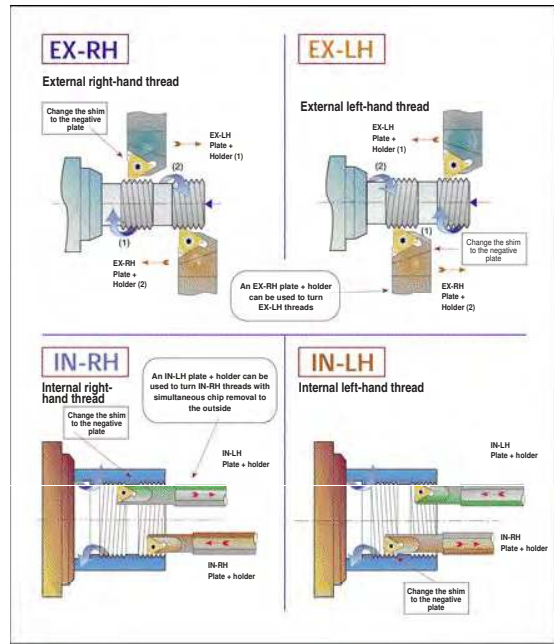


HW 5615 (K10 - K30) Uncoated carbide grade for non-ferrous metals, aluminium and cast iron.
HC 5615 (P25 - P35) TiN-coated fine grain quality for heat-treated steels and high-alloy steel (25 HRC upwards) at medium to low cutting speeds.
HC 5630 (P20 - P50 / K25 - K40) TiAlN-coated ultra-fine grain grade for stainless steels and exotic materials and for general machining at medium to high cutting speeds.

Carbide grades and choice of cutting speeds

	Uncoated HW 5615	Coated HC 5615	Coated HC 5630
Non-ferrous metals and aluminium	120 - 200	-	140 - 290
General structural steels	-	100 - 200	90 - 240
High-alloy structural steels	-	80 - 160	80 - 170
Alloy steel	-	50 - 120	90 - 130
Cast steel	-	90 - 150	120 - 180
Stainless steels	-	-	70 - 130
Cast iron	60 - 100	-	70 - 160

Cutting speeds are specified with a tolerance range.
 In most cases, selection of a medium cutting speed to start with is recommended. For high-strength steels, the cutting speed must be reduced.



18774 - 18775 Threaded plate set



Design
 - In case

Applications
 Universal for producing a broad range of thread pitches for a limited quantity of workpcs..



Set contents			
1	clamp holder right		
1	each of cemented-carbide threaded plate grade HC 5615, part profile 60°, 16 .. A60 (pitch 0.5–1.5 mm) and 16 .. G60 (pitch 1.75–3.0 mm)		
1	cemented-carbide threaded plate grade HC 5615, full profile 60°, Pitch 0.75/1.00/1.25/1.50/1.75/2.00/2.50/3.00 mm		
1	TORX® key		
1	replacement clamping screw		

Male thread set	Holder Ø mm	18774	...	Female thread set	Holder Ø mm	18775	...
KEG 20	20		102	KIG 20	20		102

18776 Cemented-carbide threaded plates external

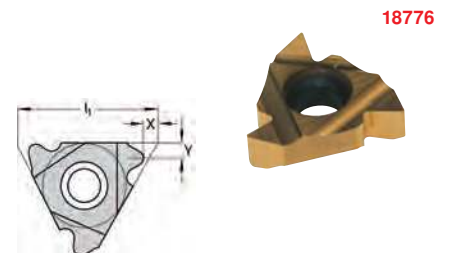


Design
 Right, part profile 60°, external, ground.

Note:
 Different pitches and left version are deliverable on request.

Designation	Pitch mm	Pitch TPI	l ₁ mm	x mm	y mm		
16 ER A60	0.50–1.5	48–16	16	0.8	0.9	10 pcs.	302
16 ER G60	1.75–3.0	14–8	16	1.2	1.7	10 pcs.	303

P
 HC 5615 coated
 18776 ...



