73001 - 73002 Goldsmith's scissors	
Quality 73001 Special steel. With open arms.	73001
73002 With finger balas	January 1990
With finger holes.	73002
Total length Blade 73001 73002	
mm	
73007 Special sheet metal shears	
Quality Nickel-plated.	73007
Total length Blade 73007	
	\cup
73008 Electrician's shears	
Design PVC handles.	73008
	10
Total length Blade 73008	
73030 Telephone scissors	
Design Nickel-plated, with wire cutter.	73030
Total length Blade 73030	
mm	
125 serrated 101	
73050 - 73053 Paper scissors/work scissors	
73050 73053	73050
Paper scissors ATORN® Nickel-plated, lower blade serrated. Image: scissor servated se	H
Multi-purpose scissors 73052 Blades made of stainless steel,	\bigcirc
ATORN® impact-resistant plastic handle. Applications	\bigcap
Work scissors For right-handed and left-handed people.	73052
Blades polished, handles painted.	
Paper scissors Work scissors Multi-purpose scissors	
Total length 73050 73052 73053 mm	73053
200 101 101	
210 101 250 103 102	
73056 Household and work scissors	
Design 73056 101 Ergonomic design. Handles made of shatterproof	73056 102
plastic with skin-friendly soft rubber inserts. The	ZIFZAP
scissors can be adjusted with a screw. Suitable for right-handed and left-handed people.	()
Quality Stainless steel, rust-proof, cold-hardened.	\checkmark
	73056 103
mm	
130 101 150 102	ZIPLAP Q-
250 103	

73.1

HH

plastic handles.

73060

Erdi Design

Multi-purpose scissors

ches, etc.

Applications For cutting paper, cardboard, fabric, leather, fine sheet metal, plastic, carpet, twine, flowers, bran-





73065

Total length mm	Blades	73060	
190	straight		101
190	angled		102

One blade toothed, stainless steel cutting head,

rust-proof, with spring and lock, impact-resistant

Multi-purpose scissors Combinox

Erdi

73065

Design

Ergonomic handles with soft insert, one-hand locking, opening spring, integrated wire stripper for conductor cross-section 1.0 and 1.5 mm². Wire cutter, hanging eyelet.

Applications

For cutting paper, plastic, carpet, cardboard, wire made of soft materials (not steel), thin copper and aluminium sheets and much more. Quality

All metal parts rust-proof stainless steel.



Total length mm	73065	
190		201

Erdi Blade qualities

The service life of the blades is in direct proportion to the qualities of steel used and their finish. In particular, the high performance scissors with HSS blades meet the highest standards for service life and long-lasting cutting performance. The shear heads of quality HSS TiN are additionally coated with wear-reducing, extremely hard titanium nitride. Depending on the application and frequency of use, special stainless steel, stainless steel and quality steel are available as further blade materials.

Blade gualities	Hardness min. HRC	Service life
HSS-TIN	65	+++++
HSS	65	++++
Special stainless steel	61	+++
Stainless steel	59	++
Quality steel	56	+

The higher the quality of the steel of the cutting edge, the longer the service life of the scissors!

Blade quality	For maximum sheet thickness at tensile strength of:					
Normal sheet metal shears	400 N/mm ²	600 N/mm ²	800 N/mm ²	1100 N/mm ²		
HSS	1.2 mm	1.0 mm	0.8 mm	0.6 mm		
Stainless steel	1.2 mm	1.0 mm	0.8 mm	-		
Quality steel	1.2 mm	1.0 mm	0.8 mm	-		

Blade quality For maximum sheet thickness at tensile strength of:						
N/mm ² 600) N/mm ² 80	00 N/mm ²	1100 N/mm ²			
mm 1.2	mm 1.	0 mm (0.8 mm			
mm 1.2	mm 1.	0 mm (0.8 mm			
mm 1.5	mm 1.	2 mm				
mm 1.2	mm 1.	0 mm -	-			
mm 1.0	mm 0.	8 mm				
mm 1.2	mm 1.	0 mm -	-			
	N/mm² 600 mm 1.2 mm 1.2 mm 1.2 mm 1.5 mm 1.2 mm 1.2 mm 1.2 mm 1.2	N/mm² 600 N/mm² 80 mm 1.2 mm 1. mm 1.2 mm 1. mm 1.5 mm 1. mm 1.5 mm 1. mm 1.0 mm 0.	N/mm² 600 N/mm² 800 N/mm² * mm 1.2 mm 1.0 mm 0 mm 1.2 mm 1.0 mm 0 mm 1.5 mm 1.2 mm 1 mm 1.5 mm 1.2 mm 1 mm 1.2 mm 1.0 mm 1 mm 1.2 mm 1.0 mm 1 mm 1.2 mm 0.8 mm 1			

*When cutting folds, the scissors can briefly cut up to 3 x 0.6 mm (1.8 mm).

