Adjustable circular cutter

Design

Circular cutter equipped with 1 HSS-E blade (draw cut to 5 mm).

Applications

On stationary drills.

For cutting holes, discs and rings.

Note:

Do not use in high-speed machines! Do not use to process wood!

19015 101

Type Liliput

Version

Cutting range 18-80 mm, shank diameter 10 mm.

19015 103

type 00

Version

Cutting range 30-200 mm, shank diameter 12 mm.

19015 104

Type 00

Version

Cutting range 30-200 mm, shank MT 2.

19015 105

Type 00

Version

Cutting range 30-200 mm, shank MT 3.

19015 106

Type 00a

Design

Cutting range 30-400 mm, shank MT 3.



Туре	Cutting range diameter mm	Shank diameter mm	Shank MT	19015	
Liliput	18-80	10	-	101	1
00	30-200	12	-	103	3
00	30-200	-	2	104	4
00	30-200	-	3	105	5
00a	30-400	-	3	100	6

19026 - 19028 Blade and blade holder for circular cutter

35–50 25–40 25–30 25–30 22–25 22–25 22–25 - -

45-70 45-54 45-54 40-45 40-45 40-45 40-45

00A		00 + 00a	Liliput							уре	Use for
19028		19027	19026								Version
	101	101	101				mm	netal up to 5	sheet n	raw cut) for	Blade (d
						e from HSS-E .	ht metals, mad	s metals or I	n-ferrous	n steel, nor	For use of
	102	102	102	0	00 9			p to 5 mm	netals up	olique, for n	Blade, 0
										tipped.	Carbide
				19027 101–102	19026 101–102						
	104					and 102.	de end no. 101	r oblique bla	older fo	al blade h	Addition
	105	105	105	(a)	9			anels	plastic p	r sealants, p	Blade fo
				\square		·E.	, made of HSS	oprox. 10 mi	up to ap	eather, etc.	Rubber, I
				19027 105	V ¥ 19026 105						
	106	106	106				as well as	rox. 30 mm,	o to appi	r plastics up	Blade fo
							om HSS-E .	etc., made	lexiglas,	Pertinax, Pl	Novotex,
	107	107	107	⊕	6		as well as	rox. 30 mm,	o to appi	r plastics up	Blade fo
							-tipped.	etc., carbid	lexiglas,	Pertinax, Pl	Novotex,
				19027 106–107	19026 106–107						
	109					106 and 107.	de end no. 105	r straight bl	older fo	al blade h	Addition
111						mm	ip to approx. 12	n for panels	d versio	a reinforce	Blade in
					\Box	nade of HSS-E.					
					ZI						
112					19028 111	o. 111.	-E blade end n	inforced HS	er for re	blade hold	Special
Ti alloy GG(G) Plasti	VA>900N	HRC VA<900N	<60HRC <67HR	<45HRC <55HRC	<1200N St<1400N	00N St<1100N	St<750N St<9	St<520N	Cu	Al>10%Si	l<10%Si
	VA>900N	THRC VA<900N	<60HRC <67HR	<45HRC <55HRC	19028 111 <1200N St<1400N	o. 111.	i-E blade end n				

- - 16–19 16–19 - 16–24 35–50

28-34

28-42 70-90

19.1

28-34

35-50

60-90

Carbide-tipped

- Optimal and economical use of coolant
- Simple, separate adjustment of coolant volume and air supply
- Precise tool lubrication through one or two nozzles
- Increased tool service life
- Coolant disposal costs avoided
- All parts in stainless steel design
- Different lengths of suction hose
- Strong prismatic magnetic base with on/off switch

19095 101-109 Scope of delivery:

- 1 single spray system with a high-quality LOC-LINE hose
- 1 control valve
- 1 pressure line
- 1 suction line for coolant
- 1 strong magnet (can be switched on/off)

19095 201-209

Scope of delivery:

- 1 double spray system with a high-quality LOC-LINE hose
- 1 control valve
- 1 pressure line
- 1 suction line for coolant
- 1 strong magnet (can be switched on/off)





			Single spray system		Double spray system	
Multi-link hose length	Pneumatic hose	Suction line	19095		19095	
mm	m	m				
203	2	2		101		201
273	2	2		105		205
375	2	2		109		209

19350

Coolant tap

Design

- With magnet 260 N
- Flexible hose 300 mm long
- Adjustable stopcock
- Hose connector R1/4 inch or LW 8 hose nozzle

Applications

The coolant tap can be attached anywhere on the machine tool or directly on the workpiece.