18777 Cemented-carbide threaded plates internal

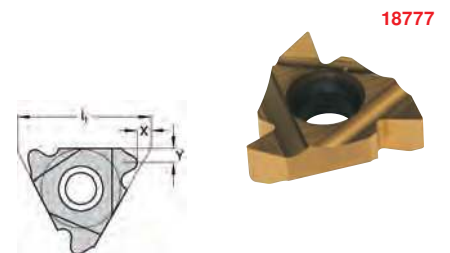


Design
 Right, part profile 60°, internal, ground.

Note:
 Different pitches and left version are deliverable on request.

Designation	Pitch mm	Pitch TPI	l ₁ mm	x mm	y mm		
16 IR A60	0.50–1.5	48–16	16	0.8	0.9	10 pcs.	302
16 IR G60	1.75–3.0	14–8	16	1.2	1.7	10 pcs.	303

P
 HC 5615 coated
 18777 ...



Thread cutting tools

18778

Cemented-carbide threaded plates DIN 405 external

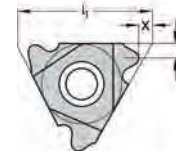
ATORN®

Design

Right, full profile Round thread, external, ground.

Note:

Different pitches and left version are deliverable on request.



18778



Applications

Cemented carbide grade

Coating

P

HC 5615

coated

18778 ...

Designation	Pitch TPI	l ₁ mm	x mm	y mm		
16 ER 10 RD	10	16	1.1	1.2	10 pcs.	101
16 ER 8 RD	8	16	1.4	1.3	10 pcs.	102
16 ER 6 RD	6	16	1.5	1.7	10 pcs.	103

18780

Clamp holder (male thread)

ATORN®

Note:

Different shank diameters are deliverable on request.

18780 103-118

Design

Right, pitch angle 1.5°.

18780



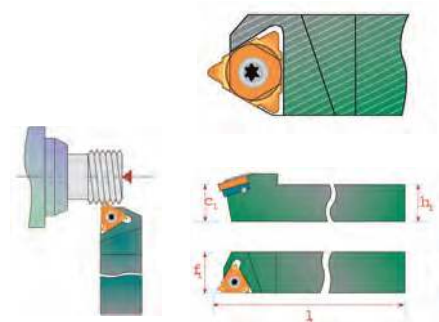
18780 203-218

Design

Left, pitch angle 1.5°.

Designation	h ₁ = c ₁ mm	l ₁ mm	f ₁ mm	Clamping screw	Right		Left	
					18780	...	18780	...
SER/L 1616 H16	16	100	16	S 16	103	...	203	...
SER/L 2020 K16	20	125	20	S 16	106	...	206	...
SER/L 2525 M16	25	150	25	S 16	109	...	209	...
SER/L 2525 M22	25	150	25	S 22	112	...	212	...
SER/L 3232 P22	32	170	32	S 22	115	...	215	...
SER/L 3232 P22U	32	170	32	S 22	116	...	216	...
SER/L 2525 M27	25	150	32	S 27	117	...	217	...
SER/L 3232 P27	32	170	32	S 27	118	...	218	...

18780 116



18781

Cemented-carbide threaded plates external

ATORN®

Design

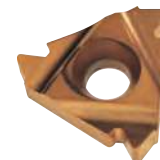
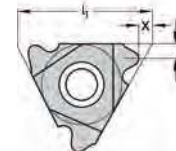
Full profile ISO, metric 60°, external, ground.

18781 210-226

Design

Right.

18781



Note:

Different pitches are deliverable on request.

18781 310-335

Design

Right.

18781 410-435

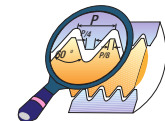
Design

Right.

18781 510-535

Design

Left.



Applications

Cemented carbide grade

Coating

N M K

HW 5615

uncoated

18781 ...

P

HC 5615

coated

18781 ...