PLEASE NOTE! Manual sheet metal shears may only be used for cutting thin sheets of soft metals and steel. Not suitable for cutting round and square metal shapes such as wire.





ena/P

HW

Info

Erdi Blade technology

1. The types

Standard sheet metal shears



In the case of normal plate shears, the blade and handle are traditionally forged in one piece. The cutting force is derived from the ratio of blade length to handle length.

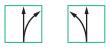
Manual sheet metal shears with leverage



Manual sheet metal shears with leverage consisting of a cutting head and handle. Both parts are articulated to provide additional leverage.

2. The models

Ideal shears (sheet metal shears)



These shears are aptly named. Because ideal shears are real all-rounders. You can use them to cut through a metal sheet (continuous cut) and to cut large and small contours or radii (shape cut). It does not matter whether your cutting work is on the sheet edge (trim cut), or in the middle of the panel. Of course, you can also do simple notching work with ideal shears.

Shape-cutting shears



Shape-cutting shears are best if you want to make fine, tight curved cuts at the edge of the sheet. The fine blade shape of these shears allows you to cut extremely tight shapes or curves with ease.

Straight-cut shears



Do you want to cut through a metal sheet in the middle and/or in the edge area? Then the straightcut shears are the right tool for you. The long blades of these tools allow you to notch and cut even large sheets to length quickly, with little effort and yet precisely.

73070

Erdi MULTISNIP Longstyle D 22 A

Design 2-component grip sleeves. Long blade for extra-long cuts. Offset at the side for continuous cutting. Cutter

head made of drop-forged stainless steel, tempered. Heavy wearing for a long service life through additional inductive hardening of the blades. The angled cutting head always guides the hand over the workpiece and minimises the risk of injury. Double leverage for high cutting performance with little effort.

Total length mm	Blade length mm	73070	
280	64		101

Applications

Universal straight-cut shears

Cuts aluminium/copper sheets up to 1.2 mm, standard sheet metal up to 1 mm, stainless steel sheets up to 0.8 mm and wire mesh up to a diameter of 1 mm. Quality

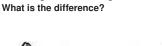
Stainless steel shears.







##**W**



3. Left or right-hand cutting scissors.





Left-cut shears

Right-cut shears

Right-cut shears are ground and constructed to allow easy cutting of curves to the right. Curved cuts from right to left are best done with left-cut shears.

It is often believed that right-cut shears are for right-handed people and left-cut shears are for left-handed people. This is not true. On the contrary, if you are a right-hander cutting a radius with a pair of right-cut shears (see above, from left to right), cut outwards from your wrist. With the left-cut shears (radius from right to left), cut inwards from your wrist. This is much more ergonomic. Give it a try!

eng/P () = Items with prices in brackets partly available from stock.

73.3

Universal straight-cut shears

Erdi

MULTISNIP Master D 51 A Design

Fibreglass-reinforced plastic handles with soft insert. Long blade for long cuts. Offset at the side for continuous cutting. Cutter head and all metal parts made from rust-proof stainless steel, tempered. The angled cutting head always guides the hand over the workpiece and minimises the risk of injury. Onehanded locking, opening spring.

Applications

Cuts aluminium sheet up to 0.75 mm, copper/standard sheet metal up to 0.6 mm and stainless steel sheet metal up to 0.4 mm.

Quality

Stainless steel blades, rust-proof.







1/ 11

Total length mm	Blade length mm	73075	
235	50		101

73080	Ideal shears (short version 180 mm)		
2	e and compact ideal shears, landle with moulded grip blades (HRC 61).		73080 102	
Total length mm	Blade length mm	Cutting thickness up to mm stainless steel/standard sheet metal		73080
180	20	1.0/1.2		101
180	20	1.0/1.2		102

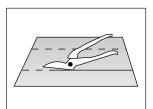
73095 - 73096

Pelican shears

Erdi Design Right-handed use, drop-forged, open arms, inductively hardened. Applications For long, straight and continuous cuts. Also suitable for rust-proof stainless steel sheets.