101

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Design

- Fits all conventional tool carriers
- Flexible and versatile
- Can be used with up to 80 bar high pressure
- Versatile
- Long service life thanks to anodised coating
- Low weight
- New design
- 100% Swiss-made

19355 201-219 Design

1/4-inch individual elements

Note:

Further individual parts available on request.



19355 101

	1/4-inch set configuration	
(max)	3 spacer pieces, 28 mm	
	3 spacer pieces, 43 mm	
	3 spacer pieces, 70 mm	
	1 threaded connector, 1/4 inch	
100	1 threaded connector, 1/4 inch NPT	
=0	1 threaded connector, 1/8 inch NPT	
=)	1 threaded connector M, 10x1	
	1 threaded connector M, 12x1	
	1 round nozzle, diameter 3.5 mm	
	1 round nozzle, diameter 4.5 mm	
	1 round nozzle, diameter 5.5 mm	
4	1 special nozzle, diameter 1.8/60°, short	
	1 special nozzle, diameter 1.8/60°, long	
1	1 special nozzle, diameter 1.8/90°, short	
-	1 special nozzle, diameter 1.8/90°, long	
	5 nuts, spanner size 16x7 mm	
-	1 flat nozzle, 22 mm	
2:10	1 complete manifold	
	1 hexagon key, spanner size 11 mm/16 mm	



Kit	Contents	19355
1/4-inch kit	29 pieces	101

1/4 inch













19357 - 19359

Flexible plastic coolant hoses

LOC-LINE FLEXI

Design

- Can be shortened or extended as necessary
- Insensitive to vibration, hose remains in position
- Rust-proof and resistant to chemicals and solvents
- Nozzles, junctions and fittings can be easily replaced

19357 101 1/4-inch kit, 29 pieces, in plastic box.

19357 101



19357 102 1/2 inch kit, 33 pieces, in plastic box.



19357 102

		1/4-inch set configuration
		 8 hose sections of 90 mm
		 3 threaded connectors, NPT 1/8 inch
	Turin Vinne	 3 threaded connectors, NPT 1/4 inch
		 3 round nozzles, diameter 1.5 mm
		- 3 round nozzles, diameter 3.0 mm
		 3 round nozzles, diameter 6.0 mm
		 1 hole nozzle, 5 x 1.5 mm diameter
		 1 hole nozzle, 7 x 1.0 mm diameter
		 1 flat nozzle, 25 x 0.8 mm
		 1 stopcock with segment connector
		 1 Y branch piece
0 1		 1 setting tool

1/2-inch set configuration 6 hose sections of 140 mm 4 threaded connectors, NPT 3/8 inch 4 threaded connectors, NPT 1/2 inch 2 round nozzles, diameter 6 mm 2 round nozzles, diameter 9 mm 2 round nozzles, diameter 12 mm 1 90° nozzle, diameter 9 mm 1 90° nozzle, diameter 12 mm 2 flat nozzles, 32 x 4.2 mm 2 flat nozzles, 63 x 2.8 mm 1 stopcock with segment connector 2 extensions, each 95 mm 2 clamping rings 1 Y branch piece 1 setting tool