N P M K

HC 5630

coated

18781 ...

P

HC 5615

coated

18781 ...

Designation	Pitch mm	l ₁ mm	x mm	y mm						
16 ER/L 0.5 ISO	0.50	16	0.6	0.6	10 pcs.		210	310	410	510
16 ER/L 0.75 ISO	0.75	16	0.6	0.6	10 pcs.		211	311	411	511
16 ER/L 0.8 ISO	0.80	16	0.6	0.6	10 pcs.		212	312	412	512
16 ER/L 1.0 ISO	1.00	16	0.7	0.7	10 pcs.		213	313	413	513
16 ER/L 1.25 ISO	1.25	16	0.8	0.9	10 pcs.		214	314	414	514
16 ER/L 1.5 ISO	1.50	16	0.8	1.0	10 pcs.		215	315	415	515
16 ER/L 1.75 ISO	1.75	16	0.9	1.2	10 pcs.		216	316	416	516
16 ER/L 2.0 ISO	2.00	16	1.0	1.3	10 pcs.		217	317	417	517
16 ER/L 2.5 ISO	2.50	16	1.1	1.5	10 pcs.		218	318	418	518
16 ER/L 3.0 ISO	3.00	16	1.2	1.6	10 pcs.		219	319	419	519
22 ER/L 3.5 ISO	3.50	22	1.6	2.3	10 pcs.		225	325	425	525
22 ER/L 4.0 ISO	4.00	22	1.6	2.3	10 pcs.		226	326	426	526
22 ER/L 4.5 ISO	4.50	22	1.7	2.4	10 pcs.			327	427	527
22 ER/L 5.0 ISO	5.00	22	1.7	2.5	10 pcs.			328	428	528
27 ER/L 6.0 ISO	6.00	27	2.0	2.9	10 pcs.			335	435	535

18783

Cemented-carbide threaded plates external

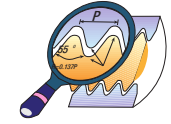
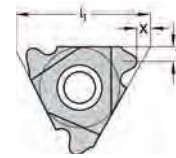


Design

Right, full profile BSW 55°, external, ground.

Note:

Different pitches and left version are deliverable on request.



Applications
Cemented carbide grade
Coating

P
HC 5615
coated

N P M K
HC 5630
coated

Designation	Pitch TPI	l ₁ mm	x mm	y mm		18783	...	18783	...
16 ER 28 W	28	16	0.6	0.7	10 pcs.			319	419
16 ER 19 W	19	16	0.8	1.0	10 pcs.			320	420
16 ER 16 W	16	16	0.9	1.1	10 pcs.			322	422
16 ER 14 W	14	16	1.0	1.2	10 pcs.			323	423
16 ER 11 W	11	16	1.1	1.5	10 pcs.			325	425

18785

Cemented-carbide threaded plates DIN 103 external



Design

Right, full profile trapezoidal 30°, external, ground.

Note:

Different pitches and left version are deliverable on request.



Applications
Cemented carbide grade
Coating

P
HC 5615
coated

N P M K
HC 5630
coated

Designation	Pitch mm	l ₁ mm	x mm	y mm		18785	...	18785	...
16 ER 2TR	2	16	1.0	1.3	10 pcs.			310	
16 ER 3TR	3	16	1.3	1.5	10 pcs.			311	411
22 ER 4TR	4	22	1.8	1.9	10 pcs.			315	415
22 ER 5TR	5	22	2.0	2.4	10 pcs.			316	416
22 U ER 6TR	6	22 U	2.0	11.0	10 pcs.			317	417
22 U ER 7TR	7	22 U	2.3	11.0	10 pcs.			318	418

18787

Cemented-carbide threaded plates external

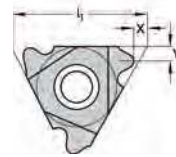


Design

Right, full profile UN, external, ground.

Note:

Different pitches and left version are deliverable on request.