Quality steel

Stainless steel

ena/P

Total length mm	Cutting thickness up to mm stainless steel/standard sheet metal	73095	73096
300	1.0/1.2	101	101
350	1.0/1.2		102

Shape-cutting shears DIN 6438 73117

Quality

Design

73.4

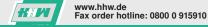
Straight cut, with lever action.

Ergonomically shaped 2-component handles. Applications

Cuts metal sheets up to 1.2 mm and stainless steel up to 0.7 mm.

Blades made from forged chromiumvanadium steel, toothed, inductively hardened. 73117

Total length mm 250



= The specified prices are unit prices. Only sold in the specified packing units. Always specify number of units is and a information units. Always specify number of units in order information.

73133 - 73134	Shape-cutting	n shears w	ith leverage				*
Ercli Design Right-handed or left-han with locking, heavy-duty de	ded use. Self-opening, asign, drop forged						73133
stainless steel cutter head, fine toothed. Ergonomically guard, plastic-coated with s Applications For shape cuts (including v	y shaped handle with slip soft insert.						73134
straight cuts, for cutting shoroof stainless steel sheets		Bi	ght	Left	00-	8	
Total length mm				3134		•	
260			101	101			
73099 - 73100	Berlin shears						-
Erdi							1
Design Right-handed use, drop-fo nductively hardened. Jse	orged, open arms,				0		73100
For long, straight cuts and uitable for rust-proof stain							
				120			_
Total length	Blade width	Cutting	thickness up to mm		Quality steel 73099	Stainless steel	
mm 250	up to max. mm 50	stainiess steel/ste	el/copper/aluminium 0.8/1.0/1.2			101	201
300	50		0.8/1.0/1.2			102	202
73103 - 73106	Punch snips						\mathbf{n}
Ercli Design Right-handed or left-han open arms. Applications For short, straight cuts, hol			•		0		7310:
uts. '3103 - 73104							73104
Quality Quality steel.							
3105 - 73106 Quality Stainless steel.					OX		73105
							73106
					0		
Total langth	Quality	steel right	Quality steel left		ess steel right	Stainless steel left	
Total length mm			73104		73105	73106	
250 275		10	1	101	101 102		102
300					102		102

103

73.5

HIN

103

Shears

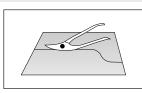
73110 - 73113

Sheet metal shears

Ercti Design Right-handed or left-handed use, drop forged, open arms. Applications As hole, shape and straight cut shears.

73110 - 73111 Quality Quality steel.

73112 - 73113 Applications For rust-proof stainless steel sheets. Quality Stainless steel, inductively hardened.









73113

	Quality steel right		Quality steel left	Stainles	s steel right	Stain	less steel left	
Total length	73110		73111		73112		73113	
mm								
260						101		101
280		102		102		102		102

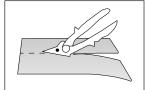
73130 - 73131 Straight-cut shears with leverage

Erdi Design

Right-handed or left-handed use. Self-opening, with locking, heavy-duty design, drop-forged cutter head, double-hardened blades, fine toothed. Ergonomically shaped handle with slip guard, plastic-coated with soft insert. **Applications**

For long, straight cuts, for cutting sheet metal up to 1.2 mm (rust-proof stainless steel sheets up to 1.0 mm).

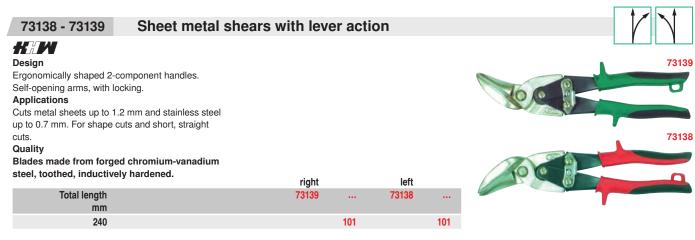
Quality Cutter head made from stainless steel.







	right		left	
Total length	73130		73131	
mm				
260		101		101



73.6

ena/P

73140 - 73145

Sheet metal shears with lever action

Erdi

Design For right- or left-handed use, drop forged, open arms.

Applications

As hole, shape and straight cut shears.