Sets	Contents	19357	
1/4-inch set	29 pieces		101
1/2-inch set	33 pieces		102

19358 101 1/4-inch set, 7 pieces. 19358 104-145 1/4-inch individual elements

1/4-111011 301,	r pieces.	1/4-men marvidual elements	1/4 inch	
	Set + single elements		19358	
	Set consisting of:			
	2 hose sections, each approx. 140 mm			
	1 each of round nozzle diameter 1.5/3 and	6 mm		
	1 each of threaded connector NPT 1/8 inch	and 1/4 inch		101
	2 hose sections, each approx. 140 mm			104
	7.5-m hose in 55 pieces of 140 mm each			106
	1 pack of 4 pieces, threaded connector NPT	1/8 inch		110
	1 pack of 4 pieces, threaded connector NPT	1/4 inch		111
	1 pack of 4 pieces, round nozzle diameter 1	.5 mm		112
	1 pack of 4 pieces, round nozzle diameter 3	.0 mm		113
	1 pack of 4 pieces, round nozzle diameter 6	.0 mm		114
	1 pack of 2 pieces, flat nozzle 25 x 0.8 mm			115
	1 pack of 2 pieces, pivot nozzle diameter 1	mm x 16		120
	1 pack consisting of:			
	1 each of flat nozzle 12 x 1.0 and 12 x 1.5 m	nm		
	1 each of injector nozzle 5 x diameter 1.5 ar	nd 7 x diameter 1.0 mm		124
	1 pack of 2 pieces, Y branch			128
	1 pack of 4 pieces, extensions 95 mm with	clamping ring		131
- O-	1 ring system with 15 side nozzles			132
	1 pack of 2 pieces, check valve			135
	1 pack of 2 pieces, stopcock with male thre	ad 1/4 inch		136
	1 pack of 2 pieces. stopcock with segment	connector		138
Ω	1 pack of 4 pieces, hose elbow 1/4 inch			139
7	1 pack of 4 pieces, hose element with flushing	ng hole 1/4 inch		141
0 1	1 setting tool for clamping and releasing seg	gments		145

19.4

19357 - 19359

Flexible plastic coolant hoses

Continued

19359 101 1/2-inch set, 7 pieces. 19359 104-145

1/2-inch individual elements

		1/2 inch	
	Set + single elements	19359	
	Set consisting of:		
	2 hose sections, each approx. 140 mm		
	1 each of round nozzle diameter 6/9 and 12 mm		
D	1 each of threaded connector NPT 3/8 inch and 1/2 inch		101
	2 hose sections approx. 140 mm		104
	— 7.5 m hose in 59 sections of 140 mm each		106
	1 pack of 4 pieces, threaded connector NPT 3/8 inch		110
	1 pack of 4 pieces, threaded connector NPT 1/2 inch		111
	1 pack of 4 pieces, round nozzle diameter 6 mm		112
	1 pack of 4 pieces, round nozzle diameter 9 mm		113
	1 pack of 4 pieces, round nozzle diameter 12 mm		114
	1 pack of 2 pieces, flat nozzle 32 x 4.2 mm		115
	1 pack of 2 pieces, flat nozzle 63 x 2.8 mm		116
	1 pack consisting of:		
100	1 each of flat nozzle 18 x 2.0 and 18 x 3.2 mm		
No.	1 each of injector nozzle 7 x diameter 2.0 and 5 x diameter 3.2 mm		124
	1 pack consisting of:		
	1 piece, each of 90° nozzle diameter 6/9 and 12 mm		
	1 piece, 90° shower nozzle		125
PR-	1 pack of 2 pieces, Y branch		127
	1 pack of 2 pieces, reduction to 1/4 inch		129
	1 pack of 2 pieces, Y-junction with reduction to 1/4 inch		130
	1 pack of 4 pieces, extensions 95 mm with clamping ring		131
)— 1 ring system with 15 side nozzles		132
	1 pack of 2 pieces, check valve		135
	1 pack of 2 pieces, stopcock with male thread 1/2 inch		136
	— 1 pack of 2 pieces, stopcock with segment connector		138
	1 pack of 4 pieces, hose elbow 1/2 inch		139
Q	1 pack of 4 pieces, extension with clamping ring 1/2 inch		140
Dept.	1 pack of 4 pieces, hose elements with flushing hole 1/2 inch		141
104	1 setting tool for clamping and releasing segments		145









19356

Cold air nozzle

Design

- Simple air connection (3-8 bar)
- Cold air escapes from the blue component (- 48°)
- Hot air escapes from the red component (+ 100°)

Scope of delivery:

- Air nozzle with magnetic plate
- Ball valve
- Connector for compressed air quick coupler 3/8 inch
- Silencer
- Jointed hose, 1/2 inch with round nozzle

Applications

Pinpoint cooling/heating. Efficient use of cooling where no lubrication or cooling lubricants are desired.



