	371		110
M 12	11.20	1.75	17	110	9.0 x 7.0	376		112
M 16	15.00	2.00	20	110	12.0 x 9.0	376		116
M 20	18.80	2.50	20	140	16.0 x 12.0	376		120

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-40	20-40	15-22	20-30	20-30	20-30	8-15	8-15	8-15	-	-	-	-	8-10	-	-	-	-

14364

Machine thread mould

ATORN®

Design

Significantly reduced torque due to the optimised geometry. With lubrication grooves for optimum lubrication effect even in deep threads.
Up to M 10 DIN 371.
From M 12 DIN 376.

Applications

For through holes and blind holes.

Note:

For all materials with a minimum expansion of 8%.
Use the most highly compressible cutting oils possible for shaping.

14364 103-112

Quality

TiN coating for good sliding properties.

14364 203-212

Quality

TiAlN+C coating for reduced wear and lower tendency for a build-up of material deposits.

14364 303-312

Quality

Powder steel PM/TiCN coating.



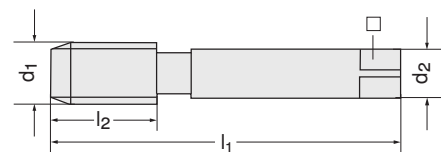
14364 103-112

**HSS-E
TiN**

14364 203-212

**HSS-E
TiAlN+C**

14364 303-312

**HSS-E-PM
TiCN**

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	DIN	HSS-E/TiN		HSS-E/TiAlN+C		HSS-E/PM-TiCN		...
							14364	...	14364	...	14364	...	
M 3	2.80	0.50	10	56	3.5 x 2.7	371		103		203		303	
M 4	3.70	0.70	12	63	4.5 x 3.4	371		104		204		304	
M 5	4.65	0.80	14	70	6.0 x 4.9	371		105		205		305	
M 6	5.55	1.00	16	80	6.0 x 4.9	371		106		206		306	
M 8	7.40	1.25	18	90	8.0 x 6.2	371		108		208		308	
M 10	9.30	1.50	20	100	10.0 x 8.0	371		110		210		310	
M 12	11.10	1.75	24	110	9.0 x 7.0	376		112		212		312	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
45-60	20-80	10-20	8-60	8-45	8-36	5-20	3-18	-	-	-	-	-	8-30	8-30	-	-	-



14363

Machine thread mould Uni

M

6HX

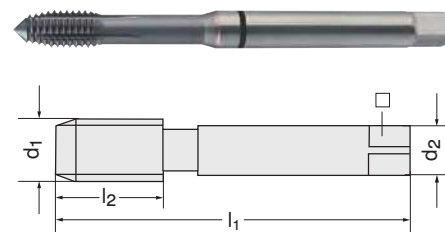
DIN
371DIN
376PM
TiCN**ATORN®****Design**

With oil grooves.
Synchro tool for CNC machines.
Up to M 10 DIN 371.
From M 12 DIN 376.

Note:

Synchro chuck, see art. no. 21453,
21457 and 21837.
Suitable inserts, see art. no. 21465–21466.

14363



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN 371		DIN 376	
						14363	...	14363	...
M 3	2.75	0.50	5	56	3.5 x 2.7			103	
M 4	3.65	0.70	6	63	4.5 x 3.4			104	
M 5	4.60	0.80	7	70	6.0 x 4.9			105	
M 6	5.55	1.00	8	80	6.0 x 4.9			106	
M 8	7.40	1.25	10	90	8.0 x 6.2			108	
M 10	9.30	1.50	12	100	10.0 x 8.0			110	
M 12	11.10	1.75	18	110	9.0 x 7.0				112
M 16	15.10	2.00	20	110	12.0 x 9.0				116

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
15–40	-	10–30	15–40	15–35	15–35	10–30	10–20	5–15	-	-	-	-	5–18	5–18	-	-	-

14365

Machine thread mould

M

6HX

DIN
2174HSS-E
TiN**HHW****Design**

TiN coating for good sliding properties.

With lubrication grooves for optimum lubrication effects.

Up to M 10 DIN 371.

From M 12 DIN 376.

Applications

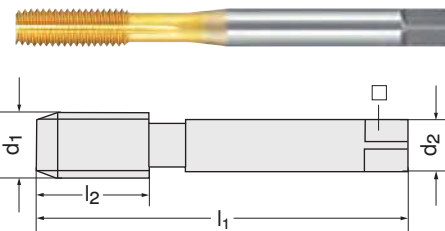
For through holes and blind holes.

Note:

For all materials with a minimum expansion of 8%.
Highly compressible cutting oils should be used for shaping.



14365



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN 371		DIN 376	
						14365	...	14365	...
M 2	1.83	0.40	8	45	2.8 x 2.1			101	
M 2.5	2.30	0.45	9	50	2.8 x 2.1			102	
M 3	2.80	0.50	11	56	3.5 x 2.7			103	
M 3.5	3.25	0.60	11	56	4.0 x 3.0			104	
M 4	3.70	0.70	13	63	4.5 x 3.4			105	
M 5	4.65	0.80	16	70	6.0 x 4.9			106	
M 6	5.55	1.00	19	80	6.0 x 4.9			107	
M 8	7.40	1.25	22	90	8.0 x 6.2			108	
M 10	9.30	1.50	24	100	10.0 x 8.0			109	
M 12	11.10	1.75	28	110	9.0 x 7.0				110
M 14	13.00	2.00	30	110	11.0 x 9.0				111
M 16	15.00	2.00	32	110	12.0 x 9.0				112

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
45–60	20–80	10–20	8–60	8–45	8–36	5–20	-	-	-	-	-	-	8–30	8–30	-	-	-

Machine thread moulds | Through-hole nut taps

14367

Solid carbide machine thread mould

M

6HX

DIN
371DIN
376**ATORN®****Design**

h6 shank for fitting in shrink-fit chucks.

Up to M 10 DIN 371.

From M 12 DIN 376.

Applications

For through holes and blind holes.

Quality

Solid carbide ultra-fine grain for the highest machining performance. **TiAlN+C-coated** for significant reduction in torque and lower tendency for build-up of material deposits.

Note:

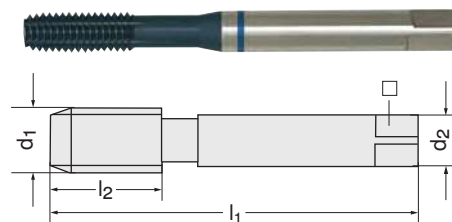
For all materials with a minimum expansion of 8%.

Highly compressible cutting oils should be used for shaping.

An extremely long service life for series production.

High level of process reliability.

14367



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{H}{mm}$	DIN 371		DIN 376	
						14367	...	14367	...
M 3	2.80	0.50	10	56	6.0 x 4.9		103		
M 4	3.70	0.70	12	63	6.0 x 4.9		104		
M 5	4.65	0.80	14	70	6.0 x 4.9		105		
M 6	5.55	1.00	16	80	6.0 x 4.9		106		
M 8	7.40	1.25	18	90	8.0 x 6.2		108		
M 10	9.30	1.50	20	100	10.0 x 8.0		110		
M 12	11.10	1.75	24	110	12.0 x 9.0				112

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
40-70	30-60	30-50	40-70	30-65	25-60	20-55	20-50	-	-	-	-	-	20-25	-	-	-	-

14368

Through-hole nut tap

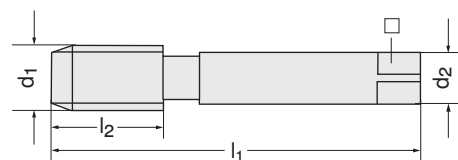
M

6H

DIN
357**ATORN®****Design**

- With extra-long spiral point and long shank

14368



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{H}{mm}$	DIN 357	
						14368	...
M 3	2.50	0.50	22	70	2.2 x -		103
M 4	3.30	0.70	25	90	2.8 x 2.1		104
M 5	4.20	0.80	28	100	3.5 x 2.7		105
M 6	5.00	1.00	32	110	4.5 x 3.4		106
M 8	6.80	1.25	40	125	6.0 x 4.9		108
M 10	8.50	1.50	45	140	7.0 x 5.5		110
M 12	10.20	1.75	50	180	9.0 x 7.0		112
M 16	14.00	2.00	63	200	12.0 x 9.0		116
M 20	17.50	2.50	70	250	16.0 x 12.0		120

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	-	-	-	-	-	-	-	-	-	-	-	-



14373

Machine thread mould Uni

M

6GX

DIN
371DIN
376**ATORN®****Design**

- Innovative mould geometry according to DIN 2174
- With lubrication grooves for optimum lubrication effect even in deeper threads
- Up to M 10 DIN 371.
- From M 12 DIN 376.

Applications

For through holes and blind holes.
For producing metric threads on CNC and conventional machines. For the material groups steel, stainless steel and non-ferrous metals. Also suitable for materials up to 1300 N/mm².
For workpieces that are retrofitted with a galvanic coating.

Quality

Finished **TiCN coating** for the best sliding properties.

Note:

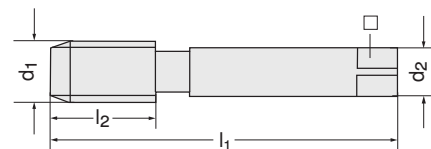
For all materials with a minimum expansion of 8%.

NEW

14373 103-110



14373 112-116



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\pi}{4}$ mm	DIN	14373	...
M 3	2.83	0.50	8	56	3.5 x 2.7	371		103
M 4	3.73	0.70	11	63	4.5 x 3.4	371		104
M 5	4.68	0.80	12	70	6.0 x 4.9	371		105
M 6	5.60	1.00	10	80	6.0 x 4.9	371		106
M 8	7.45	1.25	12	90	8.0 x 6.2	371		108
M 10	9.35	1.50	15	100	10.0 x 8.0	371		110
M 12	11.20	1.75	17	110	9.0 x 7.0	376		112
M 16	15.00	2.00	20	110	12.0 x 9.0	376		116

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-40	20-40	15-22	20-30	20-30	20-30	8-15	8-15	8-15	-	-	-	-	8-10	-	-	-	-

14374

Machine thread mould Uni

MF

6HX

DIN
374**ATORN®****Design**

- Innovative mould geometry according to DIN 2174
- With lubrication grooves for optimum lubrication effect even in deeper threads

Applications

For through holes and blind holes.
For producing fine metric threads on CNC and conventional machines. For the material groups steel, stainless steel and non-ferrous metals. Also suitable for materials up to 1300 N/mm².

Quality

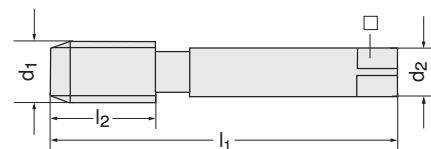
Finished **TiCN coating** for the best sliding properties.

Note:

For all materials with a minimum expansion of 8%.

NEW

14374



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\pi}{4}$ mm	DIN	14374	...
M 8 x 1	7.55	1.00	10	90	8.0 x 6.2	374		101
M 10 x 1	9.55	1.00	12	90	10.0 x 8.0	374		102
M 12 x 1	11.55	1.00	15	100	9.0 x 7.0	374		103
M 12 x 1.5	11.30	1.50	15	100	11.0 x 9.0	374		104
M 16 x 1.5	15.30	1.50	15	110	14.0 x 11.0	374		105
M 18 x 1.5	17.30	1.50	15	125	16.0 x 12.0	374		106
M 20 x 1.5	19.30	1.50	15	125	18.0 x 14.5	374		107

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-40	20-40	15-22	20-30	20-30	20-30	8-15	8-15	8-15	-	-	-	-	8-10	-	-	-	-

Through-hole screw taps | Blind-hole screw taps

14372

Through-hole screw tap, left cutting

M

6H

DIN
371DIN
376

3,5-5 B

≤ 2xD

HSS-E

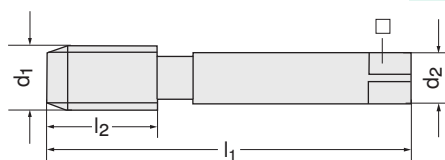
800
N/mm²**ATORN®**

Design

With strong spiral point.

Up to M 10 DIN 371.

From M 12 DIN 376.



14372

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	DIN 371		DIN 376	
						14372	...	14372	...
M 4	3.30	0.70	12	63	4.5 x 3.4			104	
M 5	4.20	0.80	14	70	6.0 x 4.9			105	
M 6	5.00	1.00	16	80	6.0 x 4.9			106	
M 8	6.80	1.25	18	90	8.0 x 6.2			108	
M 10	8.50	1.50	20	100	10.0 x 8.0			110	
M 12	10.20	1.75	22	110	9.0 x 7.0				112
M 14	12.00	2.00	25	110	11.0 x 9.0				114
M 16	14.00	2.00	28	110	12.0 x 9.0				116
M 20	17.50	2.50	32	140	16.0 x 12.0				120

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	-	-	-	-	-	-	-	-	-	-	-	-

14392 - 14394

Blind-hole screw tap

M

6H

DIN
371DIN
376

2-3 C

≤ 2xD

ATORN®

Design

With larger chip space.

Up to M 10 DIN 371.

From M 12 DIN 376.

14392

Applications

For steels

up to 800 N/mm².

HSS-E

800
N/mm²

14392

14393

Applications

Low build-up of material

deposits thanks to TiN

coating. For steels

up to 850 N/mm².HSS-E
TiN850
N/mm²

14393

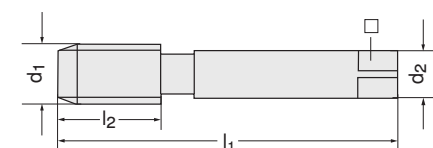
HSS-E
TiCN1000
N/mm²

14394

14394

Applications

Excellent emergency running properties and the highest demands on the performance thanks to special TiCN coating.

For steels up to 1000 N/mm².

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	DIN	HSS-E		HSS-E/TiN		HSS-E/TiCN	
							14392	...	14393	...	14394	...
M 2	1.60	0.40	8	45	2.8 x 2.1	371		098				
M 2.3	1.90	0.40	8	45	2.8 x 2.1	371		099				
M 2.5	2.05	0.45	9	50	2.8 x 2.1	371		100				
M 2.6	2.10	0.45	9	50	2.8 x 2.1	371		101				
M 3	2.50	0.50	6	56	3.0 x 2.7	371		102		102		102
M 3.5	2.90	0.60	7	56	4.0 x 3.0	371		103				
M 4	3.30	0.70	7	63	4.5 x 3.4	371		104		104		104
M 5	4.20	0.80	8	70	6.0 x 4.9	371		105		105		105
M 6	5.00	1.00	10	80	6.0 x 4.9	371		106		106		106
M 7	6.00	1.00	10	80	7.0 x 5.5	371		107				
M 8	6.80	1.25	13	90	8.0 x 6.2	371		108		108		108
M 10	8.50	1.50	15	100	10.0 x 8.0	371		110		110		110
M 12	10.20	1.75	18	110	9.0 x 7.0	376		112		112		112
M 14	12.00	2.00	20	110	11.0 x 9.0	376		114				
M 16	14.00	2.00	20	110	12.0 x 9.0	376		116		116		116
M 18	15.50	2.50	25	125	14.0 x 11.0	376		118				
M 20	17.50	2.50	25	140	16.0 x 12.0	376		120		120		120
M 24	21.00	3.00	30	160	18.0 x 14.5	376		124				
M 30	26.50	3.50	35	180	22.0 x 18.0	376		130				

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	-	-	-	-	-	-	-	-	-	-	8-20	-

14392-14393

14394

30-40	10-60	10-20	5-40	5-30	3-24	5-18	-	-	-	-	-	-	-	-	-	-	-
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ATORN®**Design**

With larger chip space and strong twist.

Up to M 10 DIN 371.

From M 12 DIN 376.

14396**Applications**

For steels up to 800 N/mm².

14397**Applications**

Low build-up of material deposits thanks to TiN coating. For steels up to 850 N/mm².

14398**Applications**

Excellent emergency running properties and performs well for the most demanding applications thanks to special TiCN coating.

For steels up to 1000 N/mm².

14404**Applications**

Also suitable for synchro chucks. For steels up to 1000 N/mm².



HSS-E



14396 300



HSS-E



14396



HSS-E

TiN



14397



HSS-E

TiCN



14398

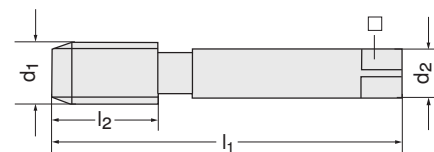


HSS-E-PM

TiN



14404



HSS-E

14396

...

Set contents

7 pieces M 3-M 12

300

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x Ø mm	DIN	HSS-E		HSS-E/TiN		HSS-E/TiCN		HSS-E-PM/TiN	
							14396	...	14397	...	14398	...	14404	...
M 2	1.60	0.40	8	45	2.8 x 2.1	371	101		101		101			
M 2.5	2.05	0.45	9	50	2.8 x 2.1	371	102		102		102			
M 3	2.50	0.50	6	56	3.5 x 2.7	371	103		103		103			101
M 4	3.30	0.70	7	63	4.5 x 3.4	371	104		104		104			102
M 5	4.20	0.80	8	70	6.0 x 4.9	371	105		105		105			103
M 6	5.00	1.00	10	80	6.0 x 4.9	371	106		106		106			104
M 8	6.80	1.25	13	90	8.0 x 6.2	371	108		108		108			105
M 10	8.50	1.50	15	100	10.0 x 8.0	371	110		110		110			106
M 12	10.20	1.75	18	110	9.0 x 7.0	376	112		112		112			107
M 14	12.00	2.00	20	110	11.0 x 9.0	376	114				114			108
M 16	14.00	2.00	20	110	12.0 x 9.0	376	116		116		116			109
M 18	15.50	2.50	25	125	14.0 x 11.0	376	118							
M 20	17.50	2.50	25	140	16.0 x 12.0	376	120		120		120			110
M 24	21.00	3.00	30	160	18.0 x 14.5	376	124		124					
M 30	26.50	3.50	35	180	22.0 x 18.0	376	130		130					

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
14396 + 14397																	
20-25	10-40	10-12	5-20	5-15	5-12	-	-	-	-	-	-	-	-	-	-	-	-
14398																	
30-40	10-60	10-20	5-40	5-30	5-24	5-18	-	-	-	-	-	-	-	-	-	-	-
14404																	
-	-	-	5-40	5-30	5-24	2-22	-	-	-	-	-	-	5-20	5-20	-	8-30	-

Blind-hole screw tap

14410

Blind-hole screw tap Hyper Z

NACHI

Design

- Metric thread
- Blind hole thread
- Right cutting
- Without point
- Spiral-fluted 43°
- Up to M 10 DIN 371
- From M 12 DIN 376

Note:

UNI High Performance screw taps with optimum cutting geometry, long service life and process reliability!

**NEW**

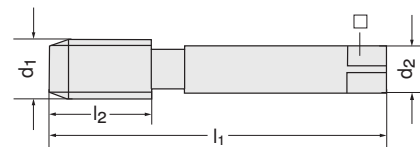
14410

Applications

For steels up to 1200 N/mm².

Quality

HSS-E.



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\pi}{4}$ mm	Z	DIN	14410	...
M 3	2.50	0.50	5.6	56	3.5 x 2.7	3	371		005
M 4	3.30	0.70	8.1	63	4.5 x 3.4	3	371		006
M 5	4.20	0.80	9.4	70	6.0 x 4.9	3	371		007
M 6	5.00	1.00	12.0	80	6.0 x 4.9	3	371		008
M 8	6.80	1.25	15.4	90	8.0 x 6.2	3	371		009
M 10	8.50	1.50	18.9	100	10.0 x 8.0	3	371		010
M 12	10.20	1.75	22.4	110	9.0 x 7.0	3	376		011
M 14	12.00	2.00	25.9	110	11.0 x 9.0	3	376		012
M 16	14.00	2.00	25.9	110	12.0 x 9.0	3	376		013
M 18	15.50	2.50	32.6	125	14.0 x 11.0	4	376		014
M 20	17.50	2.50	32.6	140	16.0 x 12.0	4	376		015
M 22	19.50	2.50	32.6	140	18.0 x 14.5	4	376		016
M 24	21.00	3.00	38.8	160	18.0 x 14.5	4	376		017

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10-25	10-25	6-20	15-50	15-50	15-50	15-50	15-50	5-10	-	-	-	-	-	-	-	15-30	10-20

14399

Blind-hole screw tap

ATORN®

Applications

For threaded holes with very short thread run-out.

Design

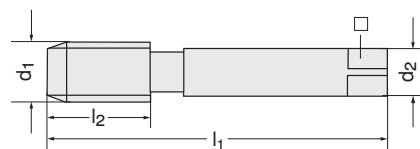
Extremely short notch (1.5-2 speed).

DIN 371

14399

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\pi}{4}$ mm	DIN 371 14399	...
M 3	2.50	0.50	6.0	56	3.5 x 2.7		103
M 4	3.30	0.70	7.5	63	4.5 x 3.4		104
M 5	4.20	0.80	8.5	70	6.0 x 4.9		105
M 6	5.00	1.00	11.0	80	6.0 x 4.9		106
M 8	6.80	1.25	14.0	90	8.0 x 6.2		108
M 10	8.50	1.50	16.0	100	10.0 x 8.0		110

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	5-20	5-15	5-12	4-10	-	-	-	-	-	-	-	-	-	-	-



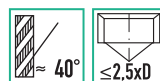
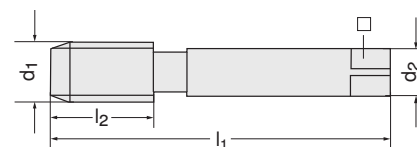
14399

14400 - 14401 Blind-hole screw tap**M****6H****DIN 371****HSS-E****HHW****14400****Design**

Right-hand spiral grooves approx. 15°.

14401**Design**

Right-hand spiral grooves approx. 40°.