Quality Cutter head made from stainless steel.

73140 - 73141

Design

Lightweight, handy design, made of drop-forged stainless steel, double-hardened blades, fine toothed, pressed steel handles, plastic handle sleeves with slip guard and soft inlay.

Applications

For cutting sheet metal up to 1.2 mm in thickness (rust-proof stainless steel sheets up to 1.0 mm).

73142 - 73143

Design

Self-opening arms, with locking, robust design, cutter head made of drop-forged stainless steel. Double-hardened blades, fine toothed, pressed steel handles with slip guard and soft inlay, PVC-coated. Applications

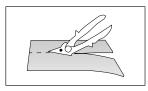
For cutting sheet metal up to 1.2 mm in thickness (rust-proof stainless steel sheets up to 1.0 mm).



Like art. no. 73142-143, but with steel handles and slip guard. Robust, for industrial use.

Applications

For cutting sheet metal up to 2.0 mm in thickness (rust-proof stainless steel sheets up to 1.2 mm).











73145

73140

											~~~~	
	right		left		right		left		right	-	left	
Total length	73140		73141		73142		73143		73144		73145	
mm												
230		101		101								
240										101		101
260						101		101				

## 73146 - 73148

## Erdi

Design

For right-handed use, drop forged, open arms. Use

As hole, shape and straight cut shears.

## 73146

Design

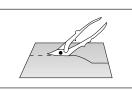
Drop-forged shear head, handles with soft inlay and slip guard. **With soldered HSS blades**, for heavyduty use, up to 15x longer service life

## 73148

## Design

Drop-forged shear head, with soldered HSS blades with titanium nitride (TiN) coating. Hardness at least 2300 HV, improved sliding properties through hard and smooth surfaces, reduced tendency to form built-up edges, multiple improvements in service life compared to HSS. Use

Specifically designed to cut hard stainless steels. For straight, continuous and shaped cuts.



High-performance sheet metal shears with lever action





	HSS right	HSS/TiN right
Total length	73146	73148
mm		
260	1	01 101

73.7

/ **HEN** /

1.0 mm, steel sheets up to 1.2 mm, folded sheets up to 1.8 mm, aluminium/copper sheets up to 1.8 mm,

wire mesh up to wire diameter 1 mm.

#### Applications For straight, continuous and shaped cuts. For right- or left-handed use. Drop forged stainless steel. The optimised tuning of the leverage and blade geometry further reduces the effort by 25%. Comfortable, ergonomically designed handle with soft insert. Cuts stainless steel sheets up to

Sheet metal shears



	Right	Left	
Total length	72150	73151	
mm			
260	1	01	101

## Sheet metal shears

## Erdi

#### Design

Design

90°

#### - With lever action

- Optimised design

73152

73150 - 73151

Erdi

Design

The reduced grip opening angle ensures better handling for the same length of cut. And thanks to the more compact cutting head with partially recessed head fitting, curved cuts are even easier and more precise. The spring is maintenance-free. - Extremely robust joint

The joint with sintered steel insert makes the shears especially smooth and resistant to wear. The bolted joint with a stud bolt is very robust.

With two 45° stops and markings for 15°, 30° and

#### - Centric locking bolt

The locking bolt can be operated easily and without grasping by both right- and left-handed users due to its central location on the upper handle. - Double leverage

The double leverage results in a noticeable reduction in the amount of force applied. At the same time, cutting performance is significantly increased as a result.

#### Applications

For continuous straight and shaped cuts. Quality

Special stainless steel blade quality.





73152 102

73161 101



## 73161 **LOWE**

Mitre snips assembly

Replacement blade

Replacement pad

73168

Mitre snips

Applications Wherever skirting and profiles made of plastic, rubber or wood need to be mitred. All parts are easily replaceable.



## Band shears

Applications For steel packaging straps up to 0.8 x 28 mm.

For cutting steel and plastic strapping band.

Forged from a single piece. Inductively hardened blades (58-61 HRC). Handles coated in plastic. Total length

> mm 305



101 102

73161

73169

73168

# Safety steel band shears

Applications

# ATOR/

73169

## Design

73.8

Design

With lever action. Hold-down clamp prevents the packaging strap from

**# N** 

springing up. Comfortable grip covers with slip guard.