Jointed hose connector	Compressed air connection	19356
Inch	Inch	
1/2	3/8	101

19356

19.5

Cooling lubricants | Track oils | Lubricating sticks | Cutting pastes | Cutting oils | Grinding concentrates | Concentrated cooling lubricants | Canister and drum mixers | Refractometers

19300 **Cooling lubricants**

H!W

Design

- Cooling and machining agent with high corrosion protection for the most demanding applications
- Semi-transparent emulsion
- Increased service life compared to conventional coolants
- Product adapted to HHW track oils 68 and 220 (demulsifying)
- Extremely gentle on the skin
- pH value approx. 9.3 at 5%

Applications

Foam resistant, ideal for CNC machines with high pressures. Suitable for all materials. Mixing ratio1:25 (4%) for light machining, up to 1:10 (10%) for very heavy machining.

Note:

Non-hazardous material, free from chlorine, nitrite and formaldehyde. High corrosion protection even at low concentrations (from 3%). Refractometer value: 1.3. Water hazard class 2.

Contents I	19300	
10		101
25		102



19300

19302

Track oils



Design

- Product adapted to HHW cooling lubricants so cannot be mixed with emulsion (demulsifying)
- No sticky residue forms on guideways and the service life of the emulsion is considerably extended

Applications

Demulsifying special oil for tracks and guides. Also suitable for use as hydraulic oil in accordance with DIN 51524/2 and gear oil.



Content L	Kinematic viscosity	Density at 15°C	Flashpoint °C	19302	
10	68	0.876	230		101
10	220	0.891	240		102

19304

Stainless-steel lubricating stick/cutting pastes



Applications

For heavy machining when thread cutting, broaching and reaming.

Application range:

High-alloyed carbon steels, chrome-nickel alloys, stainless steel, austenitic, ferritic chrome-nickel steels, titanium, manganese.

19304 101

Lubricating stick

Design

- Clings to blades 19304 102-103

Cutting paste Design

- In can



19304 102-103

19306 103-104



Co	ontents	19304	
	g		
Lubricating stick	300		101
Cutting paste	120		102
Cutting paste	750		103

19306 Universal cutting oils



Design

- Free of chlorine and mineral oils
- High-quality universal cutting oil based on natural raw materials
- Low tool wear
- Economical

Applications

For medium to heaviest-duty machining tasks.

Also suitable for minimum quantity lubrication (MMS).







19306 101

l	19306
-	101
-	102
5	103
10	104
	- 5

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Design

- Synthetic grinding concentrate with high corrosion protection for the most demanding applications
- The emulsion is transparent and thus meets the requirements of clear-view grinding
- Increased service life compared to conventional coolants
- Extremely gentle on the skin
- High corrosion protection, even at low concentrations (from 2%)

Applications

For grinding a wide variety of materials. Mixing ratio 1:40 (2.5%). Also suitable as compressed water additive, as additional corrosion protection and as a stabilising agent.

Free of chlorine, nitrite and formaldehyde. Non-hazardous material. Refractometer value: 2.1. Water hazard class 2.

Contents	19308	
1		
10		101
25		102



19360

Cooling lubricating concentrates

Design

- Emulsifying universal coolants and cutting agents

Applications

For all cutting, machining and deformation tasks.

Note:

Free of nitrites, silicones and phenols. Free of formaldehyde depot substances.