**14400****14401**

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{D}{d}$ mm	15°		40°	
						14400	...	14401	...
M 2	1.60	0.40	8	45	2.8 x 2.1				
M 2.5	2.05	0.45	9	50	2.8 x 2.1				
M 3	2.50	0.50	5	56	3.5 x 2.7				
M 4	3.30	0.70	7	63	4.5 x 3.4				
M 5	4.20	0.80	8	70	6.0 x 4.9				
M 6	5.00	1.00	10	80	6.0 x 4.9				
M 8	6.80	1.25	13	90	8.0 x 6.2				
M 10	8.50	1.50	15	100	10.0 x 8.0				

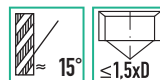
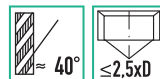
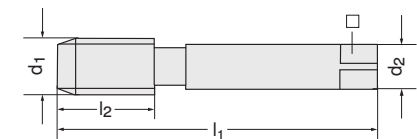
Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	-	-	-	-	-	-	-	-	-	-	-	-	20-30

14406 - 14407 Blind-hole screw tap**M****6H****DIN 376****HSS-E****HHW****14406****Design**

Right-hand spiral grooves approx. 15°.

14407**Design**

Right-hand spiral grooves approx. 40°.

**14406****14407**

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{D}{d}$ mm	15°		40°	
						14406	...	14407	...
M 3	2.50	0.50	5	56	2.2 x -				
M 4	3.30	0.70	7	63	2.8 x 2.1				
M 5	4.20	0.80	8	70	3.5 x 2.7				
M 6	5.00	1.00	10	80	4.5 x 3.4				
M 8	6.80	1.25	13	90	6.0 x 4.9				
M 10	8.50	1.50	15	100	7.0 x 5.5				
M 12	10.20	1.75	18	110	9.0 x 7.0				
M 14	12.00	2.00	20	110	11.0 x 9.0				
M 16	14.00	2.00	20	110	12.0 x 9.0				
M 18	15.50	2.50	25	125	14.0 x 11.0				
M 20	17.50	2.50	25	140	16.0 x 12.0				
M 22	19.50	2.50	25	140	18.0 x 14.5				
M 24	21.00	3.00	30	160	18.0 x 14.5				
M 27	24.00	3.00	30	160	20.0 x 16.0				
M 30	26.50	3.50	35	180	22.0 x 18.0				

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	-	-	-	-	-	-	-	-	-	-	-	-	20-30

Blind-hole screw tap

14402 - 14403

Blind-hole screw tap

M

6H

DIN
371DIN
376

35°

2-3 C

≤ 2xD

HSS-E

800
N/mm²

Note:

Cost-effective design.

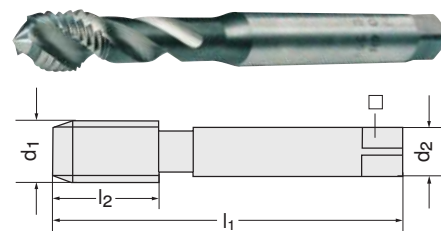
14402

M 3–M 10, DIN 371.

14403

M 3–M 24, DIN 376.

14402



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	DIN 371 14402	...
M 3	2.50	0.50	6	56	3.5 x 2.7		104
M 4	3.30	0.70	7	63	4.5 x 3.4		106
M 5	4.20	0.80	8	70	6.0 x 4.9		107
M 6	5.00	1.00	10	80	6.0 x 4.9		108
M 8	6.80	1.25	13	90	8.0 x 6.2		109
M 10	8.50	1.50	15	100	10.0 x 6.2		110

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	DIN 376 14403	...
M 3	2.50	0.50	5	56	2.2 x -		204
M 4	3.30	0.70	7	63	2.8 x 2.1		206
M 5	4.20	0.80	8	70	3.5 x 2.7		207
M 6	5.00	1.00	10	80	4.5 x 3.4		208
M 8	6.80	1.25	13	90	6.0 x 4.9		209
M 10	8.50	1.50	15	100	7.0 x 5.5		210
M 12	10.20	1.75	18	110	9.0 x 7.0		211
M 14	12.00	2.00	20	110	11.0 x 9.0		212
M 16	14.00	2.00	20	110	12.0 x 9.0		213
M 20	17.50	2.50	25	140	16.0 x 12.0		214
M 24	21.00	3.00	30	160	18.0 x 14.5		215

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	-	-	-	-	-	-	-	-	-	-	-	-	20-25

14408 - 14409

Blind-hole screw tap

M

6G

DIN
371DIN
376

40°

2-3 C

≤ 2xD

HSS-E

800
N/mm²

HHW

Design

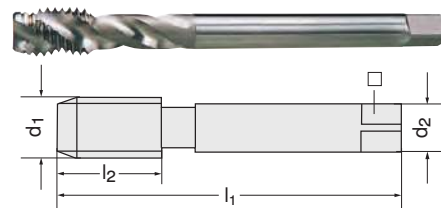
Up to M 10 DIN 371.

From M 12 DIN 376.

Note:

For workpieces that are retrofitted with a galvanic coating.

14408



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	DIN 371 14408	...	DIN 376 14409	...
M 3	2.50	0.50	5	56	3.5 x 2.7			204	
M 4	3.30	0.70	7	63	4.5 x 3.4			206	
M 5	4.20	0.80	8	70	6.0 x 4.9			207	
M 6	5.00	1.00	10	80	6.0 x 4.9			208	
M 8	6.80	1.25	13	90	8.0 x 6.2			209	
M 10	8.50	1.50	15	100	10.0 x 8.0			210	
M 12	10.20	1.75	18	110	9.0 x 7.0				108
M 14	12.00	2.00	20	110	11.0 x 9.0				109
M 16	14.00	2.00	20	110	12.0 x 9.0				110
M 18	15.50	2.50	25	125	14.0 x 11.0				111
M 20	17.50	2.50	25	140	16.0 x 12.0				112

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	-	-	-	-	-	-	-	-	-	-	-	-	-

14412 - 14413

Blind-hole screw tap



Design

Special OX treatment for soft and lubricated

steels (St 33/St 37).

Up to M 10 DIN 371.

From M 12 DIN 376.

Note:

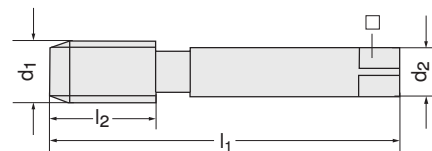
Especially suitable for use on machines with non-forcibly actuated working spindle. Using special cutting geometry an accurate thread is created.

M

6H

DIN
371DIN
376HSS-E
OX

14412



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	DIN 371	DIN 376
						14412	14413
M 3	2.50	0.50	5	56	3.5 x 2.7		101
M 4	3.30	0.70	7	63	4.5 x 3.4		103
M 5	4.20	0.80	8	70	6.0 x 4.9		104
M 6	5.00	1.00	10	80	6.0 x 4.9		105
M 8	6.80	1.25	13	90	8.0 x 6.2		106
M 10	8.50	1.50	15	100	10.0 x 8.0		107
M 12	10.20	1.75	18	110	9.0 x 7.0		108
M 14	12.00	2.00	20	110	11.0 x 9.0		109
M 16	14.00	2.00	20	110	12.0 x 9.0		110
M 18	15.50	2.50	25	125	14.0 x 11.0		111
M 20	17.50	2.50	25	140	16.0 x 12.0		112
M 22	19.50	2.50	25	140	18.0 x 14.5		113
M 24	21.00	3.00	30	160	18.0 x 14.5		114

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	5-20	5-15	-	-	-	-	-	-	-	-	-	-	-	-	-

14420 - 14421

Blind-hole screw tap



Design

Up to M 10 DIN 371.

From M 12 DIN 376.

14420

1 Enorm.

14421

2 Enorm.

M

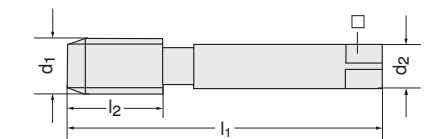
6H

DIN
371DIN
376

HSS-E



14420



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	DIN 371	DIN 376
						14420	14421
M 3	2.50	0.50	11	56	3.5 x 2.7		101
M 4	3.30	0.70	13	63	4.5 x 3.4		103
M 5	4.20	0.80	15	70	6.0 x 4.9		104
M 6	5.00	1.00	17	80	6.0 x 4.9		105
M 7	6.00	1.00	17	80	7.0 x 5.5		108
M 8	6.80	1.25	20	90	8.0 x 6.2		106
M 10	8.50	1.50	22	100	10.0 x 8.0		107
M 12	10.20	1.75	18	110	9.0 x 7.0		108
M 14	12.00	2.00	20	110	11.0 x 9.0		109
M 16	14.00	2.00	22	110	12.0 x 9.0		110
M 20	17.50	2.50	25	140	16.0 x 12.0		112
M 24	21.00	3.00	30	160	18.0 x 14.5		114

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	10-12	5-25	5-20	5-15	-	-	-	-	-	-	-	-	-	-	-	-

Blind-hole screw tap

14425

Blind-hole screw tap

ATORN®

Design

Minimum thread radial relief.
Up to M 10 DIN 371.
From M 12 DIN 376.

Note:

Very well suited for machining VA.

14425 101-120+300

Design

Reduced build-up of material deposits
due to vaporisation.

Quality

HSS-E, vaporised.

14425 203-216

Design

TiN-coated for an even longer
service life.

Quality

HSS-E/TiN-coated.

14425 300

HSS-E



M

6H

DIN
371DIN
376

40°

2-3 C

≤ 3xD

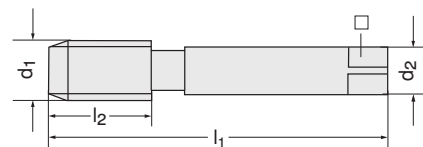
≤ 1200
N/mm²

14425 101-120

HSS-E

HSS-E
TiN

14425 203-216



Set contents	Vaporised 14425	...
7 pieces M3-M 12	300	

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x Ø mm	DIN	Vaporised 14425	...	TiN-coated 14425	...
M 2	1.60	0.40	8	45	2.8 x 2.1	371		101		
M 2.5	2.05	0.45	9	50	2.8 x 2.1	371		102		
M 3	2.50	0.50	6	56	3.5 x 2.7	371		103		203
M 4	3.30	0.70	7	63	4.5 x 3.4	371		104		204
M 5	4.20	0.80	8	70	6.0 x 4.9	371		105		205
M 6	5.00	1.00	10	80	6.0 x 4.9	371		106		206
M 8	6.80	1.25	13	90	8.0 x 6.2	371		108		208
M 10	8.50	1.50	15	100	10.0 x 8.0	371		110		210
M 12	10.20	1.75	18	110	9.0 x 7.0	376		112		212
M 16	14.00	2.00	20	110	11.0 x 9.0	376		116		216
M 20	17.50	2.50	25	140	16.0 x 12.0	376		120		

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
14425 101-120 + 300																	
20-25	-	-	-	-	5-12	-	-	-	-	-	-	-	5-12	5-12	2-6	-	-
14425 203-216																	
-	-	-	-	-	5-12	-	-	-	-	-	-	-	5-20	5-20	2-6	-	-

14429 - 14430

Blind-hole screw tap

M

6H

DIN
371DIN
376

35°

2-3 C

≤ 2xD

HSS-E
TiCN≤ 1000
N/mm²

14429

Design

Long service life thanks to TiCN coating.

14429

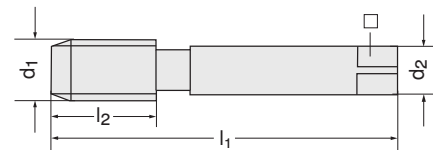
M 3-M 10, DIN 371.

Note:

Cost-effective design.

14430

M 3-M 24, DIN 376.



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x Ø mm	DIN 371 14429	...
M 3	2.50	0.50	11	56	3.5 x 2.7	201	
M 4	3.30	0.70	13	63	4.5 x 3.4	202	
M 5	4.20	0.80	15	70	6.0 x 4.9	203	
M 6	5.00	1.00	17	80	6.0 x 4.9	204	
M 8	6.80	1.25	20	90	8.0 x 6.2	205	
M 10	8.50	1.50	22	100	10.0 x 8.0	206	

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x Ø mm	DIN 376 14430	...
M 3	2.50	0.50	11	56	2.2 x -	201	
M 4	3.30	0.70	13	63	2.8 x 2.1	202	
M 5	4.20	0.80	15	70	3.5 x 2.7	203	
M 6	5.00	1.00	17	80	4.5 x 3.4	204	
M 8	6.80	1.25	20	90	6.0 x 4.9	205	
M 10	8.50	1.50	22	100	7.0 x 5.5	206	
M 12	10.20	1.75	24	110	9.0 x 7.0	207	
M 14	12.00	2.00	30	110	11.0 x 9.0	208	
M 16	14.00	2.00	32	110	12.0 x 9.0	209	
M 20	17.50	2.50	34	140	16.0 x 12.0	210	
M 24	21.00	3.00	38	160	18.0 x 14.5	211	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	5-40	5-30	5-24	5-24	-	-	-	-	-	-	5-20	5-20	-	-	-





Design

Increased wear resistance thanks to the
OX coating.

Up to M 10 DIN 371.

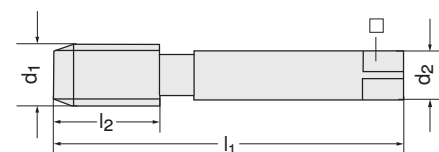
From M 12 DIN 376.

Note:

Very well suited for machining VA.



14436



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x Ø mm	DIN 371 14436	...	DIN 376 14437	...
M 2	1.60	0.40	8	45	2.8 x 2.1		101		
M 2.5	2.05	0.45	9	50	2.8 x 2.1		103		
M 3	2.50	0.50	5	56	3.5 x 2.7		104		
M 3.5	2.90	0.60	6	56	4.0 x 3.0		105		
M 4	3.30	0.70	7	63	4.5 x 3.4		106		
M 5	4.20	0.80	8	70	6.0 x 4.9		107		
M 6	5.00	1.00	10	80	6.0 x 4.9		108		
M 8	6.80	1.25	13	90	8.0 x 6.2		109		
M 10	8.50	1.50	15	100	10.0 x 8.0		110		
M 12	10.20	1.75	18	110	9.0 x 7.0				111
M 14	12.00	2.00	20	110	11.0 x 9.0				112
M 16	14.00	2.00	20	110	12.0 x 9.0				113
M 18	15.50	2.50	25	125	14.0 x 11.0				114
M 20	17.50	2.50	25	140	16.0 x 12.0				115
M 22	19.50	2.50	25	140	18.0 x 14.5				116
M 24	21.00	3.00	30	160	18.0 x 14.5				117
M 30	26.50	3.50	35	180	22.0 x 18.0				118

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	5-12	2-8	-	-	-	-	-	5-12	5-12	-	-	-



Design

Increased wear resistance thanks to the
OX coating.

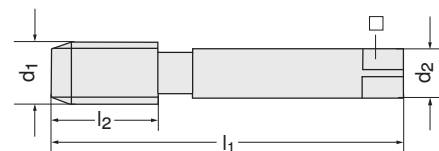
Note:

For workpieces that are retrofitted
with a galvanic coating.

Very well suited for machining VA.



14438



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x Ø mm	DIN 371 14438	...
M 2	1.60	0.40	8	45	2.8 x 2.1		101
M 2.5	2.05	0.45	9	50	2.8 x 2.1		103
M 3	2.50	0.50	5	56	3.5 x 2.7		104
M 4	3.30	0.70	7	63	4.5 x 3.4		106
M 5	4.20	0.80	8	70	6.0 x 4.9		107
M 6	5.00	1.00	10	80	6.0 x 4.9		108
M 8	6.80	1.25	13	90	8.0 x 6.2		109
M 10	8.50	1.50	15	100	10.0 x 8.0		110

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	5-12	2-8	-	-	-	-	-	5-12	5-12	-	-	-

Through-hole screw taps | Blind-hole screw taps

14414

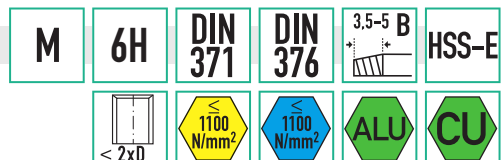
Through-hole screw tap Hyper Z (VA)

NACHI**Design**

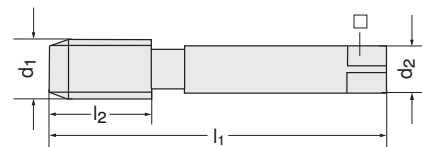
- Metric thread
- Through-hole thread
- Right cutting with spiral point
- Up to M 10 DIN 371
- From M 12 DIN 376

Note:

UNI High Performance screw taps with optimum cutting geometry, long service life and process reliability!



14414

NEW

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	Z	DIN	14414	...								
M 3	2.50	0.50	10	46	3.5 x 2.7	3	371		200								
M 4	3.30	0.70	12.5	52	4.5 x 3.4	3	371		201								
M 5	4.20	0.80	14.5	60	6.0 x 4.9	3	371		202								
M 6	5.00	1.00	17	62	6.0 x 4.9	3	371		203								
M 8	6.80	1.25	22	70	8.0 x 6.2	3	371		204								
M 10	8.50	1.50	27	75	10.0 x 8.0	3	371		205								
M 12	10.20	1.75	32	82	9.0 x 7.0	3	376		206								
Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10–25	10–25	6–11	5–10	5–10	5–10	5–10	5–10	-	-	-	-	-	5–10	5–10	-	-	10–20

14411

Blind-hole screw tap Hyper Z (VA)

NACHI**Design**

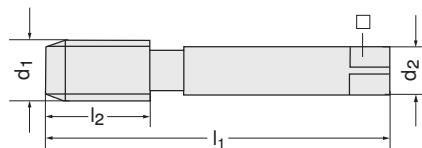
- Metric thread
- Blind hole thread
- Right cutting
- Without point
- Spiral-fluted 51°
- Up to M 10 DIN 371
- From M 12 DIN 376

Note:

UNI High Performance screw taps with optimum cutting geometry, long service life and process reliability!



14411

NEW

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\varnothing$ mm	Z	DIN									14411	...
M 3	2.50	0.50	5.6	56	3.5 x 2.7	3	371										005
M 4	3.30	0.70	8.1	63	4.5 x 3.4	3	371										006
M 5	4.20	0.80	9.4	70	6.0 x 4.9	3	371										007
M 6	5.00	1.00	12.0	80	6.0 x 4.9	3	371										008
M 8	6.80	1.25	15.4	90	8.0 x 6.2	3	371										009
M 10	8.50	1.50	18.9	100	10.0 x 8.0	3	371										010
M 12	10.20	1.75	22.4	110	9.0 x 7.0	3	376										011
Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10–25	10–25	6–11	5–10	5–10	5–10	5–10	5–10	-	-	-	-	-	5–10	5–10	-	-	10–20

14439 - 14440

Blind-hole screw tap

EMUGE

Design

Up to M 10 DIN 371.
From M 12 DIN 376.

14439

1 Enorm-VA.

14440

2 Enorm-VA.

M

6H

DIN
371DIN
376

39°

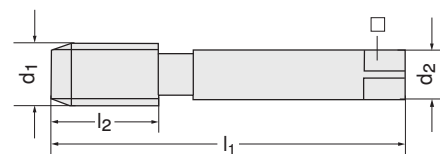
2-3 C

≤ 2,5xD

HSS-E

1100
N/mm²

14439



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	DIN 371		DIN 376	
						14439	...	14440	...
M 3	2.50	0.50	6	56	3.5 x 2.7		104		
M 4	3.30	0.70	7	63	4.5 x 3.4		106		
M 5	4.20	0.80	8	70	6.0 x 4.9		107		
M 6	5.00	1.00	10	80	6.0 x 4.9		108		
M 8	6.80	1.25	14	90	8.0 x 6.2		109		
M 10	8.50	1.50	16	100	10.0 x 8.0		110		
M 12	10.20	1.75	18	110	9.0 x 7.0				111
M 14	12.00	2.00	20	110	11.0 x 9.0				112
M 16	14.00	2.00	22	110	12.0 x 9.0				113
M 20	17.50	2.50	25	140	16.0 x 12.0				115
M 24	21.00	3.00	30	160	18.0 x 14.5				117

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	5-25	5-20	5-15	5-12	5-10	-	-	-	-	-	5-15	2-10	-	-	-

14443 - 14444

Blind-hole screw tap

HHW

Design

Special right-hand spiral grooves approx. 45°.

**Increased wear resistance thanks to the
OX coating.**

Up to M 10 DIN 371.

From M 12 DIN 376.

Note:

For particularly deep blind holes.

M

6H

DIN
371DIN
376

45°

2-3 C

≤ 3xD

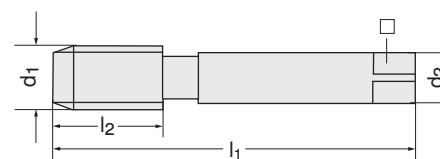
HSS-E

VA-OX

1200
N/mm²

Uni

14443



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	DIN 371		DIN 376	
						14443	...	14444	...
M 3	2.50	0.50	5	56	3.5 x 2.7		101		
M 4	3.30	0.70	7	63	4.5 x 3.4		102		
M 5	4.20	0.80	8	70	6.0 x 4.9		103		
M 6	5.00	1.00	10	80	6.0 x 4.9		104		
M 8	6.80	1.25	13	90	8.0 x 6.2		105		
M 10	8.50	1.50	15	100	10.0 x 8.0		106		
M 12	10.20	1.75	18	110	9.0 x 7.0				107
M 16	14.00	2.00	20	110	12.0 x 9.0				109
M 20	17.50	2.50	25	140	16.0 x 12.0				110

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	5-12	2-8	-	-	-	-	-	5-12	5-12	-	-	-

Blind-hole screw tap

14445

Blind-hole screw tap

ATORN®

Design

Spiral-fluted with offset teeth to reduce the torque and for better distribution of the lubricant.

Up to M 10 DIN 371.

From M 12 DIN 376.

Applications

Particularly suitable for materials that tend to jam and thin-walled parts, since there is no material deformation thanks to the reduced frictional resistance.