Applications
Cemented carbide grade
Coating

P
HC 5615
coated

Designation	Pitch TPI	l ₁ mm	x mm	y mm		18787	...
16 ER 20 UN	20	16	0.8	0.9	10 pcs.		110
16 ER 18 UN	18	16	0.8	1.0	10 pcs.		111
16 ER 16 UN	16	16	0.9	1.1	10 pcs.		112
16 ER 12 UN	12	16	1.1	1.4	10 pcs.		115

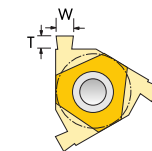
18788

Cemented-carbide indexable inserts for o-rings, external



Applications

For clamp holder, external right or internal left.



Applications
Cemented carbide grade
Coating

N P M K
HC 5640
coated

Designation	W mm	T mm		18788	...
16 ER/IL 1.00	1.00	1.40	10 pcs.		401
16 ER/IL 1.20	1.20	1.60	10 pcs.		402
16 ER/IL 1.40	1.40	1.80	10 pcs.		403
16 ER/IL 1.70	1.70	2.00	10 pcs.		404
16 ER/IL 1.95	1.95	2.00	10 pcs.		405
16 ER/IL 2.25	2.25	2.25	10 pcs.		406

Thread cutting tools

18786

Cemented-carbide indexable inserts for grooving

ATORN®

Applications

For clamp holder, external right or internal left.

Applications
Cemented carbide grade
Coating

PK
HC 5640
coated
18786 ...



Designation	R +/- 0.04 mm	T mm		Suitable for shim	
16 ER/IL R 0.5	0.5	1.4	10 pcs.	AE 16-0	401
16 ER/IL R 0.6	0.6	1.6	10 pcs.	AE 16-0	402
16 ER/IL R 0.9	0.9	2.0	10 pcs.	AE 16-0	403
16 ER/IL R 1.0	1.0	2.0	10 pcs.	AE 16-0	404
16 ER/IL R 1.1	1.1	2.15	10 pcs.	AE 16-0	405
16 ER/IL R 1.2	1.2	2.25	10 pcs.	AE 16-0	406

18802

Cemented-carbide indexable inserts for o-rings, internal

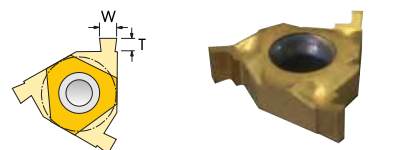
ATORN®

Applications

For clamp holder internal right or external left.

Applications
Cemented carbide grade
Coating

NPMK
HC 5640
coated
18802 ...



Designation	W mm	T mm		
16 IR/EL 1.00	1.00	1.40	10 pcs.	401
16 IR/EL 1.20	1.20	1.60	10 pcs.	402
16 IR/EL 1.40	1.40	1.80	10 pcs.	403
16 IR/EL 1.70	1.70	2.00	10 pcs.	404
16 IR/EL 1.95	1.95	2.00	10 pcs.	405
16 IR/EL 2.25	2.25	2.25	10 pcs.	406

18790

Mini threaded plate sets

ATORN®

Design

For female thread, part profile, right.
Incl. 1 TX key and 2 replacement screws.

18790 101
Contents KU 60 M

1 boring bar, shank 12 mm (art. no. 18791 101),
10 threaded plates part profile metric 60° for
pitches 0.5–1.25 (art. no. 18793 101).

18790 103
Contents KM 60 M

1 boring bar, shank 16 mm (art. no. 18791 102),
10 threaded plates part profile metric 60° for
pitches 0.5–1.5 (art. no. 18793 102).

	18790	...
KU 60 M	101	
KM 60 M	103	



18791

Mini boring bars

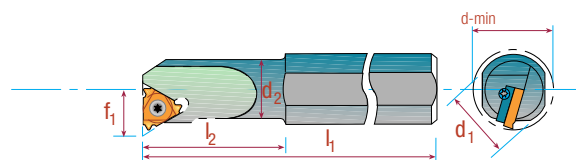
ATORN®

Design

Female thread, steel.