Total	length	For tape widthFor t	tape thickness
	mm	up to mm	up to mm
	250	25	0.5
	600	50	1.2



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#### 73170 Safety steel band shears Erdi Quality Design Special stainless steel. With lever action. Cutter head made from precision casting, tempered. Note: Inductively hardened blades. Small size for one-The restraining device prevents the sudden lifting of handed operation. Flat lower part can easily be steel band ends during continuous cutting - greatly pushed under the stretched steel band. 2K handle reduces the risk of injury. with slip guard. Applications For hardened steel packaging straps up to 32 mm in width and 1.0 mm in thickness. **Total length** 73170 mm 260 101 73167 **Crate pliers ATORN**[®] Advantage: 73167 - Time saving NEW Design - Increased safety at work - Pushing the arms together raises the spring out of - No risk of injury when using these pliers the stop cam groove Applications For easy opening of crates. - With a bolt-shutter, the jaws pull the bolt from the Quality stop cam groove when the arms are pressed together Chrome-plated surface and material handle made of - Optimised leverage plastic. - Ergonomically shaped 2-component handle Total length 73167 mm 220 102 73270 - 73275 Safety scraper 73270 73275 73270 Design Spare blades. With safety cover and slip-resistant handle. Pack = 5 units. Applications For cleaning smooth surfaces. Scraper Spare blades 73275 Blade width 73270 73275 mm 88 101 101 73280 **Blade scrapers** martor 73280 201 73280 101 73280 101 Scrapex Cleany Scrapex Argentax Desian Design Made of plastic with retractable blade. With large, rounded handle and protective cap over Applications the blade. For cleaning all smooth surfaces. Applications 73280 201 73280 102 For removing residues on all smooth surfaces. Reinforced razor blade Replacement blades for Scrapex Argentax and Cleany. Blade width 73280 73280 102 mm Argentax blade scrapers 39 101 39 **Cleany blade scrapers** 201 39 Replacement blades, 10 units 102

/##**W** 

73.9

## Scraper

#### 73300 - 73302 **Triangular scraper**

Design

With wooden handle and polished work surface. Quality Tool steel.

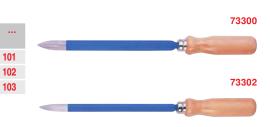
## 73300 Hollow-ground scraper

Blade length

Complies with DIN 8350 C.

mm

73302 Solid scraper Complies with DIN 8350 B.



73305

73306 101

Hollow-ground scraper Blade length 73300 mm 101 100 150 102 200 103 250 104 300 105

				1	10	0						
					15	0						
				2	20	0						

Solid scraper

73302



## Flat scraper according to DIN 8350 A

Quality

Design

With wooden handle and polish	ed work surface.	Tool steel.	
Blade length	Blade width	73	305
mm	mm		
100	20		101
150	20		102
200	20		103
250	25		104
300	25		105

**Flat scrapers** 

## Quality

Special steel, galvanised.

HAZET Design

Square blade with plastic handle, black.

73306

Blade length	Blade width	73306	
mm	mm		
150	23		101
55	23		102



# 73308 - 73310

## Cemented carbide flat scraper

73308 201-203 Design

- Carbide flat scraper
- Alloyed tool steel
- With replaceable, four-edged
- cemented carbide indexable insert
- Painted shaft
- Wooden handle

# 73310 201-203 Design

residues, e.g. on windscreens.

- Spare cemented carbide inserts
- 73308 73310 NEW Flat scraper Spare cemented carbide inserts

Blade length	Blade width	Thickness	73308		73310
mm	mm	mm			
300	20	5		201	201
330	25	5		202	202
330	30	5		203	203

73311

101

73311

## Knife scraper set

## Design

73.10

#### Applications Ideal for removing stickers, sealing and adhesive

Practical storage system with replaceable blades. Easy blade change by loosening the knurled thumb screw on the scraper handle chuck. Scope of delivery:

1 x 2K scraper handle, 1 x professional universal knife, 5 x trapezoidal blades, 5 x 12 mm wide/straight blades, 5 x 16 mm wide/straight blades, 5 x 20 mm wide/straight blades, 5 x 16 mm wide/53° angled blades.

Content

27 pieces



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## **Universal scraper**

#### Design

With easily replaceable blade.

73312

73315

## Applications

For removing sealing and adhesive residues, film. labels.





73312 201

73315

73316

## **Precision mechanical scraper**

### Quality

Vanadium extra steel.