M

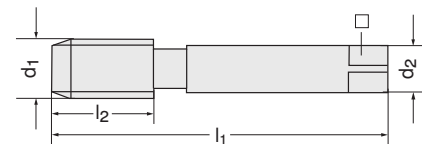
6H

DIN
371DIN
376

HSS-E



14445



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	DIN 371		DIN 376	
						14445	...	14445	...
M 3	2.50	0.50	6.0	56	3.5 x 2.7		103		
M 4	3.30	0.70	7.5	63	4.5 x 3.4		104		
M 5	4.20	0.80	8.5	70	6.0 x 4.9		105		
M 6	5.00	1.00	11.0	80	6.0 x 4.9		106		
M 8	6.80	1.25	14.0	90	8.0 x 6.2		108		
M 10	8.50	1.50	16.0	100	10.0 x 8.0		110		
M 12	10.20	1.75	18.5	110	9.0 x 7.0				112
M 16	14.00	2.00	20.0	110	12.0 x 9.0				116
M 20	17.50	2.50	25.0	140	16.0 x 12.0				120

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	-	-	-	-	-	-	-	-	-	-	5-12	5-12	-	-	-

14447 - 14448

Blind-hole screw tap

HHW

Design

Improved wear characteristics thanks to

TiN coating.

Up to M 10 DIN 371.

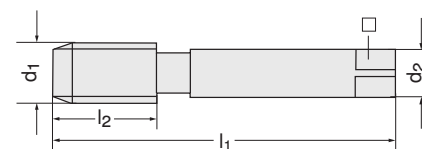
From M 12 DIN 376.

M

6H

DIN
371DIN
376HSS-E
TiN

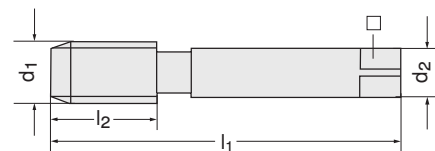
14447



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	DIN 371		DIN 376	
						14447	...	14448	...
M 3	2.50	0.50	5	56	3.5 x 2.7		101		
M 4	3.30	0.70	7	63	4.5 x 3.4		102		
M 5	4.20	0.80	8	70	6.0 x 4.9		103		
M 6	5.00	1.00	10	80	6.0 x 4.9		104		
M 8	6.80	1.25	13	90	8.0 x 6.2		105		
M 10	8.50	1.50	15	100	10.0 x 8.0		106		
M 12	10.20	1.75	18	110	9.0 x 7.0				107
M 16	14.00	2.00	20	110	12.0 x 9.0				109
M 20	17.50	2.50	25	140	16.0 x 12.0				110

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	5-40	5-30	5-24	5-20	2-12	-	-	-	-	-	5-20	5-20	-	-	-



**HHW****Design**

With offset teeth to reduce the torque and for better distribution of the lubricant.

Up to M 10 DIN 371.

From M 12 DIN 376.

Applications

Particularly suitable for materials that tend to jam and thin-walled parts, since there is no material deformation thanks to the reduced frictional resistance.

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN 371		DIN 376	
						14451	...	14452	...
M 3	2.50	0.50	5	56	3.5 x 2.7		104		
M 4	3.30	0.70	7	63	4.5 x 3.4		106		
M 5	4.20	0.80	8	70	6.0 x 4.9		107		
M 6	5.00	1.00	10	80	6.0 x 4.9		108		
M 8	6.80	1.25	13	90	8.0 x 6.2		109		
M 10	8.50	1.50	15	100	10.0 x 8.0		110		
M 12	10.20	1.75	18	110	9.0 x 7.0				111
M 16	14.00	2.00	20	110	12.0 x 9.0				113
M 20	17.50	2.50	25	140	16.0 x 12.0				114

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	5-20	5-15	5-12	5-12	2-8	-	-	-	-	-	5-12	-	-	-	-

ATORN®**Design**

Up to M 10 DIN 371.

From M 12 DIN 376.

Applications

Special grinding for steels up to 1400 N/mm².

14449 103-120

Quality

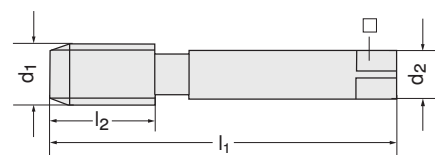
HSS-E.

14449 203-220

Quality

HSS-E/TiCN.

HSS-E

HSS-E
TiCN

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN	HSS-E		HSS-E/TiCN	
							14449	...	14449	...
M 3	2.50	0.50	6	56	3.5 x 2.7	371		103		203
M 4	3.30	0.70	7	63	4.5 x 3.4	371		104		204
M 5	4.20	0.80	8	70	6.0 x 4.9	371		105		205
M 6	5.00	1.00	10	80	6.0 x 4.9	371		106		206
M 8	6.80	1.25	13	90	8.0 x 6.2	371		108		208
M 10	8.50	1.50	15	100	10.0 x 8.0	371		110		210
M 12	10.20	1.75	18	110	9.0 x 7.0	376		112		212
M 16	14.00	2.00	20	110	12.0 x 9.0	376		116		216
M 20	17.50	2.50	25	140	16.0 x 12.0	376		120		220

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	-	5-15	5-12	4-10	2-8	2-5	-	-	-	-	-	-	-	-	-

Blind-hole screw tap

14446

Blind-hole screw tap

M

6H

DIN
371DIN
376HSS-E
PM

14446

ATORN®**Design**

Light chip transport to the rear.

Up to M 10 DIN 371.

From M 12 DIN 376.

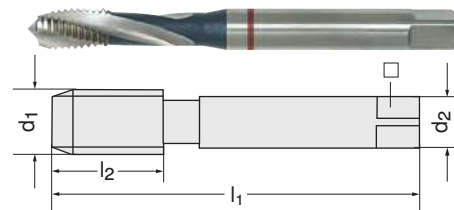
Applications

For an especially long service life.

For titanium, titanium alloys and super alloys.

Note:

For difficult-to-machine materials.



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	DIN 371 14446	...	DIN 376 14446	...
M 3	2.50	0.50	10	56	3.5 x 2.7		103		
M 4	3.30	0.70	12	63	4.5 x 3.4		104		
M 5	4.20	0.80	14	70	6.0 x 4.9		105		
M 6	5.00	1.00	16	80	6.0 x 4.9		106		
M 8	6.80	1.25	18	90	8.0 x 6.2		108		
M 10	8.50	1.50	20	100	10.0 x 8.0		110		
M 12	10.20	1.75	22	110	9.0 x 7.0			112	
M 16	14.00	2.00	28	110	12.0 x 9.0			116	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	Ni alloy	Plastic
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2-6	2-6	-

14431 - 14432

Blind-hole screw tap

M

6H

DIN
371DIN
376HSS-E
OX

14431

ATORN®**Design**

- Vaporised

- For minimised wear

- Improved coolant transport

Applications

All-rounder for universal machining.

Also very well suited to the machining of VA.

Note:

Outstanding value for money.

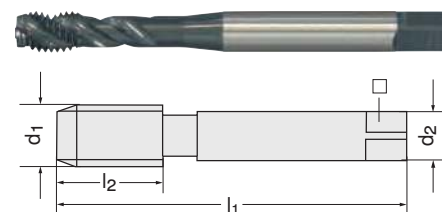
High profitability.

14431

M 2–M 10, DIN 371.

14432

M 3–M 36, DIN 376.



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	DIN 371 14431	...
M 2	1.60	0.40	8	45	2.8 x 2.1		101
M 2.5	2.05	0.45	9	50	2.8 x 2.1		102
M 3	2.50	0.50	5	56	3.5 x 2.7		103
M 3.5	2.90	0.60	6	56	4.0 x 3.0		104
M 4	3.30	0.70	7	63	4.5 x 3.4		105
M 5	4.20	0.80	8	70	6.0 x 4.9		106
M 6	5.00	1.00	10	80	6.0 x 4.9		107
M 8	6.80	1.25	13	90	8.0 x 6.2		108
M 10	8.50	1.50	15	100	10.0 x 8.0		109

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	DIN 376 14432	...
M 3	2.50	0.50	5	56	2.2 x -		103
M 4	3.30	0.70	7	63	2.8 x 2.1		105
M 5	4.20	0.80	8	70	3.5 x 2.7		106
M 6	5.00	1.00	10	80	4.5 x 3.4		107
M 8	6.80	1.25	13	90	6.0 x 4.9		108
M 10	8.50	1.50	15	100	7.0 x 5.5		109
M 12	10.20	1.75	18	110	9.0 x 7.0		110
M 14	12.00	2.00	20	110	11.0 x 9.0		111
M 16	14.00	2.00	20	110	12.0 x 9.0		112
M 18	15.50	2.50	25	125	14.0 x 11.0		113
M 20	17.50	2.50	25	140	16.0 x 12.0		114
M 22	19.50	2.50	25	140	18.0 x 14.5		115
M 24	21.00	3.00	30	160	18.0 x 14.5		116
M 27	24.00	3.00	30	160	20.0 x 16.0		117
M 30	26.50	3.50	35	180	22.0 x 18.0		118
M 33	29.50	3.50	35	180	25.0 x 20.0		119
M 36	32.00	4.00	40	200	28.0 x 22.0		120

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	5-12	2-8	-	-	-	-	-	5-12	5-12	-	-	-



14433

Blind-hole screw tap

M

6H

DIN
371DIN
376HSS-E
OX**ATORN®****Design**

- Vaporised
 - For minimised wear
 - Improved coolant transport
- Up to M 10 DIN 371.
From M 12 DIN 376.

Applications

Suitable for blind holes up to 3xD.

All-rounder for universal machining.

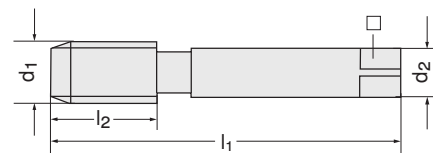
Also very well suited to the machining of VA.

Note:

Outstanding value for money.

High profitability.

14433



												DIN 371		DIN 376			
d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\varnothing$ mm							14433	...	14433	...		
M 2	1.60	0.40	8	45	2.8 x 2.1								099	NEW			
M 2.5	2.05	0.45	9	50	2.8 x 2.1								100	NEW			
M 3	2.50	0.50	5	56	3.5 x 2.7								101				
M 4	3.30	0.70	7	63	4.5 x 3.4								102				
M 5	4.20	0.80	8	70	6.0 x 4.9								103				
M 6	5.00	1.00	10	80	6.0 x 4.9								104				
M 8	6.80	1.25	13	90	8.0 x 6.2								105				
M 10	8.50	1.50	15	100	10.0 x 8.0								106				
M 12	10.20	1.75	18	110	9.0 x 7.0										107		
M 14	12.00	2.00	20	110	11.0 x 9.0										110		
M 16	14.00	2.00	20	110	12.0 x 9.0										108		
M 18	15.50	2.50	25	125	14.0 x 11.0										111		
M 20	17.50	2.50	25	140	16.0 x 12.0										109		
M 22	19.50	2.50	25	140	18.0 x 14.5										112		
M 24	21.00	3.00	30	160	18.0 x 14.5										113		
M 27	24.00	3.00	30	160	20.0 x 16.0										114		
M 30	26.50	3.50	35	180	22.0 x 18.0										115		
M 33	29.50	3.50	35	180	25.0 x 20.0										116		
M 36	32.00	4.00	40	200	28.0 x 22.0										117		
Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	5-12	2-8	-	-	-	-	-	5-12	5-12	-	-	-

Blind-hole screw tap

14455

Blind-hole screw tap

M

6H

DIN
371DIN
376**ATORN®**

Spiral-fluted.
Up to M10 DIN 371.
From M 12 DIN 376.

Applications

Special geometry for
universal use.

14455 098-130

Quality

HSS-E, vaporised.

14455 203-220

Quality

HSS-E/TiN-coated.

Vaporised

Set contents	14455	...
7 pieces	M 3 - M 12	300

14455 300

HSS-E



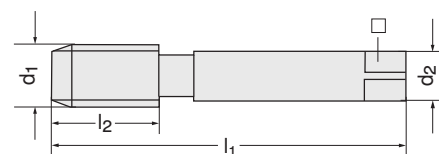
HSS-E

HSS-E
TiN

14455 098-130



14455 203-220



Vaporised

HSS-E/TiN

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN	14455	...	14455	...
M 2	1.60	0.40	8	45	2.8 x 2.1	371		098		
M 2.3	1.90	0.40	8	45	2.8 x 2.1	371		100		
M 2.5	2.05	0.45	9	50	2.8 x 2.1	371		101		
M 3	2.50	0.50	6	56	3.5 x 2.7	371		103		203
M 4	3.30	0.70	7	63	4.5 x 3.4	371		104		204
M 5	4.20	0.80	8	70	6.0 x 4.9	371		105		205
M 6	5.00	1.00	10	80	6.0 x 4.9	371		106		206
M 8	6.80	1.25	13	90	8.0 x 6.2	371		108		208
M 10	8.50	1.50	15	100	10.0 x 8.0	371		110		210
M 12	10.25	1.75	18	110	9.0 x 7.0	376		112		212
M 16	14.00	2.00	20	110	12.0 x 9.0	376		116		216
M 20	17.50	2.5	25	140	16.0 x 12.0	376		120		220
M 24	21.00	3.00	30	110	18.0 x 14.5	376		124		
M 27	24.00	3.00	30	110	20.0 x 16.0	376		127		
M 30	26.50	3.50	30	125	22.0 x 18.0	376		130		

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
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14455 098-130 + 300

10-15	-	10-15	5-15	5-15	5-15	5-15	-	-	-	-	-	-	4-6	4-6	-	5-8	-
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14455 203-220

10-20	-	10-20	10-20	10-20	5-20	5-20	-	-	-	-	-	-	5-8	5-8	-	8-12	-
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14450

Blind-hole screw tap Uni

M

6H

DIN
371DIN
376**ATORN®****Design**

Extra-robust PM screw taps with 45° spiral.

Up to M 10 DIN 371.

From M 12 DIN 376.

Applications

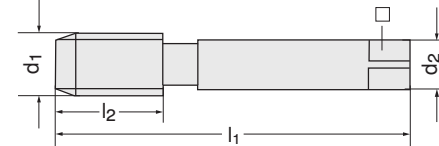
For **universal use**, for example, in VA, case-hardening, heat-treated and tool steel, aluminium, copper and cast metal.

Note:

Outstanding value for money.

Maximum profitability.

14450



DIN 371

DIN 376

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	DIN	14450	...	14450	...
M 3	2.50	0.50	6	56	3.5 x 2.7			101		
M 4	3.30	0.70	7	63	4.5 x 3.4			102		
M 5	4.20	0.80	8	70	6.0 x 4.9			103		
M 6	5.00	1.00	10	80	6.0 x 4.9			104		
M 8	6.80	1.25	13	90	8.0 x 6.2			106		
M 10	8.50	1.50	15	100	10.0 x 8.0			108		
M 12	10.20	1.75	18	110	9.0 x 7.0					110
M 16	14.00	2.00	20	110	12.0 x 9.0					112

Al<10% Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-25	5-20	5-12	4-10	2-8	-	-	-	-	-	8-20	8-20	-	-	-



14453

Blind-hole screw tap Unimaxx

UNIMAXX

Design

HSS-E-PM steel and HARDLUBE coating for particularly high wear resistance and minimised surface friction.

Up to M 10 DIN 371.

From M 12 DIN 376.

Note:

50% higher cutting values and service life possible.

All-rounder suitable for a wide variety of materials.

Excellent value for money, higher profitability.

M

6HX

DIN
371DIN
376

50°

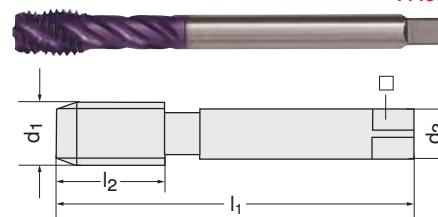
2-3 C

≤ 3xD

HSS-E-PM
HARDLUBE

Uni

14453



DIN 371

DIN 376

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x Ø mm	DIN 371 14453	...	DIN 376 14453	...
M 2	1.60	0.40	8	45	2.8 x 2.1		099		
M 2.5	2.05	0.45	9	50	2.8 x 2.1		100		
M 3	2.50	0.50	5	56	3.5 x 2.7		101		
M 4	3.30	0.70	7	63	4.5 x 3.4		102		
M 5	4.20	0.80	8	70	6.0 x 4.9		103		
M 6	5.00	1.00	10	80	6.0 x 4.9		104		
M 8	6.80	1.25	13	90	8.0 x 6.2		106		
M 10	8.50	1.50	15	100	10.0 x 8.0		108		
M 12	10.20	1.75	18	110	9.0 x 7.0				110
M 16	14.00	2.00	20	110	12.0 x 9.0				112
M 20	17.50	2.50	25	140	16.0 x 12.0				114
M 24	21.00	3.00	30	160	18.0 x 14.5				116
M 27	24.00	3.00	30	160	20.0 x 16.0				117
M 30	26.50	3.50	35	180	22.0 x 18.0				118

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-50	10-40	15-50	15-40	15-35	10-30	10-25	8-20	-	-	-	-	-	8-20	5-15	-	15-40	-

14456

Blind-hole screw tap

ATORN®

Design

- Powder-metallurgical steel (PM) with HARDLUBE coating

- High edge stability for particularly high wear resistance and minimised surface friction

Up to M 10 DIN 371.

From M 12 DIN 376.

Applications

All-rounder for universal machining.

Also very well suited to the machining of VA.

Note:

Outstanding value for money.

Maximum profitability.

M

6HX

DIN
371DIN
376

50°

2-3 C

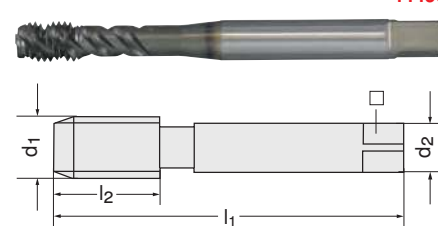
≤ 3xD

PM
HARDLUBE

VA

Uni

14456



DIN 371

DIN 376

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x Ø mm	DIN 371 14456	...	DIN 376 14456	...
M 2	1.60	0.40	8	45	2.8 x 2.1		101		
M 2.5	2.05	0.45	9	50	2.8 x 2.1		102		
M 3	2.50	0.50	5	56	3.5 x 2.7		103		
M 4	3.30	0.70	7	63	4.5 x 3.4		104		
M 5	4.20	0.80	8	70	6.0 x 4.9		105		
M 6	5.00	1.00	10	80	6.0 x 4.9		106		
M 8	6.80	1.25	13	90	8.0 x 6.2		107		
M 10	8.50	1.50	15	100	10.0 x 8.0		108		
M 12	10.20	1.75	18	110	9.0 x 7.0				109
M 14	12.00	2.00	20	110	11.0 x 9.0				110
M 16	14.00	2.00	20	110	12.0 x 9.0				111
M 20	17.50	2.50	25	140	16.0 x 12.0				112
M 24	21.00	3.00	30	160	18.0 x 14.5				113
M 27	24.00	3.00	30	160	20.0 x 16.0				114
M 30	26.50	3.50	35	180	22.0 x 18.0				115

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-50	10-40	15-50	15-40	15-35	10-30	10-25	8-20	-	-	-	-	-	8-20	5-15	-	15-40	-

Blind-hole screw tap

14457 - 14458

Blind-hole screw tap

ATORN®

Design

- Powder-metallurgical steel (PM) with HARDLUBE coating
 - High edge stability for particularly high wear resistance and minimised surface friction
- Up to M 10 DIN 371.
From M 12 DIN 376.

Applications

All-rounder for universal machining.
Also very well suited to the machining of VA.

Note:

Outstanding value for money.
Maximum profitability.

M

DIN
371DIN
376

50°

2-3 C

≤ 3xD

PM
HARDLUBE

VA

Uni

14457

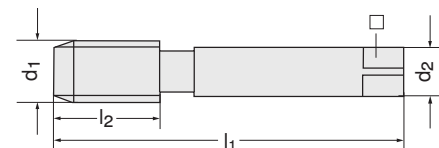


6HX



14458

6GX



6HX with internal cooling supply

14457

6GX

14458

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	DIN	14457	...	14458	...
M 3	2.50	0.50	11	56	3.5 x 2.7	371				101
M 4	3.30	0.70	13	63	4.5 x 3.4	371				102
M 5	4.20	0.80	16	70	6.0 x 4.9	371				103
M 6	5.00	1.00	19	80	6.0 x 4.9	371		104		104
M 8	6.80	1.25	22	90	8.0 x 6.2	371		105		105
M 10	8.50	1.50	24	100	10.0 x 8.0	371		106		106
M 12	10.20	1.75	28	110	9.0 x 7.0	376		107		107
M 16	14.00	2.00	32	110	12.0 x 9.0	376		108		108
M 20	17.50	2.50	34	140	16.0 x 12.0	376		109		109

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-50	10-40	15-50	15-40	15-35	10-30	10-25	8-20	-	-	-	-	-	8-20	5-15	-	15-40	-

14467

Blind-hole screw tap Uni

ATORN®

Design

Spiral-fluted.
Up to M 10 DIN 371.
From M 12 DIN 376.

Applications

Synchro tool for CNC machines (clamp rigidly or with minimal length compensation).

Note:

Synchro chuck, see art. no. 21453, 21457 and 21837. Suitable inserts, see art. no. 21465-21466.

M

6HX

DIN
371DIN
376

45°

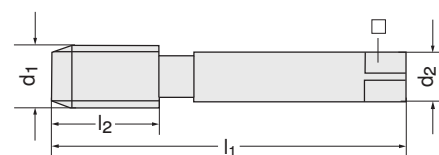
2-3 C

≤ 2xD

PM
TiCN

Uni

14467



DIN 371

14467

DIN 376

14467

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	14467	...	14467	...
M 3	2.50	0.50	5	56	3.5 x 2.7			103	
M 4	3.30	0.70	6	63	4.5 x 3.4			104	
M 5	4.20	0.80	7	70	6.0 x 4.9			105	
M 6	5.00	1.00	8	80	6.0 x 4.9			106	
M 8	6.80	1.25	10	90	8.0 x 6.2			108	
M 10	8.50	1.50	12	100	10.0 x 8.0			110	
M 12	10.20	1.75	18	110	9.0 x 7.0				112
M 16	14.00	2.00	20	110	12.0 x 9.0				116

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10-30	-	10-25	15-35	15-30	15-30	10-25	5-15	2-10	-	-	-	-	5-15	5-15	-	10-15	-

14422

Blind-hole screw tap SGSP (PM)

M

6H

DIN
371DIN
376

2-3 C

45°

NEW

HSS
PM-SG

≤ 3xD

Uni

14422

NACHI

Design

- Metric thread
- Blind hole thread
- Right cutting
- Spiral-fluted 45°
- Up to M 10 DIN 371
- From M 12 DIN 376

Note:

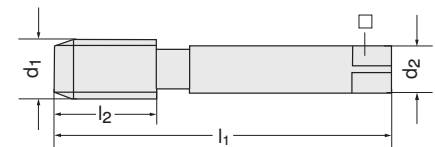
Screw tap for the most demanding applications.
For a long service life and process reliability!