18791 101-102
Design
Right.

18791 201-202
Design
Left.



Designation	d1 mm	d2 mm	l1 mm	l2 mm	d min. mm	f1 mm	Clamping screw	Right		Left	
								18791	...	18791	...
SIR/L 0005 H06	12	5.1	100	12	6.0	4.3	S 06		101		201
SIR/L 0007 K08	16	6.6	125	18	7.8	5.3	S 08		102		202

18792

Clamping screws

Applications

For mini clamp holder (art. no. 18791).

	TORX®-Size		18792	...
S 06	T 6	10 pcs.	101	
S 08	T 6	10 pcs.	102	



18793

Mini threaded plate, internal

ATORN®

Design

Part profile, metric 60°, BSW 55°, internal, ground.

Quality

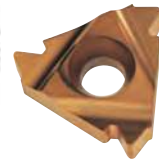
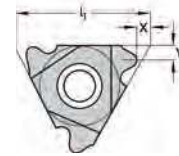
HC 5640.

18793 101-105


Design
Right.

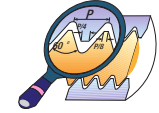
18793 201-205

Design
Left.



18793

Designation	Profile	l ₁ mm	Pitch		Right		Left	
					18793	...	18793	...
06 IR/L A 60	60°	6	0.5-1.25	10 pcs.		101		201
08 IR/L A 60	60°	8	0.5-1.50	10 pcs.		102		202
06 IR/L A 55	55°	6	48-20	10 pcs.		104		204
08 IR/L A 55	55°	8	48-16	10 pcs.		105		205



18794

Solid-carbide boring bars with internal cooling

ATORN®

Design

For use without shims.

Applications

Particularly suitable for long overhang and small bore diameters to prevent vibrations and sagging.

18794 101-103

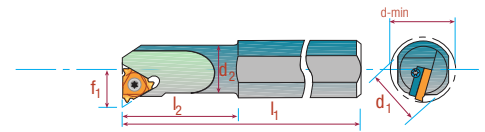
Design
Right.

18794 201-203

Design
Left.



18794



Designation	d ₁ mm	d ₂ mm	d min. mm	l ₁ mm	l ₂ mm	f ₁ mm	Clamping screw	Right with internal cooling		Left with internal cooling	
								18794	...	18794	...
SIR/L 0010 M11CB	10	10	12	150	-	7.4	S 11			101	201
SIR/L 0012 P11CB	12	12	15	170	-	8.4	S 11			102	202
SIR/L 0016 R16CB	16	16	19	200	-	11.7	S 16S			103	203

18795

Boring bars (female thread)

ATORN®

Applications

For female thread cutting.

Note:

Different shank diameters on request.

18795 101-112

Design
Right, pitch angle 1.5°.

18795 201-212

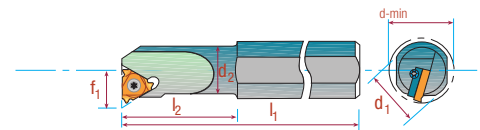
Design
Left, pitch angle 1.5°.

18795 501-506

Design
Right, with internal coolant supply,
pitch angle 1.5°.



18795



18795 111

Designation	d ₁ mm	d ₂ mm	d min. mm	l ₁ mm	l ₂ mm	f ₁ mm	Clamping screw	Right		Left	
								18795	...	18795	...
SIR/L 0010 K11	16	10	12	125	25	7.4	S 11			101	201
SIR/L 0013 L11	16	13	15	140	32	8.9	S 11			102	202
SIR/L 0016 P16	20	16	19	170	40	11.7	S 16S			104	204
SIR/L 0020 P16	20	20	24	170	-	13.7	S 16			105	205
SIR/L 0025 R16	25	25	29	200	-	16.2	S 16			106	206
SIR/L 0025 R22	25	25	29	200	-	18.1	S 22			109	209
SIR/L 0032 S22	32	32	38	250	-	21.6	S 22			110	210
SIR/L 0032 S22U	32	32	38	250	-	24.4	S 22			111	211
SIR/L 0032 S27	32	32	40	250	-	22.6	S 27			112	212