Design

BAHCO

Finely polished, encased with hollow blade up to the top, plastic handle with hand guard.

	0		
Blade length	Total length	73315	
mm	mm		
80	165		101
73316	Fine scraper		
D. J			

#### Design

Triple-edge, hollow-profile scraper blade, with black plastic protective cap and black plastic handle.

Blade length mm	Blade width mm	Weight	73316	
	111111	approx. g		
25	8	40		101

## 73317 - 73318

## ERGO pocket paint scraper



## 73317 101

#### Design

Ergonomic pocket paint scraper. Two-component handle for comfort while working. Narrow front section with thumb recess for increased precision. Complete with triangular blade and holster.

#### Applications

Specially designed for precision work, e.g. on windows or hard-to-reach areas. Cemented carbide blades allow the scraping of paint, glue, lacquer and rust on any surface, e.g. wood, metal and concrete.

#### Note:

For replacement triangular blade, see art. no. 73318 104.

#### 73317 102

#### Desian

Ergonomic universal paint scraper. Two-component handle for comfort while working. Narrow blade holder for better accessibility in hard-to-reach areas.

### Applications

Cemented carbide blades allow the scraping of paint, glue, lacquer and rust on any surface, e.g. wood, metal and concrete.

#### Note:

see art. no. 73318 105.

73318 104	
Triangular	blade

### Design

The Coromat cemented carbide spare blade prevents scratches or scoring and ensures a service life up to 50 times longer.

#### Applications

For pocket paint scraper, art. no. 73317 101. Can be used on three sides. For removing paint, lacquer and rust on the respective surface.

#### 73318 105

#### Straight blade Design

The Coromat cemented carbide spare blade prevents scratches or scoring and ensures a service life up to 50 times longer.

#### Applications

For universal paint scraper, art. no. 73317 102. Can be used on both sides. For removing paint, lacquer and rust on the respective surface.



73318 104



73318 105

For straight replacement blade,

		Scraper	Replacement blade		le	
	Working width	73317		73318		
	mm					
Scraper 625	25		101			
Scraper 650	50		102			
Triangular blade	25				104	
Straight blade	50				105	

73.11

| HEM

## Hook tools | Deburring tools

#### 73329 Deburring tool for external thread/rod material 73329 101 Design - Powerful deburring tool with drive E 6.3 NEW - For deburring damaged screws, stud bolts, threaded rods and rod-shaped parts with a diameter of 3-19 mm Applications Suitable for deburring steel, stainless steel, aluminium, copper, brass, wood, plastic. 73329 Туре Uni reamer for threaded rods 101 73330 Triangular bearing scraper Design 73330 With wooden handle and polished work surface. Quality Tool steel. Blade length Spoon length 73330 mm mm 200 85 101 Hook tool set 73340 Applications 73340 Contents Ideal for removing and inserting O-rings and seals. 1 hook tool straight, hook tool S-shaped, 1 1 hook tool 90°, hook tool round. 1 Contents Version 73340 101 4-piece in bag 73405 Replacement blades B, shank diameter 2.6 mm Applications 73405 105 73405 101 73405 105 For art. no. 73400-73402. Type B 10 C, solid carbide For stainless steel and plastics. $\square$ $\square$ Note: For plastic handles, see art. no. 73469. 73405 106 73405 102 73405 106 For spare blade holder B, see art. no. 73402. Shape B 20, HSS For normal deburring work on brass and cast iron. $\square$ 73405 101 Right- and left-hand cutting $\cap$ Shape B 10, HSS 73405 108 For normal deburring work on steel, aluminium and Shape B 30, HSS plastic. 73405 103 73405 108 For simultaneous removal of inside and outside 73405 102 burrs. Type B 10 L, HSS For left-handed use. 73405 109 Shape B 60, HSS 73405 104 73405 109 73405 103 For cross-drilled holes in poorly accessible places. Type B 10, TiN-coated To extend the service life. מכ 73405 104 Type B 10 plus For stainless steel. 73405 Туре P

B 10 HSS	10 pcs.	101
B 10 L, HSS left	10 pcs.	102
B 10 TiN	10 pcs.	103
B 10 plus	10 pcs.	104
B 10 C solid carbide	10 pcs.	105
B 20 HSS	10 pcs.	106
B 30 HSS	10 pcs.	108
B 60 HSS	10 pcs.	109

73.12

eng/P

#### 73400 - 73402 **Deburring tools**

#### Applications

For precise deburring work on drilled holes as well as on straight, concave and convex edges.