Applications

For universal use.

Quality

High-quality HSS-PM with SG coating
(TiCN multi-layer coating).



HSS-PM-SG

14422

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	Z	DIN	...
M 3	2.50	0.50	5.6	56	3.5 x 2.7	3	371	005
M 4	3.30	0.70	8.1	63	4.5 x 3.4	3	371	006
M 5	4.20	0.80	9.4	70	6.0 x 4.9	3	371	007
M 6	5.00	1.00	12.0	80	6.0 x 4.9	3	371	008
M 8	6.80	1.25	15.4	90	8.0 x 6.2	3	371	009
M 10	8.50	1.50	18.9	100	10.0 x 8.0	3	371	010
M 12	10.20	1.75	22.4	110	9.0 x 7.0	3	376	011
M 14	12.00	2.00	25.9	110	11.0 x 9.0	3	376	012
M 16	14.00	2.00	25.9	110	12.0 x 9.0	3	376	013
M 18	15.50	2.50	32.6	125	14.0 x 11.0	4	376	014
M 20	17.50	2.50	32.6	140	16.0 x 12.0	4	376	015
M 22	19.50	2.50	32.6	140	18.0 x 14.5	4	376	016
M 24	21.00	3.00	38.8	160	18.0 x 14.5	4	376	017

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
15-50	15-20	6-15	15-30	15-30	8-30	8-30	8-30	5-20	-	-	-	-	5-10	5-10	-	10-30	-

14466

Blind-hole screw tap Synchro

M

6HX

DIN
371DIN
376

50°

2-3 C

≤ 2.5xD

HSS-E-PM
TiCN

Uni

14466

HWW

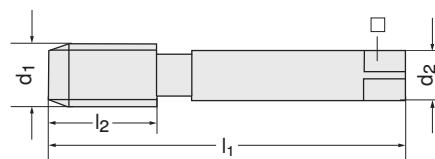
Design

Extra-robust PM screw taps with h6 shank for
shrinking and with clamping surface for fitting in
the surface chuck. Special geometry for universal
use on machines with synchronised spindle drive.
Up to M 10 DIN 371.
From M 12 DIN 376.

Note:

The emulsion ratio should be min. 8%.

To increase the service life of the screw tap,
we recommend the use of the Synchro tapping
chuck (see art. no. 21449 ff.).



DIN 371

DIN 376

14466

14466

d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	...	...
M 2	1.60	0.40	4	70	6.0 x 4.9	101	...
M 2.5	2.05	0.45	5	70	6.0 x 4.9	102	...
M 3	2.50	0.50	5	70	6.0 x 4.9	103	...
M 4	3.30	0.70	7	70	6.0 x 4.9	104	...
M 5	4.20	0.80	8	70	6.0 x 4.9	105	...
M 6	5.00	1.00	10	80	6.0 x 4.9	106	...
M 8	6.80	1.25	13	90	8.0 x 6.2	108	...
M 10	8.50	1.50	15	100	10.0 x 8.0	110	...
M 12	10.20	1.75	18	110	12.0 x 9.0	112	...
M 14	12.00	2.00	20	110	14.0 x 11.0	114	...
M 16	14.00	2.00	20	110	16.0 x 12.0	116	...
M 20	17.50	2.50	25	140	16.0 x 12.0	120	...

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti	GG(G)	Plastic
60-80	40-50	25-70	50-60	40-50	30-40	20-30	20-30	20-30	-	-	-	-	10-20	10-20	10-25	-	40-50

Blind-hole screw tap

14454

Blind-hole screw tap

M

6H

DIN
371DIN
376HSS-E
PM**ATORN®****Design**

HSS-E-PM screw taps for increased service life.

Shortened threaded part, larger radial relief, narrow blades.

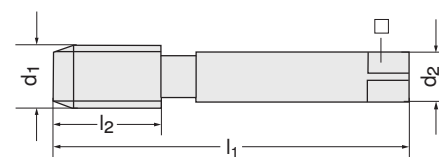
Up to M 10 DIN 371.

From M 12 DIN 376.

Applications

For steels up to 1400 N/mm².

14454



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	DIN 371		DIN 376	
						14454	...	14454	...
M 3	2.50	0.50	6	56	3.5 x 2.7		103		
M 4	3.30	0.70	7	63	4.5 x 3.4		104		
M 5	4.20	0.80	8	70	6.0 x 4.9		105		
M 6	5.00	1.00	10	80	6.0 x 4.9		106		
M 8	6.80	1.25	13	90	8.0 x 6.2		108		
M 10	8.50	1.50	15	100	10.0 x 8.0		110		
M 12	10.20	1.75	18	110	9.0 x 7.0				112
M 14	12.00	2.00	20	110	11.0 x 9.0				114
M 16	14.00	2.00	20	110	12.0 x 9.0				116
M 20	17.50	2.50	25	140	16.0 x 12.0				120

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	4-10	2-8	2-5	-	-	-	-	-	-	-	-	-

14462

Blind-hole screw tap

M

6H

DIN
371DIN
376

HSS-E



14462

ATORN®**Design**

With extra-long shank.

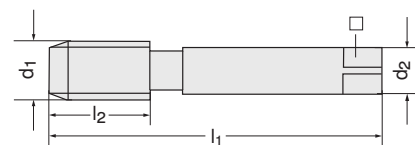
With minimal radial relief.

Up to M 10 DIN 371.

From M 12 DIN 376.

Applications

Very well suited for thread cutting in hard-to-reach places.



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	DIN 371		DIN 376	
						14462	...	14462	...
M 3	2.50	0.50	6	112	3.5 x 2.7		103		
M 4	3.30	0.70	7	126	4.5 x 3.4		104		
M 5	4.20	0.80	8	140	6.0 x 4.9		105		
M 6	5.00	1.00	10	160	6.0 x 4.9		106		
M 8	6.80	1.25	13	180	8.0 x 6.2		108		
M 10	8.50	1.50	15	200	10.0 x 8.0		110		
M 12	10.20	1.75	18	220	9.0 x 7.0				112
M 14	12.00	2.00	20	220	9.0 x 7.0				114
M 16	14.00	2.00	20	220	12.0 x 9.0				116
M 20	17.50	2.50	25	280	16.0 x 12.0				120

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	-	-	-	-	-	-	-	-	-	-	-	-



14459

Blind-hole screw tap

M

6H

DIN
371DIN
376

39°

2-3 C

≤2.5xD

HSS-E

900
N/mm²

14459

EMUGE

Design

With extra-long shank.

Up to M 5 DIN 371.

From M 6 DIN 376.

Applications

Very well suited for thread cutting in hard-to-reach places.

Note:

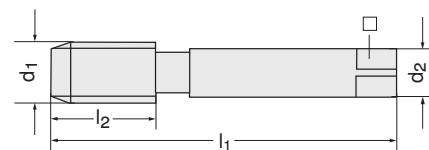
Screw tap deviating from the ATORN colour system (yellow ring: here for low-alloy steels).

14459 201-203

1-Enorm-LS.

14459 204-209

2-Enorm-LS.



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	DIN 371		DIN 376	
						14459	...	14459	...
M 3	2.50	0.50	6	100	3.5 x 2.7		201		
M 4	3.30	0.70	7	125	4.5 x 3.4		202		
M 5	4.20	0.80	8	140	6.0 x 4.9		203		
M 6	5.00	1.00	10	160	4.5 x 3.4				204
M 8	6.80	1.25	14	180	6.0 x 4.9				205
M 10	8.50	1.50	16	200	7.0 x 5.5				206
M 12	10.20	1.75	18	224	9.0 x 7.0				207
M 16	14.00	2.00	22	224	12.0 x 9.0				208
M 20	17.50	2.50	25	280	16.0 x 12.0				209

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	5-25	5-20	5-15	-	-	-	-	-	-	-	-	-	-	-	-

14463

Blind-hole screw tap

M

6H

DIN
371DIN
376

45°

2-3 C

≤2.5xD

ALU

ATORN®

Design

- With strong spiral point and larger chip space

- Up to M 10 DIN 371

- From M 12 DIN 376

Applications

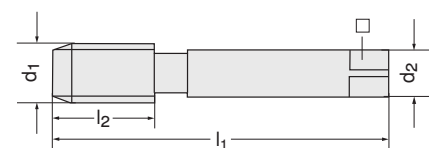
For through-hole threads in long-chipping non-ferrous metals.

HSS-E

14463 102-112

HSS-E-PM
CrN

14463 203-216



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	DIN	HSS-E/polished		HSS-E-PM-CrN	
							14463	...	14463	...
M 2	1.60	0.40	8	45	2.8 x 2.1	371		102		
M 3	2.50	0.50	10	56	3.5 x 2.7	371		103		203
M 4	3.30	0.70	12	63	4.5 x 3.4	371		104		204
M 5	4.20	0.80	14	70	6.0 x 4.9	371		105		205
M 6	5.00	1.00	16	80	6.0 x 4.9	371		106		206
M 8	6.80	1.25	18	90	8.0 x 6.2	371		108		208
M 10	8.50	1.50	20	100	10.0 x 8.0	371		110		210
M 12	10.20	1.75	22	110	9.0 x 7.0	376		112		212
M 16	14.00	2.00	28	110	12.0 x 9.0	376				216

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	-	-	-	-	-	-	-	-	-	-	-	-	-	20-30

Blind-hole screw taps | Combi screw taps | Through-hole screw taps

14473

Blind-hole screw tap, left cutting

ATORN®

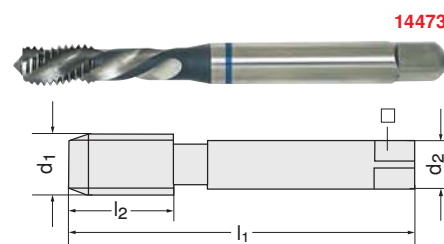
Design

Up to M 10 DIN 371.

From M 12 DIN 376.

Note:

Strong backwards chip transport especially suitable for long-chipping materials but also for steel materials.



d ₁	Core hole Ø mm	Pitch mm	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	DIN 371 14473	...	DIN 376 14473	...
M 3	2.50	0.50	6	56	3.5 x 2.7			103	
M 4	3.30	0.70	7	63	4.5 x 3.4			104	
M 5	4.20	0.80	8	70	6.0 x 4.9			105	
M 6	5.00	1.00	10	80	6.0 x 4.9			106	
M 8	6.80	1.25	13	90	8.0 x 6.2			108	
M 10	8.50	1.50	15	100	10.0 x 8.0			110	
M 12	10.20	1.75	18	110	9.0 x 7.0				112
M 16	14.00	2.00	20	110	12.0 x 9.0				116
M 20	17.50	2.50	25	140	16.0 x 12.0				120

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	-	-	-	-	-	-	-	-	-	-	-	-

14468 - 14469

Combi screw taps

Design

With 1/4-inch-bit hexagonal shank in accordance with DIN 3126.

Applications

For core hole drilling (1), thread cutting and deburring (2) (3) in a single action.

For steel and non-ferrous metals up to 1 x nominal diameter.

Note:

Select speeds in accordance with the cutting speeds of the individual tool.

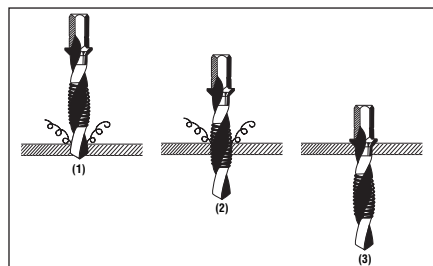
14468

7 pieces in set.

Contents: 1 piece each of: M 3/M 4/M 5/M 6/M 8/M 10 and 1 bit universal holder in box.

14469

Combi screw tap, individual.



Set	HSS
Set contents	14468 ...
7 pieces M 3 - M 10	101

individual					HSS 14469 ...
Nominal Ø	Pitch mm	Twist drill Ø mm	Total length mm	Rotation speed max. rpm	
M 3	0.50	2.5	36	1600	101
M 4	0.70	3.3	39	1200	102
M 5	0.80	4.2	41	950	103
M 6	1.00	5.0	44	800	104
M 8	1.25	6.8	50	600	105
M 10	1.50	8.5	59	450	106

14498

Through-hole screw tap

MF

6H

DIN
374

HSS-E

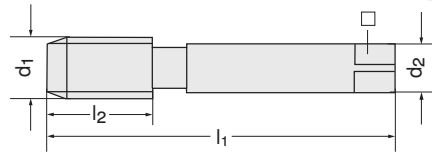


14498

ATORN®

Design

Without spiral point.



HSS-E

d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\pi}{4}$ mm	...
M 3 x 0.35	2.65	6	56	2.2 x -	101
M 4 x 0.50	3.50	8	63	2.8 x 2.1	103
M 5 x 0.50	4.50	9	70	3.5 x 2.7	104
M 6 x 0.75	5.20	12	80	4.5 x 3.4	106
M 8 x 0.75	7.20	14	80	6.0 x 4.9	108
M 8 x 1.00	7.00	16	90	6.0 x 4.9	109
M 10 x 1.00	9.00	16	90	7.0 x 5.5	112
M 10 x 1.25	8.80	20	100	7.0 x 5.5	113
M 12 x 0.75	11.20	22	100	9.0 x 7.0	114
M 12 x 1.00	11.00	16	100	9.0 x 7.0	115
M 12 x 1.25	10.80	22	100	9.0 x 7.0	116
M 12 x 1.50	10.50	22	110	9.0 x 7.0	117
M 14 x 1.00	13.00	22	100	11.0 x 9.0	118
M 14 x 1.25	12.80	22	100	11.0 x 9.0	119
M 14 x 1.50	12.50	22	100	11.0 x 9.0	120
M 15 x 1.00	14.00	22	100	12.0 x 9.0	121

HSS-E

d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\pi}{4}$ mm	14498	...
M 16 x 1.50	14.50	22	100	12.0 x 9.0	124	
M 18 x 1.00	17.00	25	110	14.0 x 11.0	125	
M 18 x 1.50	16.50	25	110	14.0 x 11.0	126	
M 20 x 1.00	19.00	18	125	16.0 x 12.0	128	
M 20 x 2.00	18.00	32	140	16.0 x 12.0	130	
M 22 x 1.50	20.50	25	125	18.0 x 14.5	132	
M 24 x 1.50	22.50	25	125	18.0 x 14.5	135	
M 24 x 2.00	22.00	28	140	18.0 x 14.5	136	
M 26 x 1.00	25.00	28	140	18.0 x 14.5	137	
M 27 x 1.50	25.50	28	140	20.0 x 16.0	138	
M 27 x 2.00	25.00	28	140	20.0 x 16.0	139	
M 30 x 1.00	29.00	28	150	22.0 x 18.0	141	
M 30 x 1.50	28.50	28	150	22.0 x 18.0	142	
M 30 x 2.00	28.00	28	150	22.0 x 18.0	143	
M 33 x 1.50	31.50	28	160	25.0 x 20.0	145	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	-	-	-	-	-	-	-	-	-	-	-	-

14499 - 14500

Through-hole screw tap

MF

6H

DIN
374

14499

ATORN®

Design

With spiral point for strong chip transport forwards.

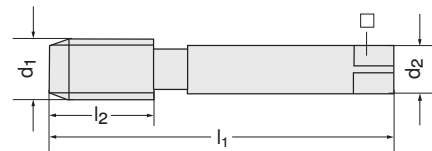
14500

Applications

Low build-up of material deposits thanks to the TiN coating.

14499

Applications

For steels up to 800 N/mm².

HSS-E

HSS-E
TiN

14500

d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\pi}{4}$ mm	HSS-E 14499	...	HSS-E/TiN 14500	...
M 4 x 0.50	3.50	8	63	2.8 x 2.1		103		103
M 5 x 0.50	4.50	9	70	3.5 x 2.7		104		104
M 6 x 0.75	5.20	12	80	4.5 x 3.4		106		106
M 8 x 0.75	7.20	14	80	6.0 x 4.9		108		108
M 8 x 1.00	7.00	16	90	6.0 x 4.9		109		109
M 10 x 0.75	8.20	16	90	7.0 x 5.5		111		111
M 10 x 1.00	9.00	16	90	7.0 x 5.5		112		112
M 10 x 1.25	8.80	20	100	7.0 x 5.5		113		113
M 12 x 1.00	11.00	16	100	9.0 x 7.0		115		115
M 12 x 1.25	10.80	22	100	9.0 x 7.0		116		116
M 12 x 1.50	10.50	22	100	9.0 x 7.0		117		117
M 14 x 1.00	13.00	22	100	11.0 x 9.0		118		118
M 14 x 1.50	12.50	22	100	11.0 x 9.0		120		120
M 16 x 1.00	15.00	22	100	12.0 x 9.0		123		123
M 16 x 1.50	14.50	22	100	12.0 x 9.0		124		124
M 18 x 1.00	17.00	25	100	14.0 x 11.0		125		125
M 18 x 1.50	16.50	25	110	14.0 x 11.0		126		126
M 20 x 1.00	19.00	25	125	16.0 x 12.0		128		128
M 20 x 1.50	18.50	25	125	16.0 x 12.0		129		129
M 22 x 1.50	20.50	25	125	18.0 x 14.5		132		132
M 24 x 1.50	22.50	25	140	18.0 x 14.5		135		135

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	-	-	-	-	-	-	-	-	-	-	-	-

Blind-hole screw taps | Machine taps

14507

Blind-hole screw tap

ATORN®

Applications

For light chip transport backwards.

MF

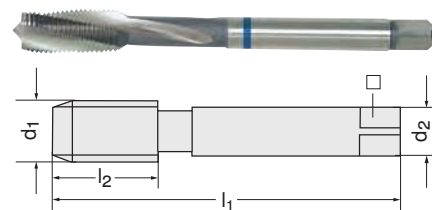
6H

DIN
374

HSS-E



14507



d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	HSS-E 14507	...
M 5 x 0.50	4.50	9	70	6.0 x 4.9		104
M 6 x 0.75	5.20	12	80	6.0 x 4.9		106
M 7 x 0.75	6.20	14	80	7.0 x 5.5		107
M 8 x 0.75	7.20	14	80	6.0 x 4.9		108
M 8 x 1.00	7.00	16	90	6.0 x 4.9		109
M 10 x 1.00	9.00	16	90	7.0 x 5.5		112
M 10 x 1.25	8.80	20	100	7.0 x 5.5		113
M 12 x 1.00	11.00	16	100	9.0 x 7.0		115
M 12 x 1.25	10.80	22	100	9.0 x 7.0		116
M 12 x 1.50	10.50	22	110	9.0 x 7.0		117
M 14 x 1.00	13.00	16	100	11.0 x 9.0		118
M 14 x 1.50	12.50	22	100	11.0 x 9.0		120
M 16 x 1.00	15.00	22	100	12.0 x 9.0		123

d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	HSS-E 14507	...
M 16 x 1.50	14.50	22	100	12.0 x 9.0		124
M 18 x 1.50	16.50	25	110	14.0 x 11.0		126
M 20 x 1.50	18.50	25	125	16.0 x 12.0		129
M 22 x 1.00	21.00	25	125	18.0 x 14.5		131
M 22 x 1.50	20.50	25	125	18.0 x 14.5		132
M 24 x 1.50	22.50	25	140	18.0 x 14.5		135
M 24 x 2.00	22.00	25	140	18.0 x 14.5		136
M 26 x 1.50	24.50	28	140	18.0 x 14.5		137
M 27 x 1.50	25.50	28	140	20.0 x 16.0		138
M 27 x 2.00	25.00	28	140	20.0 x 16.0		139
M 28 x 1.50	26.50	28	140	20.0 x 16.0		140
M 30 x 1.50	28.50	28	150	22.0 x 18.0		142
M 30 x 2.00	28.00	28	150	22.0 x 18.0		143

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	5-20	5-15	5-12	-	-	-	-	-	-	-	-	-	-	-	-

14508 - 14509

Blind-hole screw tap

ATORN®

Design

Minimum thread radial relief.

Applications

Strong chip transport backwards.

MF

6H

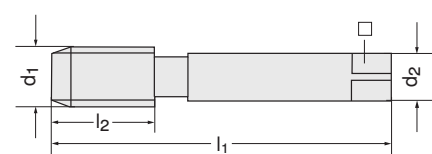
DIN
374

14508

HSS-E



14509

HSS-E
TiN

d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	HSS-E 14508	...	HSS-E/TiN 14509	...
M 6 x 0.75	5.20	12	80	4.5 x 3.4		106		106
M 8 x 1.00	7.00	16	90	6.0 x 4.9		109		109
M 10 x 1.00	9.00	16	90	7.0 x 5.5		112		112
M 10 x 1.25	8.80	20	100	7.0 x 5.5		113		113
M 12 x 1.25	10.80	22	100	9.0 x 7.0		116		116
M 12 x 1.50	10.50	22	100	9.0 x 7.0		117		117
M 14 x 1.50	12.50	22	100	11.0 x 9.0		120		120
M 16 x 1.50	14.50	22	100	12.0 x 9.0		124		124
M 18 x 1.50	16.50	25	100	14.0 x 11.0		126		126
M 20 x 1.50	18.50	25	125	16.0 x 12.0		129		129

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	-	-	-	-	-	-	-	-	-	-	-	-

14501



Design

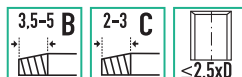
With spiral point. Up to and including M 32 x 1.5 notch shape B. In addition, notch shape C.

Applications

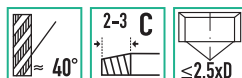
For through-hole thread.