Designation	d ₁ mm	d ₂ mm	d min. mm	l ₁ mm	l ₂ mm	f ₁ mm	Clamping screw	Right with internal cooling	
								18795	...
SIR 0010 K11B	16	10	12	125	25	7.4	S 11		501
SIR 0013 M16B	16	13	16	150	32	10.2	S 16S		503
SIR 0016 P16B	20	16	19	170	40	11.7	S 16S		504
SIR 0020 P16B	20	20	24	170	-	13.7	S 16		505
SIR 0025 R16B	25	25	29	200	-	16.2	S 16		506



Thread cutting tools

18796

Cemented-carbide threaded plates internal

ATORN®

Design
Full profile ISO, metric 60°, internal, ground.

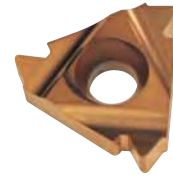
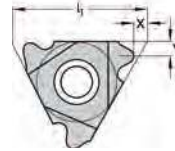
Note:
Different pitches are deliverable on request.

18796 205-224
Design
Right.

18796 305-328
Design
Right.

18796 405-428
Design
Right.

18796 505-528
Design
Left.



18796

Applications		N M K		P		N P M K		N P M K	
Cemented carbide grade		HW 5615		HC 5615		HC 5630		HC 5630	
Coating		uncoated		coated		coated		coated	
Designation	Pitch mm	l ₁ mm	x mm	y mm	18796	...	18796	...	18796
11 IR/L 0.5 ISO	0.50	11	0.6	0.6	10 pcs.	205	305	405	505
11 IR/L 0.75 ISO	0.75	11	0.6	0.6	10 pcs.	208	308	408	508
11 IR/L 0.8 ISO	0.80	11	0.6	0.6	10 pcs.	209	309	409	509
11 IR/L 1.0 ISO	1.00	11	0.6	0.7	10 pcs.	210	310	410	510
11 IR/L 1.25 ISO	1.25	11	0.8	0.8	10 pcs.	211	311	411	511
11 IR/L 1.5 ISO	1.50	11	0.8	1.0	10 pcs.	212	312	412	512
11 IR/L 1.75 ISO	1.75	11	0.8	1.1	10 pcs.	213	313	413	513
16 IR/L 1.0 ISO	1.00	16	0.6	0.7	10 pcs.	214	314	414	514
16 IR/L 1.25 ISO	1.25	16	0.8	0.9	10 pcs.	216	316	416	516
16 IR/L 1.5 ISO	1.50	16	0.8	1.0	10 pcs.	217	317	417	517
16 IR/L 1.75 ISO	1.75	16	0.9	1.2	10 pcs.	218	318	418	518
16 IR/L 2.0 ISO	2.00	16	1.0	1.3	10 pcs.	219	319	419	519
16 IR/L 2.5 ISO	2.50	16	1.1	1.5	10 pcs.	220	320	420	520
16 IR/L 3.0 ISO	3.00	16	1.1	1.5	10 pcs.	221	321	421	521
22 IR/L 3.5 ISO	3.50	22	1.6	2.3	10 pcs.	223	323	423	523
22 IR/L 4.0 ISO	4.00	22	1.6	2.3	10 pcs.	224	324	424	524
22 IR/L 4.5 ISO	4.50	22	1.6	2.4	10 pcs.		326	426	526
22 IR/L 5.0 ISO	5.00	22	1.6	2.3	10 pcs.		327	427	527
27 IR/L 6.0 ISO	6.00	27	1.8	2.5	10 pcs.		328	428	528

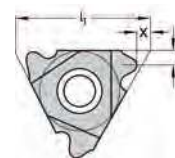
18798

Cemented-carbide threaded plates internal

ATORN®

Design
Right, full profile BSW 55°, internal, ground.