Lathe tools

19366

Canister and drum mixer

W

Design

- One mixing device for all container sizes
- Highly efficient and easy to use
- It can be used to mix all water-soluble coolant concentrates (concentration range of 1-16%)
- Can be easily secured on container sizes of 5 kg, 10 kg, 25 kg, 60 kg and 200 kg using 5 different suction tube lengths and screw caps
- Works on the principle of steel pumps (Venturi principle) and does not require electrical power

- Scope of delivery: - 5 suction pipes
- 2 screw cap adapters for canisters
- 1 screw cap for drums

Applications

Exact dosage for economic use of emulsions. The mixture ratio can be adjusted precisely using

the adjustment wheel.

Concentration is determined by handheld refractometer, see art. no. 19370 101.



- 1 transparent hose (length 1.5 m)
- 1. Emulsion outlet line
- 2. Concentration controller
- 3. Ball valve
- 4. Aluminium housing
- 5. Suction pipe (5 different lengths)
- 6. Mains water connection

19366 101



19370

Refractometer

Design

- With adjustable eyepiece

Applications

For fast and accurate determination of concentration of water-mixed cooling lubricants and many other solutions in various areas of application.

	Measuring range %	Accuracy %	Version	19370	
Refractometer	0-32	0.2	in protective case		101
Prism cover plate	-	-	-		201



19370 201



Emulsion care | pH testers | Belt skimmers | Thread lubricant | **Drilling and cutting oil WD-40**

19367 - 19368

Emulsion care carry case including test strips

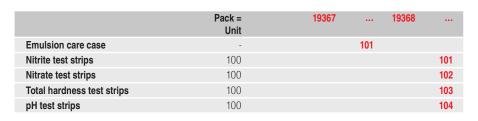
Design

Case contents:

- Thermometer to determine sample temperature
- Plastic cups for taking samples
- Empty bottles for taking samples, 3 pieces
- Nitrite test strips, 100 pieces
- Nitrate test strips, 100 pieces
- Total water hardness test strips, 100 pieces
- pH test strips, 100 pieces
- Emulsion test log
- Plastic case with foam inserts and recess for accommodating a refractometer (not included in scope of delivery, see no. 19370 101).

Applications

For all measurements in accordance with TRGS 611.





19368 101 Nitrite test strips Design

19368 101

Design Pack = 100 units. Pack = 100 units.

×0:

19368 103

Total hardness test strips Design

Pack = 100 units.

19368 104

19368 104

Design

pH test strips

Pack = 100 units.

19368 103



19368 102

19368 102

Nitrate test strips











33970

pH tester for liquids TESTO 206-pH1



Design

- Combination of °C and pH
- Fast, accurate, simple
- Reliable thanks to automatic final value detection
- Robust, insensitive to contamination

Applications

Changes in the coolant quality can be detected by the self-monitoring function and corrected as necessary. Among other things, the pH value must be recorded here.

Depending on the manufacturer's specifications, the pH value of the lubricant should lie between 7.7 and 9.2 pH. This measurement must be made when preparing the concentrate, and once weekly for emulsions ready for use.

Strongly decreasing pH value runs the risk of corrosion, poor biostability combined with unsatisfactory downtimes (additional costs), unpleasant odours and health hazards.

Measures must be taken in the event of a decrease in pH of 0.2 pH, and the coolant should be changed

33970 101

Device set TESTO 206-pH1

Scope of delivery:

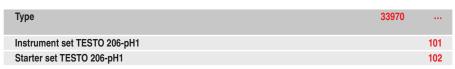
- One-handed pH/°C measuring instrument
- pH1 probe head for liquid media
- Storage cap with gel
- Protective cover TopSafe
- Belt/wall bracket

33970 102

Starter set TESTO 206-pH1 Scope of delivery:

- One-handed pH/°C measuring instrument
- pH1 probe head for liquid media
- Storage cap with gel
- Calibration dosage bottles 250 ml pH 4+7
- Protective cover TopSafe
- Belt/wall bracket
- Aluminium case

in the event of a decrea	ase οι σ.5 μπ.	
Technical data:	TESTO 206-pH1	
Measurement sensor:	pH electrode	NTC
Measuring range:	0 to 14 pH	0 to 60°C (for short periods up to +80°C, max. 5 min.)
Accuracy +/- 1 digit:	+/- 0.02 pH	+/- 0.4°C
Resolution	0.01 pH	0.1°C
Compensation:	Automatic temperature compensation	Automatic temperature compensation
Measuring rate:	2 measurements per second	2 measurements per second
Dimensions:	197 x 33 x 20 mm	197 x 33 x 20 mm



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Belt skimmer and spare belts

Design

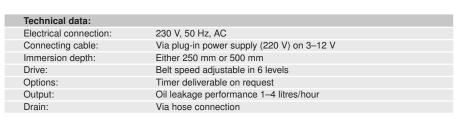
- Easy attachment with magnetic base and adjustable in 6 steps
- Universally adjustable with two joints
- The belt remains under tension in any position in hard-to-reach places thanks to the fixed bracket! You can even secure the device at an angle in hard-to-reach places, such as under a chip conveyor

Advantages:

- Longer service life for cooling lubricants
- Long replacement intervals
- Significantly lower operating costs
- Non-critical low-volt voltage of 3-12 volts
- Significantly reduces strain on the machine operator caused by smells and steam

Applications

For the maintenance of cooling lubricants in machine tools, machining centres, CNC lathes, etc.



	Belt skimmer	Replacen	nent skimmer belts	
Immersion depth	19371		19371	
mm				
250		101		201
500		102		202





Thread lubricant 19378

Design

Greasing threads to improve sliding properties. - In handy can Prevents threads from cracking.

Contents	19378	
g		
600		101



19378

Thread cutting agent 19379

Design

- Cutting agent with mineral oil base
- Free from chlorine, silicone, PCBs and solvents

Applications

For machining steel and stainless steel.

19379 101

Cutting oil Akafil

Applications

Excellent performance especially for manual thread cutting, thread forming and reaming.

19379 102

High-performance cutting grease Akawax **Applications**

Indispensable, if liquid oils cannot be used for lubrication, particularly for overhead thread cutting and sawing.

No spilling, no dripping.

Туре	Contents	Contents	19379	
	ml	g		
Akafil	210	-		101
Akawax	-	350		102







19382

Drilling and cutting oil WD-40 Specialist®



- Reduces wear and friction during machining tasks
- Extends the life of the cutting tools and drills
- Smart Straw™ spray system for full-surface and single-point spraying
- Foams when sprayed for ideal adhesion to the tool

Applications

Suitable for all metals.





19.9

21495 - 21496

Cutting lubricants

TAPMATIC

Design

- Ferrofluid and Alufluid cutting fluids cool and lubricate at the same time
- The cutting fluids are free of sulphur and chlorine and comply with the EU TRGS provisions
- They are non-toxic as defined by the Swiss Chemicals Ordinance (ChemO)
- VOC free

Advantages:

- No built-up edge
- Longer service life of the tools
- Better surface quality

Ferrofluid

Applications

Cutting fluid for steel.

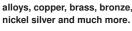
Prevents the formation of a built-up edge.

21496

Alufluid

Applications

Cutting fluid for aluminium, aluminium alloys, copper, brass, bronze,







Containers litres	21495 21496	
0.5	201	201
5.0	202	202

19390

Magnetic chip lifter



- 1 tool, 2 uses:
- 1. Remove chipse
- 2. Lift small parts

A magnet moves up and down within a stainlesssteel round bar. The strong magnet attracts metal chips. Pull the knob and the chips fall off.

















19397

Length mm

Swarf hook

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Design

- Ergonomic handle made using 2-component injection moulding technology
- Special finger recess for secure handling and more tractive force
- Fibreglass-reinforced shield
- Burnished shank
- Rounded tip to prevent injuries
- Downwards-angled hook for optimum access



Incl. chip slide for removing small chips