Note:

Cost-effective design.



14501



14502



14504

14502



Design

40° right-hand spiral with notch shape C.

Applications

For blind-hole thread.

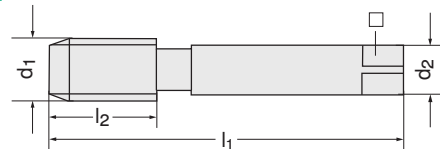
14504

Design

With spiral point, notch shape B.

Applications

For through-hole thread.



d ₁ x pitch	Core hole Ø mm	14501 + 14504		14502		l ₁ mm	d ₂ x 	straight/B+C		40°/C		straight/B	
		l ₂ mm	l ₂ mm	l ₂ mm	l ₂ mm			14501	...	14502	...	14504	...
M 3 x 0.35	2.65	8	4	56	2.2 x -			101			101		
M 4 x 0.50	3.50	10	6	63	2.8 x 2.1			103					
M 5 x 0.50	4.50	12	7	70	3.5 x 2.7			104			104		104
M 6 x 0.50	5.50	14	8	80	4.5 x 3.4			105					
M 6 x 0.75	5.25	14	8	80	4.5 x 3.4			106			106		106
M 7 x 0.75	6.25	14	-	80	5.5 x 4.3			107					
M 8 x 0.75	7.25	18	10	80	6.0 x 4.9			108			108		108
M 8 x 1.00	7.00	22	10	90	6.0 x 4.9			109			109		109
M 9 x 1.00	8.00	22	-	90	7.0 x 5.5			110					
M 10 x 0.75	9.25	20	-	90	7.0 x 5.5			111					
M 10 x 1.00	9.00	20	12	90	7.0 x 5.5			112			112		112
M 10 x 1.25	8.75	24	12	100	7.0 x 5.5			113			113		113
M 11 x 1.00	10.00	20	-	90	8.0 x 6.2			114					
M 12 x 1.00	11.00	22	14	100	9.0 x 7.0			115			115		115
M 12 x 1.25	10.75	22	14	100	9.0 x 7.0			116			116		116
M 12 x 1.50	10.50	22	14	100	9.0 x 7.0			117			117		117
M 14 x 1.00	13.00	22	16	100	11.0 x 9.0			118			118		
M 14 x 1.25	12.75	22	16	100	11.0 x 9.0			119			119		
M 14 x 1.50	12.50	22	16	100	11.0 x 9.0			120			120		120
M 16 x 1.00	15.00	22	16	100	12.0 x 9.0			123			123		
M 16 x 1.50	14.50	22	16	100	12.0 x 9.0			124			124		124
M 18 x 1.00	17.00	25	20	110	14.0 x 11.0			125			125		
M 18 x 1.50	16.50	25	20	110	14.0 x 11.0			126			126		126
M 20 x 1.00	19.00	25	20	125	16.0 x 12.0						128		
M 20 x 1.50	18.50	25	20	125	16.0 x 12.0			129			129		129
M 22 x 1.50	20.50	25	20	125	18.0 x 14.5			132			132		132
M 22 x 2.00	20.00	34	-	140	18.0 x 14.5			133					
M 24 x 1.50	22.50	28	24	140	18.0 x 14.5						135		135
M 24 x 2.00	22.00	28	-	140	18.0 x 14.5			136					
M 25 x 1.50	23.50	-	24	140	18.0 x 14.5						151		
M 26 x 1.50	24.50	28	-	140	18.0 x 14.5			137					
M 27 x 2.00	25.00	28	24	140	20.0 x 16.0						139		
M 28 x 1.50	26.50	28	-	140	20.0 x 16.0			140					
M 30 x 1.50	28.50	28	28	150	22.0 x 18.0			142			142		
M 30 x 2.00	28.00	28	28	150	22.0 x 18.0			143			143		
M 32 x 1.50	30.50	28	-	150	22.0 x 18.0			144					
M 35 x 1.50	33.50	30	-	170	28.0 x 22.0			146					
M 36 x 1.50	34.50	30	-	170	28.0 x 22.0			147					
M 38 x 1.50	36.50	30	-	170	28.0 x 22.0			148					
M 40 x 1.50	38.50	30	-	170	32.0 x 24.0			149					
M 42 x 1.50	40.50	30	-	170	32.0 x 24.0			150					

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
14501+14504																	
15-22	15-18	12-18	8-12	8-12	-	-	-	-	-	-	-	-	-	-	-	-	-
14502																	
12-18	12-15	12-18	8-10	8-10	-	-	-	-	-	-	-	-	-	-	-	-	-

Through-hole screw taps | Blind-hole screw taps

14505

Through-hole screw tap

ATORN®

Design

Reduced build-up of material deposits due to vaporisation.

Note:

Very well suited for machining VA.

MF

6H

DIN
374

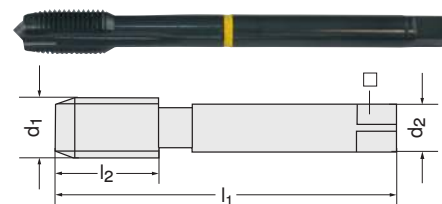
3.5-5 B

≤ 3xD

HSS-E

≤ 1200
N/mm²

14505



d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	Vaporised 14505	...
M 4 x 0.50	3.50	8	63	2.8 x 2.1	101	
M 5 x 0.50	4.50	9	70	3.5 x 2.7	102	
M 6 x 0.50	5.50	14	80	4.5 x 3.4	103	
M 6 x 0.75	5.20	12	80	4.5 x 3.4	104	
M 7 x 0.75	6.20	14	80	5.5 x 4.3	105	
M 8 x 0.50	7.50	14	80	6.0 x 4.9	106	
M 8 x 0.75	7.20	14	80	6.0 x 4.9	107	
M 8 x 1.00	7.00	16	90	6.0 x 4.9	108	
M 9 x 1.00	8.00	22	90	7.0 x 5.5	109	
M 10 x 0.75	9.20	16	90	7.0 x 5.5	110	
M 10 x 1.00	9.00	16	90	7.0 x 5.5	111	
M 10 x 1.25	8.80	20	100	7.0 x 5.5	112	
M 11 x 1.00	10.00	20	90	8.0 x 6.2	113	
M 12 x 1.00	11.00	16	100	9.0 x 7.0	114	
M 12 x 1.25	10.80	22	100	9.0 x 7.0	115	
M 12 x 1.50	10.50	22	100	9.0 x 7.0	116	
M 14 x 1.00	13.00	22	100	11.0 x 9.0	117	
M 14 x 1.25	12.80	22	100	11.0 x 9.0	118	
M 14 x 1.50	12.50	22	100	11.0 x 9.0	119	
M 15 x 1.00	14.00	22	100	12.0 x 9.0	120	
M 16 x 1.00	15.00	22	100	12.0 x 9.0	122	

d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	Vaporised 14505	...
M 16 x 1.50	14.50	22	100	12.0 x 9.0	123	
M 18 x 1.00	17.00	25	110	14.0 x 11.0	124	
M 18 x 1.50	16.50	25	110	14.0 x 11.0	125	
M 20 x 1.00	19.00	25	125	16.0 x 12.0	126	
M 20 x 1.50	18.50	25	125	16.0 x 12.0	127	
M 20 x 2.00	18.00	32	140	16.0 x 12.0	128	
M 22 x 1.00	21.00	25	125	18.0 x 14.5	129	
M 22 x 1.50	20.50	25	125	18.0 x 14.5	130	
M 24 x 1.00	23.00	25	140	18.0 x 14.5	131	
M 24 x 1.50	22.50	25	140	18.0 x 14.5	132	
M 24 x 2.00	22.00	28	140	18.0 x 14.5	133	
M 26 x 1.50	24.50	28	140	18.0 x 14.5	134	
M 30 x 1.50	28.50	28	150	22.0 x 18.0	135	
M 30 x 2.00	28.00	28	150	22.0 x 18.0	136	
M 33 x 1.50	31.50	28	160	25.0 x 20.0	137	
M 33 x 2.00	31.00	28	160	25.0 x 20.0	138	
M 35 x 1.50	33.50	30	170	28.0 x 22.0	139	
M 36 x 1.50	34.50	30	170	28.0 x 22.0	140	
M 36 x 2.00	34.00	30	170	28.0 x 22.0	141	
M 38 x 1.50	36.50	30	170	28.0 x 22.0	142	
M 42 x 1.50	40.50	30	170	32.0 x 24.0	143	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	-	-	-	-	-	-	-	-	-	-	5-12	5-12	-	-	-

14506

Blind-hole screw tap

EMUGE

Design

2 Enorm-VA.

MF

6H

DIN
374

39°

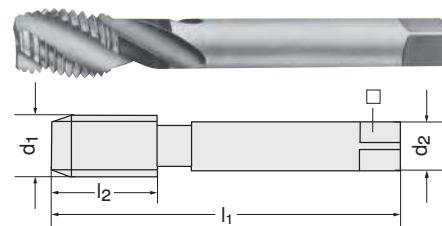
2-3 C

≤ 2.5xD

HSS-E

≤ 1100
N/mm²

14506



d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	HSS-E 14506	...
M 6 x 0.75	5.20	8	80	4.5 x 3.4	101	
M 8 x 0.75	7.20	8	80	6.0 x 4.9	102	
M 8 x 1.00	7.00	10	90	6.0 x 4.9	103	
M 10 x 0.75	9.20	10	90	7.0 x 5.5	104	
M 10 x 1.00	9.00	10	90	7.0 x 5.5	105	
M 12 x 1.00	11.00	11	100	9.0 x 7.0	106	
M 12 x 1.50	10.50	15	100	9.0 x 7.0	107	
M 14 x 1.50	12.50	15	100	11.0 x 9.0	108	
M 16 x 1.50	14.50	15	100	12.0 x 9.0	109	
M 18 x 1.50	16.50	17	110	14.0 x 11.0	110	
M 22 x 1.50	20.50	17	125	18.0 x 14.5	111	
M 24 x 1.50	22.50	20	140	18.0 x 14.5	112	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	5-25	5-20	5-15	5-12	5-10	-	-	-	-	-	5-15	2-10	-	5-20	-



14518

Through-hole screw tap Hyper Z

MF

6H

DIN
374

3.5-5 B

HSS-E

≤ 2xD

NACHI

Design

- Metric fine thread
- Through-hole thread
- Right cutting with spiral point

Note:

UNI High Performance screw taps with optimum cutting geometry, long service life and process reliability!



14518

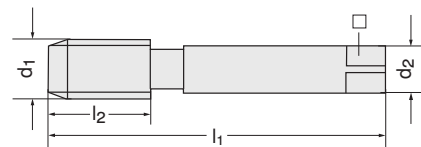
Applications

For steels up to 1200 N/mm².

Quality

HSS-E.

NEW



d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	Z	DIN	14518								...		
M 6 x 0.75	5.20	14	80	6.0 x 3.4	3	374									005		
M 8 x 0.75	7.20	14	80	8.0 x 4.9	3	374									006		
M 8 x 1.00	7.00	17	90	8.0 x 4.9	3	374									007		
M 10 x 1.00	9.00	17	90	10.0 x 5.5	3	374									008		
M 10 x 1.25	8.80	22	100	10.0 x 5.5	3	374									009		
M 12 x 1.00	11.00	23	100	9.0 x 7.0	3	374									010		
M 12 x 1.25	10.80	28	100	9.0 x 7.0	3	374									011		
M 12 x 1.50	10.50	32	100	9.0 x 7.0	3	374									012		
M 14 x 1.50	12.50	32	100	11.0 x 9.0	4	374									013		
M 16 x 1.50	14.50	32	100	12.0 x 9.0	4	374									014		
M 18 x 1.50	16.50	37.5	110	14.0 x 11.0	4	374									015		
M 20 x 1.50	18.50	37.5	125	16.0 x 12.0	4	374									016		
Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10-25	10-25	15-50	15-50	15-50	15-50	15-50	5-10	-	-	-	-	-	-	-	-	15-30	10-20

14519

Blind-hole screw tap Hyper Z

MF

6H

DIN
374

2-3 C

43°

HSS-E

≤ 2xD

NACHI

Design

- Metric fine thread
- Blind hole thread
- Right cutting
- Spiral-fluted 43°

Note:

UNI High Performance screw taps with optimum cutting geometry, long service life and process reliability!



14519

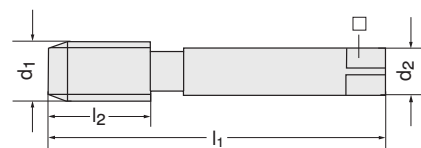
Applications

For steels up to 1200 N/mm².

Quality

HSS-E.

NEW



d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x □ mm	Z	DIN	14519	...									
M 6 x 0.75	5.20	9.2	80	6.0 x 3.4	3	374		005									
M 8 x 0.75	7.20	9.2	90	8.0 x 4.9	3	374		006									
M 8 x 1.00	7.00	12.4	90	8.0 x 4.9	3	374		007									
M 10 x 1.00	9.00	12.4	90	10.0 x 5.5	3	374		008									
M 10 x 1.25	8.80	15.7	100	10.0 x 5.5	3	374		009									
M 12 x 1.25	10.80	17.2	100	9.0 x 7.0	3	374		010									
M 12 x 1.50	10.50	20.9	100	9.0 x 7.0	3	374		011									
M 14 x 1.50	12.50	20.9	100	11.0 x 9.0	3	374		012									
M 16 x 1.50	14.50	20.9	100	12.0 x 9.0	3	374		013									
M 18 x 1.50	16.50	20.9	110	14.0 x 11.0	4	374		014									
M 20 x 1.50	18.50	20.9	125	16.0 x 12.0	4	374		015									
Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10–25	10–25	6–20	15–50	15–50	15–50	15–50	15–50	5–10	-	-	-	-	-	-	-	15–30	10–20

Machine taps | Through-hole screw taps

14516 - 14517

Machine tap


ATORN®

Design

- Vaporised
- For minimal wear
- Improved coolant transport

Applications

All-rounder for universal machining.
Also very well suited to the machining of VA.

14516

Applications

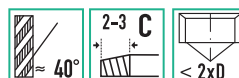
For through-hole thread.



14517

Applications

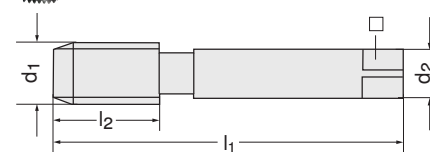
For blind-hole thread.



14516



14517



straight

14516

40°

14517

d ₁ x pitch	Core hole Ø mm	14516 l ₂ mm	14517 l ₂ mm	l ₁ mm	d ₂ x $\frac{\pi}{4}$ mm	straight 14516	...	40° 14517	...
M 3 x 0.35	2.65	8	4	56	2.2 x -	101		101	
M 4 x 0.50	3.50	10	6	63	2.8 x 2.1	102		102	
M 5 x 0.50	4.50	12	7	70	3.5 x 2.7	103		103	
M 6 x 0.50	5.50	14	8	80	4.5 x 3.4	104		104	
M 6 x 0.75	5.25	14	8	80	4.5 x 3.4	105		105	
M 8 x 0.75	7.25	18	10	80	6.0 x 4.9	106		106	
M 8 x 1.00	7.00	22	10	90	6.0 x 4.9	107		107	
M 10 x 1.00	9.00	20	12	90	7.0 x 5.5	108		108	
M 12 x 1.00	11.00	22	14	100	9.0 x 7.0	109		109	
M 12 x 1.50	10.50	22	14	100	9.0 x 7.0	110		110	
M 14 x 1.50	12.50	22	16	100	11.0 x 9.0	111		111	
M 16 x 1.50	14.50	22	16	100	12.0 x 9.0	112		112	
M 18 x 1.50	16.50	25	20	110	14.0 x 11.0	113		113	
M 20 x 1.50	18.50	25	20	125	16.0 x 12.0	114		114	
M 22 x 1.50	20.50	25	20	125	18.0 x 14.5	115		115	
M 24 x 1.50	22.50	28	24	140	18.0 x 14.5	116		116	
M 27 x 1.50	25.50	-	24	140	20.0 x 16.0	117		117	
M 30 x 1.50	28.50	-	28	150	22.0 x 18.0	118		118	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
18-25	10-25	10-15	5-25	5-20	5-15	5-15	5-10	-	-	-	-	-	5-15	5-12	-	-	-

14510 - 14511

Machine tap Unimaxx

UNIMAXX

Design

HSS-E-PM steel and HARDLUBE coating for particularly high wear resistance and minimised surface friction.

Note:

50% higher cutting values and service life possible.
All-rounder suitable for a wide variety of materials.
Excellent value for money, higher profitability.

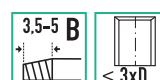
14510

Design

With spiral point.

Applications

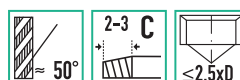
For through-hole thread.



14511

Applications

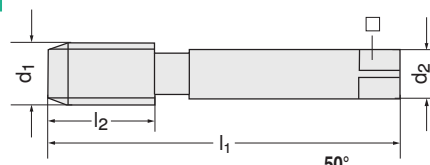
For blind-hole thread.



14510



14511



straight

14510

50°

14511

d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\pi}{4}$ mm	straight 14510	...	d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{\pi}{4}$ mm	14511	...
M 8 x 1.00	7.00	22	90	6.0 x 4.9	109		M 8 x 1.00	7.00	10	90	6.0 x 4.9	109	
M 10 x 1.00	9.00	20	90	7.0 x 5.5	112		M 10 x 1.00	9.00	12	90	7.0 x 5.5	112	
M 10 x 1.25	8.80	24	100	7.0 x 5.5	113		M 10 x 1.25	8.80	12	100	7.0 x 5.5	113	
M 12 x 1.00	11.00	22	100	9.0 x 7.0	115		M 12 x 1.00	11.00	14	100	9.0 x 7.0	115	
M 12 x 1.25	10.80	22	100	9.0 x 7.0	116		M 12 x 1.25	10.80	14	100	9.0 x 7.0	116	
M 12 x 1.50	10.50	22	100	9.0 x 7.0	117		M 12 x 1.50	10.50	14	100	9.0 x 7.0	117	
M 14 x 1.50	12.50	22	100	11.0 x 9.0	120		M 14 x 1.50	12.50	16	100	11.0 x 9.0	120	
M 16 x 1.50	14.50	22	100	12.0 x 9.0	124		M 16 x 1.50	14.50	16	100	12.0 x 9.0	124	
M 18 x 1.50	16.50	25	110	14.0 x 11.0	126		M 18 x 1.50	16.50	20	110	14.0 x 11.0	126	
M 20 x 1.50	18.50	25	125	16.0 x 12.0	129		M 20 x 1.50	18.50	20	125	16.0 x 12.0	129	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10-45	10-45	15-40	10-40	10-35	10-30	10-25	8-20	-	-	-	-	-	8-20	5-15	-	15-40	-

ATORN®**Design**

- Powder-metallurgical steel (PM) with HARDLUBE coating
- High edge stability for particularly high wear resistance and minimised surface friction

Applications

All-rounder for universal machining.
Also very well suited to the machining of VA.

Note:

Outstanding value for money.
Maximum profitability.

14512**Design**

- With spiral point

Applications

For through-hole thread.



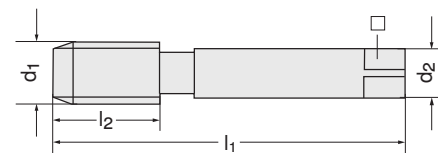
14512

14513**Applications**

For blind-hole thread.



14513



d ₁ x pitch	Core hole Ø mm	14512		14513		l ₁ mm	d ₂ x $\frac{1}{4}$ mm	straight		50°	
		l ₂ mm	l ₂ mm	l ₂ mm	l ₂ mm			14512	...	14513	...
M 8 x 1.00	7.00	22	10	90	6.0 x 4.9			101		101	
M 10 x 1.00	9.00	20	12	90	7.0 x 5.5			102		102	
M 10 x 1.25	8.80	24	12	100	7.0 x 5.5			103		103	
M 12 x 1.00	11.00	22	14	100	9.0 x 7.0			104		104	
M 12 x 1.25	10.80	22	14	100	9.0 x 7.0			105		105	
M 12 x 1.50	10.50	22	14	100	9.0 x 7.0			106		106	
M 14 x 1.50	12.50	22	16	100	11.0 x 9.0			107		107	
M 16 x 1.50	14.50	22	16	100	12.0 x 9.0			108		108	
M 18 x 1.50	16.50	25	20	110	14.0 x 11.0			109		109	
M 20 x 1.50	18.50	25	20	125	16.0 x 12.0			110		110	

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10-45	10-45	15-40	10-40	10-35	10-30	10-25	8-20	-	-	-	-	-	8-20	5-15	-	15-40	-

14513**Through-hole screw tap SGPO (PM)****NACHI****Design**

- Metric fine thread
- Through-hole thread
- Right cutting with spiral point

Applications

For universal use.

Quality

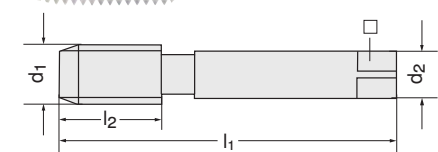
High-quality HSS-PM with SG coating
(TiCN multi-layer coating)

Note:

Screw tap for the most demanding applications.
For a long service life and process reliability!

NEW

14513



d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	Z	DIN	HSS-PM-SG	
							14513	...
M 6 x 0.75	5.20	14	80	4.5 x 3.4	3	374		005
M 8 x 0.75	7.20	14	80	6.0 x 4.9	3	374		006
M 8 x 1.00	7.00	17	90	6.0 x 4.9	3	374		007
M 10 x 1.00	9.00	17	90	7.0 x 5.5	3	374		008
M 10 x 1.25	8.80	22	100	7.0 x 5.5	3	374		009
M 12 x 1.00	11.00	19	100	9.0 x 7.0	3	374		010
M 12 x 1.25	10.80	22	100	9.0 x 7.0	3	374		011
M 12 x 1.50	10.50	22	100	9.0 x 7.0	3	374		012
M 14 x 1.50	12.50	22	100	11.0 x 9.0	3	374		013
M 16 x 1.50	14.50	22	100	12.0 x 9.0	3	374		014
M 18 x 1.50	16.50	25	110	14.0 x 11.0	3	374		015
M 20 x 1.50	18.50	25	125	16.0 x 12.0	3	374		016

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
15-50	15-20	6-15	15-30	15-30	8-30	8-30	8-30	5-10	-	-	-	-	5-10	5-10	-	10-30	-

Blind-hole screw taps | Through-hole screw taps

14520

Blind-hole screw tap SGSP (PM)

MF

6H

DIN
374

2-3 C

45°

HSS
PM-SG

≤ 3xD

Uni

NEW

NACHI

Design

- Metric fine thread
- Blind hole thread
- Right cutting
- Spiral-fluted approx. 45°

Note:

Screw tap for the most demanding applications.
For a long service life and process reliability!