Note:
Different pitches and left version are deliverable on request.



18798

Applications		P		N P M K				
Cemented carbide grade		HC 5615		HC 5630				
Coating		coated		coated				
Designation	Pitch TPI	l ₁ mm	x mm	y mm	18798	...	18798	...
11 IR 28 W	28	11	0.6	0.7	10 pcs.	319	419	
11 IR 19 W	19	11	0.8	1.0	10 pcs.	320	420	
11 IR 16 W	16	11	0.9	1.1	10 pcs.	322	422	
11 IR 14 W	14	11	0.9	1.1	10 pcs.	323	423	
11 IR 12 W	12	11	1.0	1.1	10 pcs.	324	424	
11 IR 11 W	11	11	0.9	1.2	10 pcs.	325	425	
16 IR 28 W	28	16	0.6	0.7	10 pcs.	339	439	
16 IR 19 W	19	16	0.8	1.0	10 pcs.	340	440	
16 IR 16 W	16	16	0.9	1.1	10 pcs.	342	442	
16 IR 14 W	14	16	1.0	1.2	10 pcs.	343	443	
16 IR 12 W	12	16	1.1	1.4	10 pcs.	344	444	
16 IR 11 W	11	16	1.1	1.5	10 pcs.	345	445	



18800

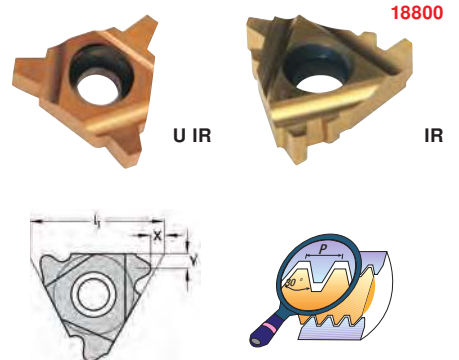
Cemented-carbide threaded plates DIN 103 internal



Design

Right, full profile trapezoidal 30°, internal, ground.

Note:
Different pitches and left version are deliverable on request.



Applications
Cemented carbide grade
Coating

P
HC 5615
coated
18800 ...

N P M K
HC 5630
coated
18800 ...

Designation	Pitch mm	l ₁ mm	x mm	y mm		18800	...	18800	...
16 IR 3TR	3	16	1.3	1.5	10 pcs.			305	405
22 IR 4TR	4	22	1.8	1.9	10 pcs.			306	406
22 IR 5TR	5	22	2.0	2.4	10 pcs.			307	407
22 U IR 6TR	6	22 U	2.0	11.0	10 pcs.			308	408
22 U IR 7TR	7	22 U	2.3	11.0	10 pcs.			309	409

18804

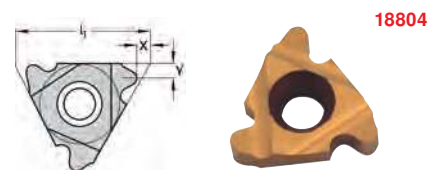
Cemented-carbide threaded plates DIN 405 internal



Design

Right, full profileround thread, internal, ground.

Note:
Different pitches and left version are deliverable on request.



Applications
Cemented carbide grade
Coating

P
HC 5615
coated
18804 ...

Designation	Pitch TPI	l ₁ mm	x mm	y mm		18804	...
16 IR 8 RD	8	16	1.4	1.4	10 pcs.		102
16 IR 6 RD	6	16	1.4	1.5	10 pcs.		103
22 IR 6 RD	6	22	1.5	1.7	10 pcs.		104
22 IR 4 RD	4	22	2.2	2.3	10 pcs.		105

18803

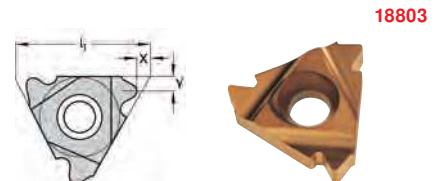
Cemented-carbide threaded plates internal



Design

Right, full profileUN, internal, ground.