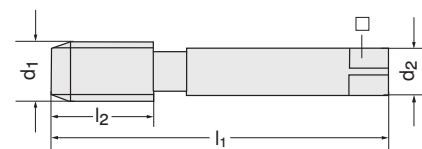
Applications

For universal use.

Quality

High-quality HSS-PM with SG coating
(TiCN multi-layer coating).

14520



HSS-PM-SG

14520

d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	Z	DIN	...
M 6 x 0.75	5.20	8	80	4.5 x 3.4	3	374	005
M 8 x 0.75	7.20	8	80	6.0 x 4.9	3	374	006
M 8 x 1.00	7.00	10	90	6.0 x 4.9	3	374	007
M 10 x 1.25	8.80	12	100	7.0 x 5.5	3	374	008
M 12 x 1.25	10.80	12	100	9.0 x 7.0	3	374	009
M 12 x 1.50	10.50	14	100	9.0 x 7.0	3	374	010
M 14 x 1.50	12.50	16	100	11.0 x 9.0	3	374	011
M 16 x 1.50	14.50	16	100	12.0 x 9.0	3	374	012
M 18 x 1.50	16.50	16	110	14.0 x 11.0	4	374	013
M 20 x 1.50	18.50	16	125	16.0 x 12.0	4	374	014

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
15-50	15-20	6-15	15-30	15-30	8-30	8-30	8-30	5-10	-	-	-	-	5-10	5-10	-	10-30	-

14514

Through-hole screw tap

MF

6HX

DIN
374

2-3 C

≤ 3xD

HSS-E

GG(G)

ATORN®

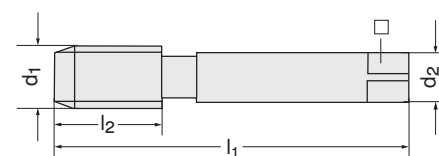
Design

Nitrided.

Applications

For high machining performance in grey cast iron.

14514



HSS-E nitrided

14514

d ₁ x pitch	Core hole Ø mm	l ₂ mm	l ₁ mm	d ₂ x $\frac{1}{4}$ mm	...
M 8 x 1.00	7.00	16	90	6.0 x 4.9	109
M 10 x 1.00	9.00	16	90	7.0 x 5.5	112
M 12 x 1.50	8.50	22	100	9.0 x 7.0	117
M 14 x 1.50	12.50	22	100	11.0 x 9.0	120
M 16 x 1.50	14.50	22	100	12.0 x 9.0	124
M 18 x 1.50	16.50	25	110	14.0 x 11.0	126
M 20 x 1.50	18.50	25	125	16.0 x 12.0	129
M 22 x 1.50	20.50	25	125	18.0 x 14.5	132
M 24 x 1.50	22.50	25	140	18.0 x 14.5	135
M 30 x 1.50	28.50	28	150	22.0 x 18.0	142

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45 HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8-20	-

14560

Through-hole screw tap

UNC

DIN 371

DIN 376

3.5-5 B

≤ 3xD

HSS-E

≤ 800 N/mm²

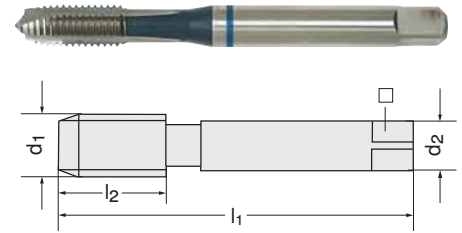
ATORN®

Design

Up to 3/8 inch DIN 371.

From 7/16 inch DIN 376.

d ₁ inch	Core hole Ø mm	Pitch TPI	l ₂ mm	l ₁ mm	d ₂ x Ø mm	DIN 371		DIN 376	
						14560	...	14560	...
1/4	5.20	20	16	80	7.0 x 5.5			110	
5/16	6.60	18	18	90	8.0 x 6.2			111	
3/8	8.00	16	20	100	9.0 x 7.0			112	
7/16	9.40	14	20	100	8.0 x 6.2				113
1/2	10.80	13	22	110	9.0 x 7.0				114
9/16	12.20	12	24	110	11.0 x 9.0				115
5/8	13.50	11	26	110	12.0 x 9.0				116
3/4	16.50	10	32	140	16.0 x 12.0				117



14560

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-20	5-15	-	-	-	-	-	-	-	-	-	-	-	-

14565

Blind-hole screw tap

UNC

DIN 371

DIN 376

≈ 40°

3.5-5 B

≤ 2.5xD

HSS-E

≤ 800 N/mm²

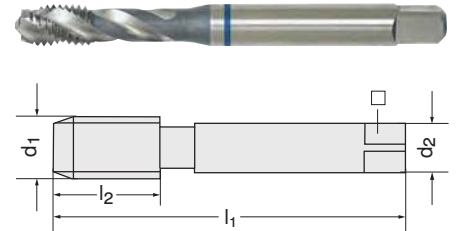
ATORN®

Design

Up to 3/8 inch DIN 371.

From 7/16 inch DIN 376.

d ₁ inch	Core hole Ø mm	Pitch TPI	l ₂ mm	l ₁ mm	d ₂ x Ø mm	DIN 371		DIN 376	
						14565	...	14565	...
1/4	5.20	20	16	80	7.0 x 5.5			110	
5/16	6.60	18	18	90	8.0 x 6.2			111	
3/8	8.00	16	20	100	9.0 x 7.0			112	
7/16	9.40	14	20	100	8.0 x 6.2				113
1/2	10.80	13	22	110	9.0 x 7.0				114
9/16	12.20	12	24	110	11.0 x 9.0				115
5/8	13.50	11	26	110	12.0 x 9.0				116
3/4	16.50	10	32	140	16.0 x 12.0				117



14565

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45 HRC	<55HRC	<60HRC	<67HRC	VA < 900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	-	-	-	-	-	-	-	-	-	-	-	-

14570 - 14571

Blind-hole screw tap

UNC

DIN 2184-1

≈ 40°

2-3 C

≤ 2.5xD

HSS-E

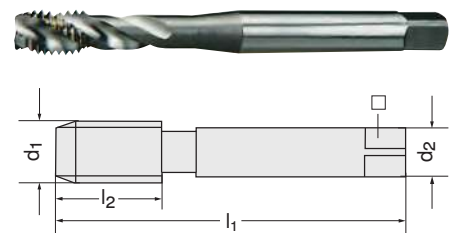
≤ 800 N/mm²

HHW

Applications

For blind-hole thread.

d ₁	Core hole Ø mm	Pitch TPI	l ₂ mm	l ₁ mm	d ₂ x Ø mm	HSS-E		HSS-E	
						14570	...	14571	...
No. 2	1.85	56	9	50	2.8 x 2.1			201	
No. 3	2.10	48	9	50	2.8 x 2.1			202	
No. 4	2.35	40	11	56	3.5 x 2.7			203	
No. 5	2.65	40	7	56	3.5 x 2.7			204	
No. 6	2.85	32	8	56	4.0 x 3.0			205	
No. 8	3.50	32	8	63	4.5 x 3.4			206	
No. 10	3.90	24	11	70	6.0 x 4.9			207	
No. 12	4.50	24	11	80	6.0 x 4.9			208	
1/4	5.10	20	13	80	7.0 x 5.5			209	
5/16	6.60	18	15	90	8.0 x 6.2			210	
3/8	8.00	16	16	90	9.0 x 7.0			211	
7/16	9.40	14	22	100	8.0 x 6.2				212
1/2	10.80	13	23	110	9.0 x 7.0				213
9/16	12.25	12	25	110	11.0 x 9.0				214
5/8	13.50	11	28	110	12.0 x 9.0				215
3/4	16.50	10	30	125	14.0 x 11.0				216
7/8	19.50	9	34	140	18.0 x 14.5				217
1.	22.25	8	38	160	18.0 x 14.5				218



14570

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
12-18	12-15	10-15	8-10	8-10	-	-	-	-	-	-	-	-	-	-	-	-	-

Machine taps | Blind-hole screw taps | Through-hole screw taps

14577 - 14578

Machine tap


ATORN®

Design

Up to 3/8 inch DIN 371.
From 7/16 inch DIN 376.

14577

Applications

For through-hole thread.

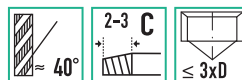
14578

Applications

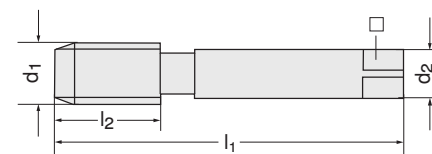
For blind-hole thread.



14577



14578



d ₁ inch	Core hole Ø mm	Pitch speed/inch	l ₂ mm	l ₁ mm	d ₂ x Ø mm	DIN	straight		40°	
							14577	...	14578	...
1/4	5.50	28	16	80	7.0 x 5.5	371		111		111
5/16	6.90	24	18	90	8.0 x 6.2	371		112		112
3/8	8.50	24	20	100	10.0 x 8.0	371		113		113
7/16	9.90	20	20	100	8.0 x 6.2	376		114		114
1/2	11.50	20	20	100	9.0 x 7.0	376		115		115
9/16	13.00	18	22	100	11.0 x 9.0	376		116		116
5/8	14.50	18	22	100	12.0 x 9.0	376		117		117
3/4	17.50	16	25	110	14.0 x 11.0	376		118		118

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45 HRC	<55HRC	<60HRC	<67HRC	VA < 900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	-	-	-	-	-	-	-	-	-	-	-	-

14582

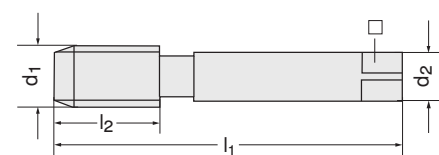
Blind-hole screw tap


HHW

Applications

For blind-hole thread.

14582



d ₁	Core hole Ø mm	Pitch TPI	l ₂ mm	l ₁ mm	d ₂ x Ø mm	HSS-E	
						14582	...
No. 4	2.40	48	7	56	2.2 x -		205
No. 5	2.70	44	7	56	2.2 x -		206
No. 6	3.00	40	7	56	2.5 x 2.1		207
No. 8	3.50	36	7	63	2.8 x 2.1		208
No. 10	4.10	32	9	70	3.5 x 2.7		209
No. 12	4.60	28	9	80	4.0 x 3.0		210
1/4	5.50	28	11	80	4.5 x 3.4		211
5/16	6.90	24	12	90	6.0 x 4.9		212
3/8	8.50	24	13	90	7.0 x 5.5		213
7/16	9.90	20	15	100	8.0 x 6.2		214
1/2	11.50	20	16	100	9.0 x 7.0		215
9/16	12.90	18	17	100	11.0 x 9.0		216
5/8	14.50	18	19	100	12.0 x 9.0		217
3/4	17.50	16	21	110	14.0 x 11.0		218
7/8	20.40	14	23	125	18.0 x 14.5		219
1.	23.25	12	25	125	18.0 x 14.5		220

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
12-18	12-15	-	5-20	5-15	-	-	-	-	-	-	-	-	-	-	-	-	-

14594 - 14595

Machine tap

G

DIN
5156

HSS-E

≤ 1200
N/mm²

ATORN®

Design

DIN 5156-DIN ISO 228.

14594

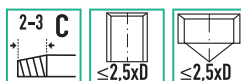
Applications

For through-hole thread.

14595

Applications

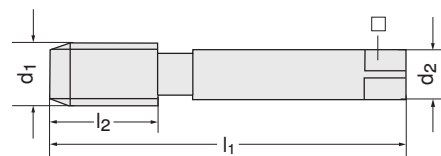
For through-hole and blind-hole threads.



14594



14595



d ₁ inch	Core hole Ø mm	Pitch TPI	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	Shape B		Shape C	
						14594	...	14595	...
G 1/8	8.80	28	20	90	7.0 x 5.5			101	101
G 1/4	11.80	19	22	100	11.0 x 9.0			102	102
G 3/8	15.30	19	22	100	12.0 x 9.0			103	103
G 1/2	19.00	14	25	125	16.0 x 12.0			104	104
G 3/4	24.50	14	28	140	20.0 x 16.0			106	106
Thread 1.	30.50	11	30	160	25.0 x 16.0			108	108

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	5-20	5-15	5-12	4-10	2-8	-	-	-	-	-	-	-	-	-	-

14596

Through-hole screw tap

G

DIN
5156

2-3 C

≤ 2.5xD

HSS-E

GG(G)

ATORN®

Design

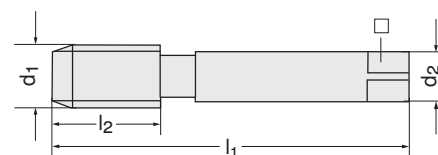
DIN 5156-DIN ISO 228. Nitrided.

Applications

For high machining performance in grey cast iron.



14596



d ₁ inch	Core hole Ø mm	Pitch speed/inch	l ₂ mm	l ₁ mm	d ₂ x $\square$ mm	HSS-E nitrided	
						14596	...
G 1/16	6.80	28	20	90	6.0 x 4.9		100
G 1/8	8.80	28	20	90	7.0 x 5.5		101
G 1/4	11.80	19	22	100	11.0 x 9.0		102
G 3/8	15.30	19	22	100	12.0 x 9.0		103
G 1/2	19.00	14	25	125	16.0 x 12.0		104
G 5/8	21.00	14	25	125	18.0 x 14.5		105
G 3/4	24.50	14	28	140	20.0 x 16.0		106
G 7/8	28.30	14	28	150	22.0 x 18.0		107
Thread 1.	30.50	11	30	160	25.0 x 20.0		108
G 1.1/4	39.50	11	30	170	32.0 x 24.0		110

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45 HRC	<55HRC	<60HRC	<67HRC	VA < 900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8-20	-

Machine taps | Blind-hole screw taps

14598 - 14599

Machine tap

ATORN®

Design

DIN 5156-DIN ISO 228.

14598

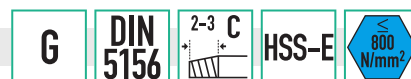
Applications

For through-hole and blind-hole threads.

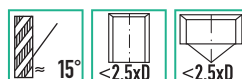
14599

Applications

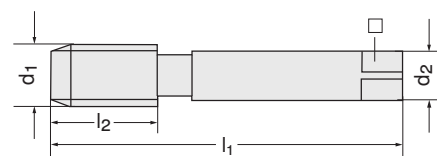
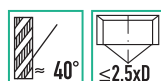
For blind-hole thread.



14598



14599



d ₁ inch	Core hole Ø mm	Pitch TPI	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	15°		40°	
						14598	...	14599	...
G 1/8	8.80	28	20	90	7.0 x 5.5		101		101
G 1/4	11.80	19	22	100	11.0 x 9.0		102		102
G 3/8	15.30	19	22	100	12.0 x 9.0		103		103
G 1/2	19.00	14	25	125	16.0 x 12.0		104		104
G 3/4	24.50	14	28	140	20.0 x 16.0		106		106
Thread 1.	30.50	11	30	160	25.0 x 20.0		108		108
G 1.1/4	39.50	11	30	170	32.0 x 24.0		110		
G 1.1/2	45.00	11	32	190	36.0 x 29.0		112		

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45 HRC	<55HRC	<60HRC	<67HRC	VA < 900N	VA>900N	Ti alloy	GG(G)	Plastic
14598																	
20-25	10-40	10-12	5-20	5-15	5-12	4-10	-	-	-	-	-	-	5-12	5-12	-	-	-
14599																	
20-25	10-40	10-12	5-20	5-15	5-12	4-10	-	-	-	-	-	-	5-12	5-12	-	-	-

14601

Blind-hole screw tap

HHW

Design

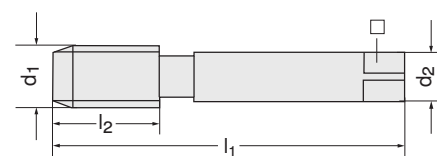
DIN 5156-DIN ISO 228.

Increased wear

resistance thanks to OX coating.



14601



HSS-E VA-OX

d ₁ inch	Core hole Ø mm	Pitch speed/inch	l ₂ mm	l ₁ mm	d ₂ x $\frac{\square}{\square}$ mm	HSS-E VA-OX	
						14601	...
G 1/8	8.80	28	11	90	7 x 5.5		101
G 1/4	11.80	19	16	100	11 x 9.0		102
G 3/8	15.25	19	16	100	12 x 9.0		103
G 1/2	19.00	14	22	125	16 x 12.0		104
G 5/8	21.00	14	22	125	18 x 14.5		105
G 3/4	24.50	14	22	140	20 x 16.0		106
G 7/8	28.25	14	22	150	22 x 18.0		107
Thread 1.	30.75	11	28	160	25 x 20.0		108
G 1.1/8	35.50	11	30	170	28 x 22.0		109
G 1.1/4	39.25	11	30	170	32 x 24.0		110
G 1.1/2	45.25	11	32	190	36 x 29.0		112

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	4-10	2-8	-	-	-	-	-	5-12	5-12	-	-	-

14604 - 14606

Machine tap

G

DIN
5156PM
HARDLUBE

VA


ATORN®

Design

- Powder-metallurgical steel (PM) with HARDLUBE coating
- High edge stability for particularly high wear resistance and minimised surface friction

Applications

All-rounder for universal machining.
Also very well suited to the machining of VA.

Note:

Outstanding value for money.
Maximum profitability.

14604

Design

- With spiral point

Applications

For through-hole thread.

14606

Applications

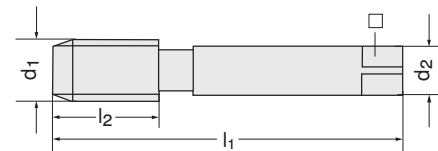
For blind-hole thread.



14604



14606



d ₁ inch	Core hole Ø mm	Pitch speed/inch	14604		14606		d ₂ x Ø mm	straight		50°	
			l ₂ mm	l ₂ mm	l ₁ mm	l ₁ mm		14604	...	14606	...
G 1/8	8.80	28	20	12	90	90	7.0 x 5.5		101		101
G 1/4	11.80	19	21	15	100	100	11.0 x 9.0		102		102
G 3/8	15.25	19	21	15	100	100	12.0 x 9.0		103		103
G 1/2	19.00	14	24	18	125	125	16.0 x 12.0		104		104
G 5/8	21.00	14	24	18	125	125	18.0 x 14.5		105		105
G 3/4	24.50	14	26	20	140	140	20.0 x 16.0		106		106
Thread 1.	30.75	11	28	22	160	160	25.0 x 20.0		107		107

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-50	10-40	15-50	15-40	15-35	10-30	10-25	8-20	-	-	-	-	-	8-20	5-15	-	15-40	-

14607 - 14608

Machine tap

G

DIN
5156HSS-E
OX

VA


ATORN®

Design

- Vaporised
- For minimised wear
- Improved coolant transport

Applications

All-rounder for universal machining.
Also very well suited to the machining of VA.

Note:

Outstanding value for money.
High profitability.

14607

Applications

For through-hole thread.

14608

Applications

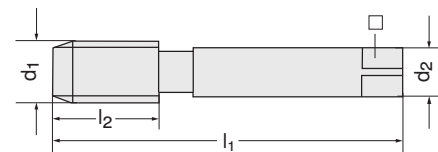
For blind-hole thread.



14607



14608



d ₁ inch	Core hole Ø mm	Pitch speed/inch	14607		14608		d ₂ x Ø mm	straight		40°	
			l ₂ mm	l ₂ mm	l ₁ mm	l ₁ mm		14607	...	14608	...
G 1/8	8.80	28	20	11	90	90	7.0 x 5.5		101		101
G 1/4	11.80	19	22	16	100	100	11.0 x 9.0		102		102
G 3/8	15.25	19	22	16	100	100	12.0 x 9.0		103		103
G 1/2	19.00	14	25	22	125	125	16.0 x 12.0		104		104
G 5/8	21.00	14	25	22	125	125	18.0 x 14.5		105		105
G 3/4	24.50	14	28	22	140	140	20.0 x 16.0		106		106
G 7/8	28.25	14	28	22	150	150	22.0 x 18.0		107		107
Thread 1.	30.75	11	30	28	160	160	25.0 x 20.0		108		108

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
20-25	10-40	10-12	5-20	5-15	5-12	4-10	2-8	-	-	-	-	-	5-12	5-12	-	-	-

Machine taps | Blind-hole screw taps | Thread milling cutters

14602 - 14603

Machine tap



Design

DIN 5156-DIN ISO 228.

Note:

Cost-effective design.

14602

Applications

For through-hole and blind-hole threads.

14603

Applications

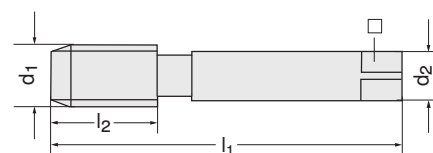
For blind-hole thread.



14602



14603



d ₁ inch	Core hole Ø mm	Pitch speed/inch	l ₂ mm	l ₁ mm	d ₂ x □ mm	straight		35°	
						14602	...	14603	...
G 1/8	8.80	28	20	90	7 x 5.5		101		101
G 1/4	11.80	19	22	100	11 x 9.0		102		102
G 3/8	15.25	19	22	100	12 x 9.0		103		103
G 1/2	19.00	14	25	125	16 x 12.0		104		104
G 3/4	24.50	14	28	140	20 x 16.0		106		106
Thread 1.	30.75	11	30	160	25 x 20.0		108		108

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
10-15	12-15	5-12	8-12	8-12	8-12	-	-	-	-	-	-	-	-	-	-	-	-

14605

Blind-hole screw tap



EMUGE

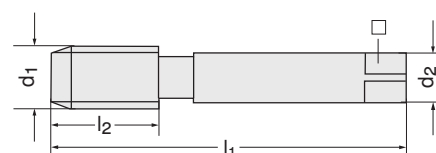
Design

2 Enorm.

DIN 5156-DIN ISO 228.



14605



d ₁ inch	Core hole Ø mm	Pitch speed/inch	l ₂ mm	l ₁ mm	d ₂ x □ mm	HSS-E	
						14605	...
G 1/8	8.80	28	10	90	7 x 5.5		101
G 1/4	11.80	19	15	100	11 x 9.0		102
G 3/8	15.25	19	15	100	12 x 9.0		103
G 1/2	19.00	14	17	125	16 x 12.0		104
G 3/4	24.50	14	20	140	20 x 16.0		106
Thread 1.	30.75	11	24	160	25 x 20.0		108

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	10-40	5-25	5-20	5-15	-	-	-	-	-	-	-	-	-	-	-	-

14610

Solid carbide thread milling cutter

M

VHM
TiAlNDIN
6535
HA

Z 3-5

≤ 2xD

DIN
13

IR/IL

**ATORN®**

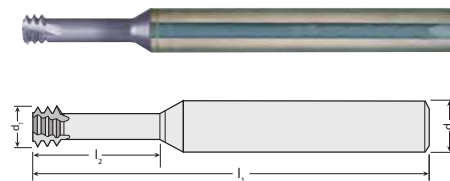
Design

- Fixed size design
- Corrected thread profile for milling precise female threads (ensure stable clamping)

Note:

Designs for up to 3xD thread depth and designs for hard machining up to 62 HRC deliverable on request.

14610



Size	Pitch mm	d ₁ mm	l ₂ mm	l ₁ mm	d ₂ mm	Z	14610	...
M 1	0.25	0.72	2.5	39	3	3		101
M 2	0.40	1.53	4.5	58	6	3		102
M 2.2	0.45	1.65	5.0	58	6	3		103
M 2.5	0.45	1.95	5.5	58	6	3		104
M 3	0.50	2.37	6.5	58	6	3		105
M 3.5	0.60	2.75	7.5	58	6	3		106
M 4	0.70	3.10	9.0	58	6	3		107
M 5	0.80	3.80	12.5	58	6	3		108
M 6	1.00	4.65	14.0	58	6	3		109
M 8	1.25	6.00	18.0	58	6	3		110
M 10	1.50	7.80	23.0	64	8	3		111
M 12	1.75	9.00	26.0	73	10	3		112
M 16	2.00	11.80	35.0	84	12	4		113
M 20	2.50	15.00	43.0	105	16	5		114



Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
200-400	200-350	200-400	100-180	80-160	70-140	55-110	50-100	60-80	-	-	-	-	50-100	60-80	40-60	80-160	-

14611

Solid carbide thread milling cutter

M

VHM
TiAlNDIN
6535
HA

Z 2-4

≤ 2xD

DIN
13

IR/IL



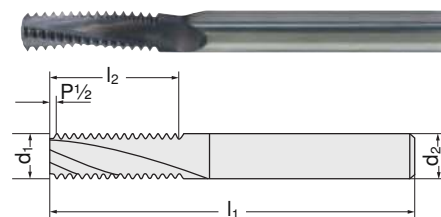
Design

- Fixed size design
- Corrected thread profile for milling precise female threads (ensure stable clamping)

Note:

Designs for up to 3xD thread depth and designs for hard machining up to 62 HRC deliverable on request.

14611



Size	Pitch mm	d ₁ mm	l ₂ mm	l ₁ mm	d ₂ mm	Z	IC	14611	...
M 3	0.50	2.40	7.0	42	4	2	-		101
M 4	0.70	3.15	9.8	55	6	3	-		102
M 5	0.80	4.00	12.0	55	6	3	-		103
M 6	1.00	4.80	14.0	55	6	3	-		104
M 8	1.25	5.95	18.75	60	6	3	x		105
M 10	1.50	7.95	22.5	70	8	3	x		106
M 12	1.75	9.90	28.0	75	10	4	x		107
M 14	2.00	11.60	32.0	85	12	4	x		108
M 16	2.00	12.00	36.0	85	12	4	x		109
M 18	2.50	14.00	42.5	90	14	4	x		110
M 20	2.50	16.00	42.5	90	16	4	x		111

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti	GG(G)	Plastic
200-400	200-350	200-400	100-180	80-160	70-140	55-110	50-100	60-80	-	-	-	-	50-100	60-80	40-60	80-160	-

Thread milling cutters

14615

Solid carbide thread milling cutter HARDCUT

VHM
TiAlNDIN
6535
HA

M

MF

≤ 2xD

≤ 2xD

62
HRC**ATORN®**

Design

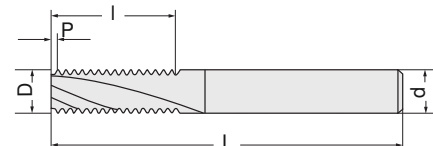
- Solid carbide ultra-fine grain
- TiAlN coating with high abrasion resistance

Advantages:

- Reduced machining time
- Smaller chips for increased process reliability
- Shorter machining time
- Higher productivity

Applications

For thread milling and countersinking.



Pitch mm	M coarse	M fine	d1 mm	D mm	Df mm	Z	I mm	If mm	L mm	14615	...
0.5	M 3	Ø > 4	6	2.4	3.6	3	5.3	5.9	58		101
0.7	M 4	Ø > 5	6	3.1	4.3	3	7.4	8.0	58		102
0.8	M 5	Ø > 6	6	4.0	5.2	3	9.2	9.8	58		103
1.0	M 6	Ø > 7	8	4.8	6.4	4	10.5	11.3	64		104
1.0	-	Ø > 9	8	6.0	7.6	4	13.5	14.3	64		105
1.0	-	Ø > 10	8	8.0	9.6	4	16.5	17.3	73		106
1.25	M 8	Ø > 10	8	6.0	7.6	4	14.4	15.2	64		107
1.5	M 10	Ø > 12	10	8.0	9.8	4	17.3	18.2	73		108
1.5	-	Ø > 14	12	10.0	11.8	4	21.8	22.7	84		109
1.75	M 12	Ø > 12	12	9.5	11.5	4	20.1	21.1	84		110

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	-	-	-	-	-	-	70-80	60-70	50-60	40-50	-	-	-	-	-

14612

Solid carbide thread milling cutter

MF

VHM
TiAlN

15°

DIN
6535
HA

Z 3-4

≤ 2xD

DIN
13

IR/IL

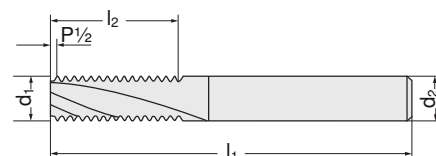
Uni

Design

- Fixed size design
- Corrected thread profile for milling precise female threads (ensure stable clamping)

Note:

Designs for up to 3xD thread depth and designs for hard machining up to 62 HRC deliverable on request.



Size	Pitch mm	d1 mm	l2 mm	l1 mm	d2 mm	Z	IC	14612	...
M 5	0.50	4.00	11.50	55	6	3	-		101
M 6	0.75	4.80	14.25	55	6	3	-		102
M 8	1.00	5.95	19.00	60	6	3	-		103
M 10	1.25	7.95	21.50	70	8	3	x		104
M 12	1.00	9.90	27.00	75	10	4	x		105
M 12	1.25	9.90	27.50	75	10	4	x		106
M 12	1.50	9.90	27.00	75	10	4	x		107
M 14	1.00	11.60	31.00	85	12	4	x		108
M 14	1.50	11.60	31.50	85	12	4	x		109
M 16	1.50	11.85	34.50	85	12	4	x		110
M 18	1.50	14.00	42.00	90	14	4	x		111
M 20	1.50	16.00	42.00	90	16	4	x		112

Al < 10% Si	Al > 10% Si	Cu	St < 520 N	St < 750 N	St < 900 N	St < 1100 N	St < 1200 N	St > 1400 N	< 45 HRC	< 55 HRC	< 60 HRC	< 67 HRC	VA < 900 N	VA > 900 N	Ti	GG(G)	Plastic
200-400	200-350	200-400	100-180	80-160	70-140	55-110	50-100	60-80	-	-	-	-	50-100	60-80	40-60	80-160	-

14613

Solid carbide thread milling cutter

MF

VHM
TiAlN



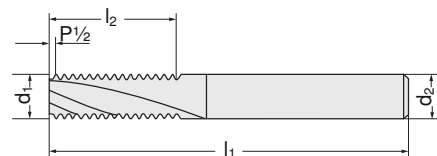
Design

- Universal design
- **Corrected thread profile** for milling precise female threads (ensure stable clamping)

Note:

Designs for up to 3xD thread depth and designs for hard machining up to 62 HRC deliverable on request.

14613



Size	Pitch mm	d ₁ mm	l ₂ mm	l ₁ mm	d ₂ mm	Z	IC	14613	...
> M 10	0.50	8.00	12	70	8	3	x		101
> M 11	0.75	8.00	12	70	8	3	x		102
> M 12	1.00	10.00	16	75	10	4	x		103
> M 14	1.00	12.00	20	85	12	4	x		104
> M 18	1.00	16.00	25	90	16	5	x		105
> M 22	1.00	20.00	32	105	20	5	x		106
> M 14	1.50	10.00	16	75	10	4	x		107
> M 16	1.50	12.00	20	85	12	4	x		108
> M 20	1.50	16.00	25	90	16	5	x		109
> M 24	1.50	20.00	32	105	20	5	x		110
> M 16	2.00	12.00	20	85	12	4	x		111
> M 20	2.00	16.00	25	90	16	5	x		112
> M 24	2.00	20.00	32	105	20	5	x		113
> M 24	3.00	16.00	25	90	16	5	x		114
> M 27	3.00	20.00	32	105	20	5	x		115

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
200-400	200-350	200-400	100-180	80-160	70-140	55-110	50-100	60-80	-	-	-	-	50-100	60-80	40-60	80-160	-

14614

Solid carbide thread milling cutter

G

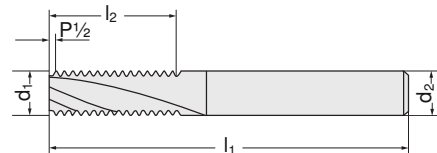
VHM
TiAlN



Design

- Fixed size design
- **Corrected thread profile** for milling precise female threads (ensure stable clamping)

14614



Size inch	Pitch mm	d ₁ mm	l ₂ mm	l ₁ mm	d ₂ mm	Z	IC	14614	...
G 1/8	28.0	8.00	20.80	70	8	3	x		101
G 1/4	19.0	9.90	28.00	75	10	4	x		102
G 3/8	19.0	14.00	41.45	90	14	4	x		103
G 1/2	14.0	16.00	43.50	90	16	4	x		104

Al<10% Si	Al>10% Si	Cu	St<520 N	St<750 N	St<900 N	St<1100 N	St<1200 N	St>1400 N	<45 HRC	<55 HRC	<60 HRC	<67 HRC	VA < 900 N	VA > 900 N	Ti	GG(G)	Plastic
200-400	200-300	200-400	100-180	80-100	70-140	55-110	50-100	60-80	-	-	-	-	50-100	60-80	40-60	80-160	-

Indexable insert thread milling cutters | Thread milling plates

14625 - 14628

Indexable insert thread milling cutter with internal cooling supply

**ATORN®****Applications**

For cylindrical female and male threads.

For through-bores and blind holes. Can be used universally for left-hand and right-hand threads.

Low cutting pressure, no chipping problems as only short chips are produced.

Scope of delivery:

Incl. spanner and clamping screw.

Note:

Indexable inserts see art. no. 14630–14631.

14625**Design**

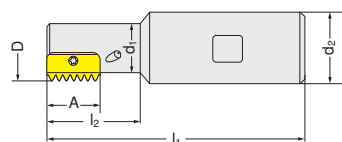
Holder made of special steel.

14626**Design**

Holder made of solid carbide.

14627**Design**

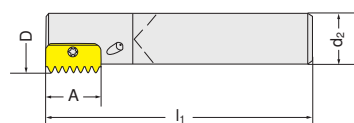
Holder made of special steel with two insert seats for higher feeds and, in particular, for harder materials.

14628**Replacement clamping screws**

14625

Holder made of special steel

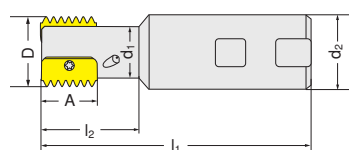
Designation	A mm	D mm	d ₂ mm	d ₁ mm	l ₁ mm	l ₂ mm	Clamping screw	
							14625	14628
SR009H12	12	9.5	20	7.5	85	14	101	101
SR0012F14	14	12.0	20	8.9	75	20	103	102
SR0014H14	14	14.5	20	11.2	85	25	104	102
SR0017H14	14	17.0	20	13.4	85	30	105	102
SR0021H21	21	21.0	20	16.5	94	40	107	103
SR0029J30	30	29.0	25	22.4	110	50	109	104



14626

Holder made of solid carbide

Designation	A mm	D mm	d ₂ mm	l ₁ mm	Clamping screw	
					14626	14628
SR0010K12C	12	9.9	8	125	101	101
SR0013J14C	14	13.2	10	150	103	102
SR0015K14C	14	15.2	12	175	104	102
SR0021M21C	21	21.0	16	200	106	103
SR0027S30C	30	27	20	270	107	104



14627

Holder made of special steel (2 insert seats)

Designation	A mm	D mm	d ₂ mm	d ₁ mm	l ₁ mm	l ₂ mm	Clamping screw	
							14627	14628
SR0020H14-2	14	20	20	16	93	41	101	101
SR0030J21-2	21	30	25	24	108	52	102	103
SR0040L30-2	30	40	32	30	130	70	103	104

ATORN®**Design**

Robust, full-profile indexable insert can be used
2 ways.

Applications

For universal use in many materials.

Quality

Solid carbide/AMT7 TiAlN-coated.

Note:

14630 101-105 single-sided cutting.

14630**Design**

Full profile 60° female.

Applications

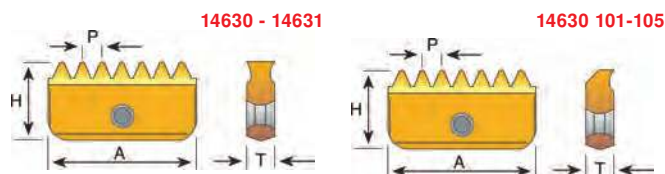
For bores.

14631**Design**

Full profile 60° male.

Applications

For shoulders.



Designation	P mm	A mm	H mm	T mm	Female		Male	
					14630	...	14631	...
12 I 0.5 ISO	0.50	12	6.3	2.9		101		
12 I 0.75 ISO	0.75	12	6.3	2.9		102		
12 I 1.0 ISO	1.00	12	6.3	2.9		103		
12 I 1.25 ISO	1.25	12	6.3	2.9		104		
12 I 1.5 ISO	1.50	12	6.3	2.9		105		
14 I 0.5 ISO	0.50	14	7.5	3.1		106		
14 I/E 0.75 ISO	0.75	14	7.5	3.1		107		107
14 I/E 1.0 ISO	1.00	14	7.5	3.1		108		108
14 I/E 1.25 ISO	1.25	14	7.5	3.1		109		109
14 I/E 1.5 ISO	1.50	14	7.5	3.1		110		110
14 I/E 1.75 ISO	1.75	14	7.5	3.1		111		111
14 I/E 2.0 ISO	2.00	14	7.5	3.1		112		112
14 I/E 2.5 ISO	2.50	14	7.5	3.1		113		113
21 I/E 1.0 ISO	1.00	21	12	4.7		114		114
21 I/E 1.5 ISO	1.50	21	12	4.7		115		115
21 I 1.75 ISO	1.75	21	12	4.7		116		
21 I/E 2.0 ISO	2.00	21	12	4.7		117		117
21 I/E 2.5 ISO	2.50	21	12	4.7		118		118
21 I/E 3.0 ISO	3.00	21	12	4.7		119		119
21 I 3.5 ISO	3.50	21	12	4.7		120		
30 I/E 1.5 ISO	1.50	30	16	5.5		121		121
30 I/E 2.0 ISO	2.00	30	16	5.5		122		122
30 I/E 3.0 ISO	3.00	30	16	5.5		123		123
30 I/E 3.5 ISO	3.50	30	16	5.5		124		124
30 I/E 4.0 ISO	4.00	30	16	5.5		125		125
30 I 4.5 ISO	4.50	30	16	5.5		126		
30 I 5.0 ISO	5.00	30	16	5.5		127		

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
180-460	180-460	115-460	130-280	120-240	115-200	110-190	105-180	105-180	-	-	-	-	130-190	130-190	25-80	60-170	115-460

Flow drills

14751 - 14753

FLOWDRILL – starter set and tool set

Design

Flow drills generate frictional heat through the polygonal cemented carbide contour, which makes the metallic materials flow. Chip-free holes for threaded connections, sealing surfaces, bearings and joints and soldering and welding connections can therefore be made very quickly.

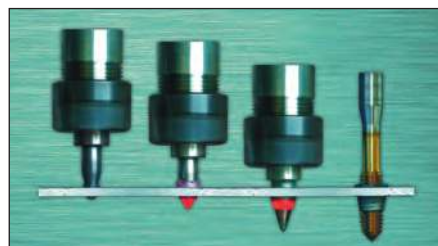
The tool diameter can be between 1 and 40 mm and the wall thickness to be machined between 0.5 and 10 mm.

Advantage:

- Saves considerable time and money compared to conventional methods
- Solid basis for threads in thin-walled parts
- In many cases, replaces weld nuts, rivet nuts and press nuts

Requirements:

For flow drilling, we recommend the use of a column-type drill with adjustable speed range and sufficient performance. The requirements vary with the tool diameter and the wall thickness. **Hand drills are not suitable for flow drilling.**



14751 101-106

Starter sets

Scope of delivery:

- 1 special chuck MK2 with cooling ring
- 1 hook wrench and open-end spanner
- 1 collet chuck ER25 in the appropriate size
- 1 flow drill in the selected thread size
- 1 thread mould in the selected thread size
- 1 FDKS release agent for flow drilling including brass brush
- 1 FTMZ thread-cutting oil including bristle brush
- 1 system case with quick start guide

14753 101

Tool set

Scope of delivery:

- 1 flow drill Ø 4.5 mm long/flat for M5
- 1 flow drill Ø 5.4 mm long/flat for M6
- 1 flow drill Ø 7.3 mm long/flat for M8
- 1 thread mould for M5 x 0.80, HSS TIN with lubrication groove
- 1 thread mould for M6 x 1.00, HSS TIN with lubrication groove
- 1 thread mould for M8 x 1.25, HSS TIN with lubrication groove
- 1 tool box with foam inserts

Note:

Other assortments including for special applications on request. **For suitable thread moulds, see art. no. 14365 and 14758.**

14751 101-106



14753 101



Technical data:

		M4	M5	M6	M8	M10	M12
Recommended rotation speed for flow drilling:	rpm	2600	2500	2400	2200	2000	1800
Recommended drive output:	kW	0.7	0.8	1.0	1.3	1.5	1.7
Shank Ø:	mm	6.0	6.0	6.0	8.0	10.0	12.0
Core hole Ø:	mm	3.7	4.5	5.4	7.3	9.2	10.9
Maximum material thickness:	mm	2.3–4.2	2.5–4.6	2.6–5.0	3.0–5.9	3.3–6.6	3.6–7.2
Recommended rotation speed, thr. moulding:	rpm	1000	800	650	500	400	330

Speed values in the table apply for 2.0 mm material thickness and ST37. For stainless steel, approximately 15% lower rotation speed applies for flow drilling and 0.1 mm larger core hole diameter from M6. For aluminium and non-ferrous base metals, approximately 50% higher rotation speed applies for flow drilling!

Type	Flow drill	14751	...	14753	...
Starter set M4	long/flat		101		
Starter set M5	long/flat		102		
Starter set M6	long/flat		103		
Starter set M8	long/flat		104		
Starter set M10	long/flat		105		
Starter set M12	long/flat		106		
Tool set M5/M6/M8	long/flat				101

Design

- A Flowdrill is a cemented carbide tool used to generate increased wall thickness by displacing raw material
- This locally produced extra material thickness can be used for a load-bearing thread, as a soldering and welding zone, sealing surfaces or as a bearing
- The tool diameter can be between 1 and 40 mm and the wall thickness to be machined between 0.5 and 10 mm

Applications

The flow drill can be used in all common materials, such as steel, stainless steel, aluminium, copper, brass, as well as in high-strength special materials.