Note:
Different pitches and left version are deliverable on request.



Applications
Cemented carbide grade
Coating

P
HC 5615
coated
18803 ...

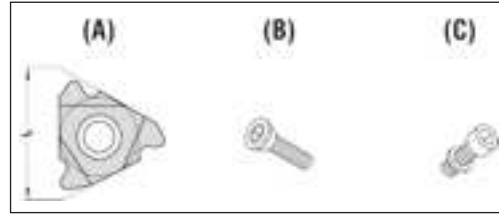
Designation	Pitch TPI	l ₁ mm	x mm	y mm		18803	...
16 IR 14 UN	14	16	0.9	1.2	10 pcs.		113
16 IR 12 UN	12	16	1.1	1.4	10 pcs.		115

Thread cutting tools

Info


18805 - 18807 Spare parts for threaded plates

Plate size (A)		Clamping screw (B)	Screw with washer (C)
11 (1/4)	Internal	S 11	
16 (3/8)	External	S 16	A 16
	Internal	S 16	A 16
22 (1/2)	External	S 22	A 22
	Internal	S 22	A 22
27 (5/8)	External	S 27	A 27



18805

Clamping screws for threaded plates

		18805	...
			
S 11 (1/4)	10 pcs.		101
S 16 (3/8)	10 pcs.		102
S 16 S	10 pcs.		105
S 22 (1/2)	10 pcs.		103
S 27 (5/8)	10 pcs.		104

18805



18806

Screws for shims

		18806	...
A 16 (3/8)			101
A 22 (1/2)			102
A 27 (5/8)			103

18806



18807

Standard and special shims

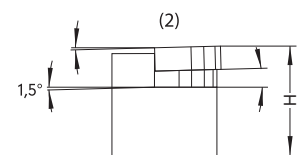
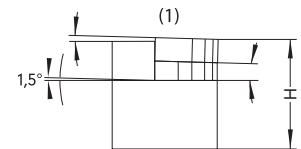
Applications

Standard shims with **positive** pitch angle (cutting edges from right to left) are used when **cutting a right-hand thread with a right-hand tool (1)**.
Special shims with **negative** pitch angle (cutting edges from left to right) are used when **cutting a right-hand thread with a left-hand tool** or a **left-hand thread with a right-hand tool (2)**.

Important:

Dimension H remains constant for every shim combination.

18807



Edge size l ₁ mm	For clamp holder	Pitch angle	Edge designation	18807	...
16 (3/8)	SER ... / SIL ...	1.5°	AE 16		102
16 (3/8)	SEL ... / SIR ...	1.5°	AI 16		103
16 (3/8)	SER ... / SIL ...	-1.5°	AE 16-1.5		106
16 (3/8)	SEL ... / SIR ...	-1.5°	AI 16-1.5		107
22 (1/2)	SER ... / SIL ...	1.5°	AE 22		110
22 (1/2)	SEL ... / SIR ...	1.5°	AI 22		111
22 U (1/2)	SER ... / SIL ...	1.5°	AE 22 U		112
22 U (1/2)	SEL ... / SIR ...	1.5°	AI 22 U		113
22 (1/2)	SER ... / SIL ...	-1.5°	AE 22-1.5		114
22 (1/2)	SEL ... / SIR ...	-1.5°	AI 22-1.5		115
27 (5/8)	SER ... / SIL ...	1.5°	AE 27		116
27 (5/8)	SEL ... / SIR ...	1.5°	AI 27 U		117
27 (5/8)	SER ... / SIL ...	-1.5°	AE 27-1.5		118
27 (5/8)	SEL ... / SIR ...	-1.5°	AI 27-1.5		119