Advantages:

- Local increase in wall thickness
- Sufficient thread length
- Faster process cycle
- High accuracy
- Long service life
- Suitable for series production, e.g. on CNC
- Chipless

14756 101-112**Flat****Design**

- Short
- Without collar (flow drilling without collar)
- For metric core holes



14756

Technical data:

14756 ...		101	102	103	104	105	106	107	108	109	110	111	112
Thread Ø		2 x 0.40	3 x 0.50	4 x 0.70	5 x 0.80	6 x 1.00	8 x 1.25	10 x 1.50	12 x 1.75	14 x 2.00	16 x 2.00	18 x 2.50	20 x 2.50
Core hole Ø	mm	1.8	2.7	3.7	4.5	5.4	7.3	9.2	10.9	13.0	14.8	16.7	18.7
Min./max. material thickness	mm	1.0–1.8	1.0–2.0	1.0–2.2	1.0–2.4	1.0–2.5	1.0–2.9	1.0–3.2	1.0–3.5	1.0–3.9	1.0–4.2	1.0–4.6	1.0–5.0
Shank Ø	mm	6.0	6.0	6.0	6.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	18.0
Work mandrel length	mm	5.8	6.7	8.2	9.3	10.5	13.4	16.9	19.7	23.3	26.6	30.4	34.4
Parameters for flow drilling													
Parameters are based on													
Material thickness	mm	1.5	1.5	2.0	2.0	2.0	2.0	2.5	2.5	2.5	3.0	3.0	3.0
Rotation speed (steel/stainless steel)	(RPM)	3400/2900	3200/2700	2600/2200	2500/2100	2400/2000	2200/-	2000/-	1800/-	1600/-	1400/-	1400/-	1200/-
Feed (steel/stainless steel)	mm/min	80	100	120	150	150	150/-	150/-	150/-	150/-	150/-	150/-	150/-
Spindle performance (steel/stainless steel)	kW	0.5	0.6	0.7	0.8	1.0	1.3/-	1.5/-	1.7/-	2.0/-	2.2/-	2.5/-	2.7/-

14757 101-112**Flat****Design**

- Long
- Without collar (flow drilling without collar)
- For metric core holes



14757

Technical data:

14757 ...		101	102	103	104	105	106	107	108	109	110	111	112
Thread Ø		2 x 0.40	3 x 0.50	4 x 0.70	5 x 0.80	6 x 1.00	8 x 1.25	10 x 1.50	12 x 1.75	14 x 2.00	16 x 2.00	18 x 2.50	20 x 2.50
Core hole Ø	mm	1.8	2.7	3.7	4.5	5.4	7.3	9.2	10.9	13.0	14.8	16.7	18.7
Min./max. material thickness	mm	1.9 - 3.2	2.1 - 3.7	2.3 - 4.2	2.5 - 4.6	2.6 - 5.0	3.0 - 5.9	3.3 - 6.6	3.6 - 7.2	4.0 - 7.9	4.3 - 8.5	4.7 - 9.2	5.1 - 9.9
Shank Ø	mm	6.0	6.0	6.0	6.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	18.0
Work mandrel length	mm	7.8	8.7	10.4	11.9	13.8	18.0	22.6	26.3	31.1	35.1	39.7	44.6
Parameters for flow drilling													
Parameters are based on													
Material thickness	mm	2.5	2.5	3.0	3.5	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.5
Rotation speed (steel/stainless steel)	(RPM)	3200/2700	3000/2600	2600/2200	2400/2000	2200/1900	2000/-	1800/-	1600/-	1400/-	1200/-	1200/-	1000/-
Feed (steel/stainless steel)	mm/min	80	100	120	120	150	120/-	120/-	120/-	100/-	100/-	100/-	80/-
Spindle performance (steel/stainless steel)	kW	00,6	0,6	0,8	1,0	1,3	1,5/-	2,0/-	3,0/-	3,0/-	3,0/-	3,5/-	4,0/-

	Short/flat		Long/flat	
	14756	...	14757	...
M2	101			101
M3	102			102
M4	103			103
M5	104			104
M6	105			105
M8	106			106

	Short/flat		Long/flat	
	14756	...	14757	...
M10		107		107
M12		108		108
M14		109		109
M16		110		110
M18		111		111
M20		112		112

14759**FDKS release agent****Design**

- Reduced FDKS build-up of material deposits on the flow drill. Also leads to a significant extension of service life as well as a homogeneous and smooth surface of the passage

Applications

Apply to the tool at least every five holes for use in steel or before every hole in stainless steel or aluminium.

Content	14759	...
100 g		101
1 kg		102

14759 102

Thread repair kits

14800

HELICOIL® plus repair kit

HELICOIL® plus
made by BOLLHOFF

Applications

The record holder for fast thread repairs:

- For scrap recovery and thread repair
- For repair of damaged or worn threads
- For thread reinforcement, where low-shear-strength materials, e.g. aluminium, are used (mechanical engineering, automotive, electrical and medical technology, etc.)
- Absolutely secure positioning, even under the most extreme loads, abrasion-resistant thread insert made of corrosion-resistant, wear-resistant and heat-resistant CrNi steel, ideal power transmission and increased load capacity of nut and bolt threads

230 pieces, set contents:

20 each of thread inserts

M 5 x 5/M 5 x 7.5/M 5 x 10/M 6 x 6/M 6 x 9/
M 6 x 12,

10 each of thread inserts

M 8 x 8/M 8 x 12/M 8 x 16/M 10 x 10/M 10 x 15/
M 10 x 20/M 12 x 12/M 12 x 18/M 12 x 24,

5 twist drills,

5 hand taps,

5 installation mandrels,

5 tang break mandrels.

14800



Set contents	Set size	14800	...
230 pieces	M 5 - M 12	202	

14810

HELICOIL® plus repair packs

HELICOIL® plus
made by BOLLHOFF

Applications

For standard metric ISO thread DIN 13.

Quality

Thread inserts made of stainless steel.

14810 103-106

Design

Set contents:

60 thread inserts (20 per nominal length),

1 twist drills,

1 hand taps,

1 installation mandrel,

1 tang break mandrel.

14810 107-112

Design

Set contents:

30 thread inserts (10 per nominal length),

1 twist drills,

1 hand taps,

1 installation mandrel,

1 tang break mandrel.

14810 113-114

Design

Set contents:

30 thread inserts (10 per nominal length),

1 hand taps,

1 installation mandrel.

14810 103-106



14810 107-112



14810 113



14810 114



d mm	Nominal length mm	Core hole Ø mm	Number of inserts	14810	...
M 3	3/4.5/6	3.2	60	103	
M 4	4/6/8	4.2	60	104	
M 5	5/7.5/10	5.2	60	105	
M 6	6/9/12	6.3	60	106	
M 7	7/10.5/14	7.3	30	107	
M 8	8/12/16	8.4	30	108	

d mm	Nominal length mm	Core hole Ø mm	Number of inserts	14810	...
M 9	9/13.5/18	9.4	30	109	
M 10	10/15/20	10.5	30	110	
M 11	11/17.5/22	11.5	30	111	
M 12	12/18/24	12.5	30	112	
M 14	14/21/28	14.5	30	113	
M 16	16/24/32	16.5	30	114	

14802 - 14808

Individual parts for HELICOIL® plus art. no. 14800 + 14810

HELICOIL® plus
made by BOLLHOFF**14802**

Thread inserts

M 3–M 6, pack = 20 pieces,
M 8–M 12, pack = 10 pieces.**14804**

Short screw tap, HSS.

14806

Installation mandrel.

14808

Tang break-off tool.



14802



14804



14806



14808

Size	Core hole Ø mm	Thread inserts		Screw tap		Installation mandrel		Tang break-off tool	
		14802	...	14804	...	14806	...	14808	...
M 3 x 3	3.2		114		102		102		102
M 3 x 4.5	3.2		115		102		102		102
M 3 x 6	3.2		116		102		102		102
M 4 x 4	4.2		120		104		104		103
M 4 x 6	4.2		121		104		104		103
M 4 x 8	4.2		122		104		104		103
M 5 x 5	5.2		126		106		106		104
M 5 x 7.5	5.2		127		106		106		104
M 5 x 10	5.2		128		106		106		104
M 6 x 6	6.3		130		107		107		104
M 6 x 9	6.3		131		107		107		104
M 6 x 12	6.3		132		107		107		104
M 8 x 8	8.4		141		109		109		105
M 8 x 12	8.4		142		109		109		105
M 8 x 16	8.4		143		109		109		105
M 10 x 10	10.5		156		112		112		106
M 10 x 15	10.5		157		112		112		106
M 10 x 20	10.5		158		112		112		106
M 12 x 12	12.5		176		116		116		107
M 12 x 18	12.5		177		116		116		107
M 12 x 24	12.5		178		116		116		107

Tap destroying tools | Screw tap extractors | Bolt extractors

11069

Solid-carbide tap removal tools



Design

With straight shank, self-centring.

Note:

Stable clamping is required. Hole dry and free from cutting oil.

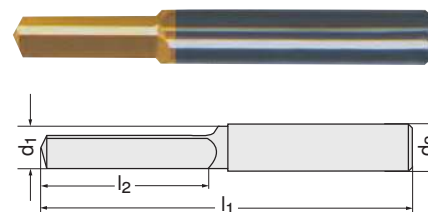
Applications

For drilling out broken-off HSS and HSS-E screw taps.

Quality

Solid-carbide micro-fine grain/TiN-coated.

11069



d ₁ h9 mm	l ₂ mm	l ₁ mm	d ₂ h6 mm	11069	...
3.3	15	50	6		101
4.2	15	50	6		103

d ₁ h9 mm	l ₂ mm	l ₁ mm	d ₂ h6 mm	11069	...
5.0	15	50	6		105
6.8	20	60	8		107

d ₁ h9 mm	l ₂ mm	l ₁ mm	d ₂ h6 mm	11069	...
8.5	25	70	10		109
10.2	30	75	12		111

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	-	-	-	-	-	-	-	-	-	35-45	-	-	-	-	-

14900 - 14904

Screw tap extractors

14900-14903

Applications

For broken screw taps. The fingers are guided into the grooves of the broken screw tap by moving the upper **retaining ring (1)** and secured with the **guide bush (2)**. The broken screw tap piece is moved back and forth using a tap wrench until it loosens and can be unscrewed.

14900 102-104

Screw tap extractor sets

Applications

For screw taps with **3 flutes**. Complete delivery in a case.

14900 106-108

Screw tap extractor sets

Applications

For screw taps with **4 flutes**. Complete delivery in a case.

14902

Screw tap extractor, individual

Applications

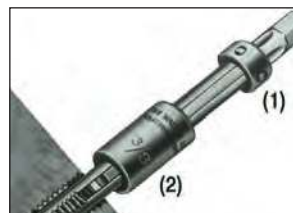
For screw taps with **3 flutes**.

14904

Replacement fingers

For extractors in **3-flute** design.

14900



Sets		3 flutes		4 flutes	
Set contents	Extractor	14900	...	14900	...
6 pieces	M 4/5/6/8/10/12		102		106
10 pieces	M 3/4/5/6/8/10/12/14/16/20		104		
10 pieces	M 4/5/6/8/10/12/14/16/20/22				108

Individual for screw tap Metric/Whitworth	3 flutes		3 replacement fingers		
	14902	...	14904	...	
M 3/1/8		102			102
M 4/5/32		104			104
M 5/3/16		105			105
M 6/1/4		107			107
M 8/5/16		109			109
M 10/3/8		111			111
M 12/1/2		113			113
M 14/9/16		114			114
M 16/5/8		115			115
M 20/3/4		117			117

14902

14904



14929

Screw tap extractor sets

Applications

For extracting broken screw taps.

14929 101

Design

- 6 pieces

- Size 1-4 three-fluted

- Size 5-6 four-fluted

14929 102

Design

- 9 pieces

- Size 2-4 three-fluted

- Size 5-10 four-fluted

Set contents	14929	...
6 pieces	101	
9 pieces	102	



14929 101

14930 - 14931

Screw tap extractor

Applications

For extracting broken screw taps.

14930

For **three-fluted** screw taps.

14931

For **four-fluted** screw taps.

Size	for screw tap metric/Whitworth	Total length mm	Square mm	14930	...	14931	...
1	M 4/5/32	55	3.0		101		
2	M 5/3/16	60	3.5		102		
3	M 6/1/4	60	3.8		103		103
4	M 8/5/16	60	5.0		104		104
5	M 10/3/8	70	6.0		105		105
6	M 12/1/2	70	7.5		106		106
7	M 14/9/16	70	8.5		107		107
8	M 16/5/8	80	10.5		108		108
9	M 20/3/4	80	13.0		109		109



14930



14931

14933

Bolt extractor set

Applications

Enables broken bolts and stud bolts to be professionally extracted.

Quality

HSS steel.

Set contents:	
5	HSS drills 3.2/4.8/6.4/8.0/8.7 mm
10	drill guide bushes
5	extractor pins
5	extractor adapters

Set contents	for stud bolt Ø mm	Design	14933	...
25 pieces	5-16	in box		201



14933

Erosion drills and accessories

14934 - 14935 Erosion drills eromobil®

The new eromobil®

More compact, more functional, more practical

Since it was invented in 1972, the **eromobil®** has been, and remains to this day, the most effective solution for tool breakage. Broken-off screw taps, twist drills, reamers, etc. can be eroded in minutes. The device can be used quickly on column, radial and magnetic drills, milling machines, drilling equipment, as well as CNC machines. This minimises production downtimes and avoids damage to workpieces and additional costs. With its new design, the **eromobil®** is more compact and functional. The new intelligent design integrates all components in a clear and space-saving way, handling is easy and comfortable.

Functional principle

The hollow electrode is clamped in the oscillating head. Its diameter is smaller than the broken-off tool. The centre of the broken-off tool is dismantled during erosion. The cutting edges then loosen and can be removed easily. The electrode does not come into contact with the workpiece meaning the thread remains undamaged. The drilling emulsion usual in operation is used as a cooling lubricant.

Generator in the robust, compact housing with ergonomic handles for easy lifting and transporting

Supply hose 2 m from the generator to the oscillating head (up to 7.5 m deliverable)

Oscillating head with ergonomic handles, LED indicator light and straight-shank mount 12 mm

Magnetic stands (optional)

Earthing cable 2 m with workpiece clamp (up to 7.5 m deliverable)

Front view

14935 103

WiFi inspection camera

- For smartphone and tablet, for Android and IOS devices
- Diameter of camera 8 mm
- Length: 80 mm
- Bending radius 45 mm
- Includes 3 interchangeable magnetic tips



14935 105

Oscillating head mount:

MK2 directly into the sleeve of a machine tool.



Two models are available

eromobil®-er 230 s-ND

- For threads from M2 up to approx. M20
- 220/230 V
- 50 Hz alternating current
- 3.6 kVA
- 16 amp

eromobil®-er 400 t-ND

- For threads from M2 up to approx. M40
- Ideally suited for deep drilled holes and cemented carbide tools
- 380/400 V
- 50 Hz three-phase current
- 6.0 kVA
- 16 amp

Supplied as standard

- Generator in the trolley
- Oscillating head
- Supply hose
- Earthing cable
- Coolant pump
- Coolant tank
- 1 each of open-ended spanner sizes 19 and 24
- 10 splash guard bags

Storage compartment for oscillating head, supply hose and earthing cable



Open cover housing compartment with oscillating head and supply hose

Trolley with footprint for coolant pump and tank, with smooth-running locking rollers

Coolant tank with two chambers for intake and return, with practical carrying handles

Rear view

Tool drawer with internal compartment settings for electrodes, collet chucks, open-ended spanners, splash guard bags and accessories that can be pulled out on smooth-running profile rails



Coolant pump for effective rinsing with approx. 3.4 bar pressure including 2-m intake hose with foot valve and 2-m pressure hose with quick-action coupling (hoses up to 5 m deliverable)

Erosion drill	14934	...
er 230 s-ND	201	
er 400 t-ND	202	

Special accessories	14935	...
WiFi inspection camera	103	
Oscillating head mount, MK 2	105	

Continued

Continued **14936****Copper electrodes****Applications**

For tools made of HSS.

14937**Collet chucks****14936****14937****Note:**

Special electrodes up to a diameter of 30 mm and 1000 mm in length, as well as electrodes made of graphite and tungsten-copper for machining of cemented carbide tools and square copper hollow electrodes from 3 x 3 mm to 30 x 30 mm are deliverable on request.

Electrode Ø x length mm	for thread M	14936	...
1.0 x 250	2-2.6	101	
1.5 x 250	3	102	
2.0 x 250	4	103	
2.5 x 250	5	104	
3.0 x 250	5-6	105	
3.5 x 250	6	106	
4.0 x 250	6-8	107	
4.5 x 250	8	108	
5.0 x 250	8-10	109	
6.0 x 250	10	110	
7.0 x 250	12	111	
8.0 x 250	12-14	112	
10.0 x 250	16-20	113	

Collet chucks Ø mm	14937	...
1.0	101	
1.5	102	
2.0	103	
2.5	104	
3.0	105	
3.5	106	
4.0	107	
4.5	108	
5.0	109	
6.0	110	
7.0	111	
8.0	112	
10.0	113	

Screw tap sets | Thread-cutting tool sets | Thread repair set

14950 - 14953

Screw tap sets

Design

For standard metric ISO thread DIN 13, right cutting, in sheet-steel box.

Applications

For cutting in normally machinable materials.



14950 101

HSS



14950 103

HSS



14950 105-109

HSS

HSS-E



14950 111

HSS-E

VA-OX



14950 112

HSS-E

VA-OX



14951

HSS



14952

HSS

HSS-E



drillbox®

Art. no.	Contents	Applications
14950 101	Hand tap sets art. no. 14010 M3, M4, M5, M6, M8, M10, M12	for steels up to 800 N/mm ²
14950 102	Sheet-steel box, empty for art. no. 14950 101	
14950 103	Hand tap sets art. no. 14010 Core drill art. no. 10001 2.5/3.3/4.2/5.0/6.8/8.5/10.2 mm	for steels up to 800 N/mm ²
14950 104	Sheet-steel box, empty for art. no. 14950 103	
14950 105	Machine tap through hole art. no. 14302+14303 Core drill art. no. 10001 2.5/3.3/4.2/5.0/6.8/8.5/10.2 mm	for steels up to 800 N/mm ²
14950 109	Machine tap blind hole, 40° spiral-fluted, Art. no. 14401+14407 Core drill art. no. 10001 2.5/3.3/4.2/5.0/6.8/8.5/10.2 mm	for steels up to 800 N/mm ²
14950 111	Machine tap through hole art. no. 14338+14339 (VAOX) Core drill art. no. 10050 2.5/3.3/4.2/5.0/6.8/8.5/10.2 mm	Universal for steels up to 1200 N/mm ²
14950 112	Machine tap blind hole, 40° spiral-fluted, Art. no. 14436+14437 (VAOX) Core drill art. no. 10050 2.5/3.3/4.2/5.0/6.8/8.5/10.2 mm	Universal for steels up to 1200 N/mm ²
14950 110	Sheet-steel box, empty for art. no. 14950 105-109 + 111-112	
14951 101	Hand tap sets art. no. 14014 M3, M4, M5, M6, M8, M10, M12	for steels up to 900 N/mm ²
14952 101	Machine tap through hole art. no. 14304+14305 Core drill art. no. 10003 2.5/3.3/4.2/5.0/6.8/8.5/10.2 mm	for steels up to 900 N/mm ²
14953 101	Machine tap blind hole, 35° spiral-fluted, Art. no. 14402+14403 Core drill art. no. 10003 2.5/3.3/4.2/5.0/6.8/8.5/10.2 mm	for steels up to 900 N/mm ²

H+W

Set contents	Design	14950	...	14951	...	14952	...	14953	...
M 3-M 12 (hand)	straight-grooved	101		101					
Sheet-steel box	empty	102							
M 3-M 12 (hand drill + core drill bits)	straight-grooved	103							
Sheet-steel box	empty	104							
M 3-M 12 (machines + core drill bits)	straight-grooved with spiral point	105						101	
M 3-M 12 (machines + core drill bits)	spiral-fluted approx. 40°	109							
M 3-M 12 (machines + core drill bits)	straight-grooved with spiral point	111							
M 3-M 12 (machines + core drill bits)	spiral-fluted approx. 40°	112							
Sheet-steel box	empty	110							
M 3-M 12 (machines + core drill bits)	spiral-fluted approx. 35°								101

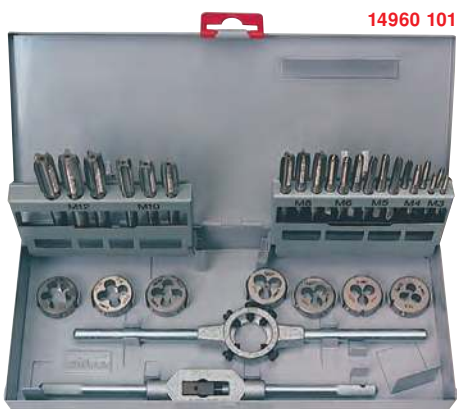
Design

For standard metric ISO thread DIN 13. Clockwise-cutting. In sheet-steel box.

Applications

For cutting in normally machinable materials.

14960



14960 101



14962 101



14962 103

Art. no.	Contents	Applications
14960 101	Hand tap sets art. no. 14010	M3, M4, M5, M6, M8, M10, M12 for steels up to 900 N/mm²
	Die art. no. 15203	
	Die holder art. no. 23502	
	Tap wrench art. no. 23130	
14960 102	Sheet-steel box, empty for art. no. 14960 101	
14962 101	Hand tap sets art. no. 14014	M3, M4, M5, M6, M8, M10, M12 for steels up to 900 N/mm²
	Die art. no. 15204	
	Core drill art. no. 10003	
	Tool holder with ratchet art. no. 23160	
	Die holder art. no. 23502	
	Tap wrench art. no. 23130	
	Thread gauge	
	Workshop screwdriver	
14962 102	Sheet-steel box, empty for art. no. 14962 101	
14962 103	Hand tap sets art. no. 14014	M3, M4, M5, M6, M8, M10, M12, M14, M16, M18, M20 for steels up to 900 N/mm²
	Die art. no. 15204	
	Die holder art. no. 23502	
	Tap wrench art. no. 23130	
	Thread gauge	
	Workshop screwdriver	



	14960	...	14962	...
M 3-M 12			101	
Sheet-steel box, empty			102	
M 3-M 12				101
Sheet-steel box, empty				102
M 3-M 20				103

23197

Thread repair set



Design

21 pieces, with HSS high-performance thread-cutting tools. In plastic box with PUR soft foam insert.

Applications

For problem-free retapping of threads, even in hard-to-reach places. Used with reversible ratchet or t-handle square drive 1/4 and 3/8 inch.

23197



Set contents:
7 screw taps for female thread M3/M4/M5/M6/M8/M10/M12,
7 dies for male thread M3/M4/M5/M6/M8/M10/M12,
1 hexagonal chuck (solid) 6.3 = 1/4 inch for screw tap M3-M6,
1 hexagonal connector (hollow) 6.3 = 1/4 inch, square (hollow) 6.3 = 1/4 inch,
1 hexagonal chuck (solid) 8 = 5/16 inch for screw tap M8-M12,
1 hexagonal connector (hollow) 8 = 5/16 inch, square (hollow) 10 = 3/8 inch,
1 square holder (hollow) 6.3 = 1/4 inch for die M3-M6,
1 square holder (hollow) 10 = 3/8 inch for die M8-M12,
1 Allen key 2.5 mm.

Set contents	23197	...
21 pieces		101