#### Note:

For replacement blades, see art. no. 73405.

## 73400

73402

#### Deburring tool set B Set contents:

Universal plastic handle EL 1000 with adjustable blade holder B for blades with shank diameter 2.6 mm. Including rotating HSS blades B 10 and B 20.

Blade holder B, adjustable length. For all rotating

blades, shank diameter 2.6 mm.



#### 73402

73400

1

		Deburring set	В	lade holder B	
Туре	Length mm	73400		73402	
B set	-		101		
Blade holder B	131				101

### 73410

## Deburring tool set E

#### Set contents:

Universal plastic handle EL 1000 with adjustable blade holder E for blades with shank diameter 3.2 mm. Including rotating HSS blades E 100, E 200 and E 300.

## Applications

For medium and heavy-duty deburring work on drilled holes as well as straight, concave and convex edges.

73410

101

#### Note:

For replacement blades, see art, no. 73420. For spare blade holder E, see art. no. 73417.



## Compact set EL 6000

#### Set contents:

73413

Туре

E set

Compact handle EL 2100 with wear-resistant steel blade guide for shank diameter 3.2 mm. Including rotating HSS blades E 100, E 200 and E 300.

### Applications

For all deburring work on the workpiece surface, where no length-adjustable blade holder is required.

#### Note:

For replacement blades, see art. no.73420. For plastic handle, see art. no. 73469.



EL 6000 set

# 73415

Design Aluminium handle with replaceable HSS blade E 100.

## Applications

For universal deburring work.

#### Note:

For replacement blades, see art. no. 73420.



Quick deburring tool RB 1000

## Blade holder E

#### Applications

For all rotating blades, shank diameter 3.2 mm.

Туре	Length mm	73417	
Blade holder E	131	101	

73490

201

#### 73490 **Deburring tool handle**

#### Design

SOFTGRIP handle with twin blade storage for all blades with 2.6-mm and 3.2-mm shank.

Туре	For blades art. no.
SG 3000	73405, 73420, 73476, 73478, 73479



73413

73415

73417

73490



73.13 HW

() = Items with prices in brackets partly available from stock ena/P

GRATTEC

## **Deburring tools**

## 73420

Applications For art. no. 73410 to 73417.

#### Note:

For plastic handles, see art. no. 73469. For spare blade holder E, see art. no. 73417.

#### 73420 101

Type E 100, HSS For heavy-duty deburring work on steel, aluminium and plastic.

73420 102

Type E 100 L, HSS For left-handed use.

#### 73420 103 Type E 100, TiN-coated To extend the service life.

73420 104

Type E 100 plus Particularly suitable for stainless steels.

Ð	73420	
10 pcs.		101
10 pcs.		102
10 pcs.		103
10 pcs.		104
10 pcs.		105
10 pcs.		107
10 pcs.		108
10 pcs.		109
10 pcs.		110
10 pcs.		111
10 pcs.		113
10 pcs.		114
10 pcs.		115
10 pcs.		116
	10 pcs. 10 pcs.	10 pcs.     10 pcs.

## 73420 105

Replacement blades E, shank diameter 3.2 mm

Type E 100 C With cemented carbide blade for stainless steel and plastic.

73420 107 Type E 101 With thick shank and thin blade for steel, aluminium and plastic.

73420 108 Type E 101 L For left-handed use.

73420 109 Type E 101, TiN-coated For extended service life.

#### 73420 110

Type E 150, HSS With thick shank and thin cutting edge for small holes from a diameter of 1.2 mm.

Г

73420 111 Type E 200, HSS For heavy-duty deburring work on brass and cast

iron. Right- and left-hand cutting. 73420 113 Type E 202, HSS

With thick shank and thin cutting edge for brass and cast iron.

## 73420 114

Type E 300, HSS For simultaneous removal of large internal and external burrs on holes in sheet metal and tubes.

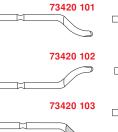
## 73420 115

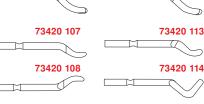
Type E 350, HSS For large burrs on straight edges.

#### 73420 116

Type E 600, HSS For large burrs on cross-drilled holes.

73420 104-105





73420 109 T

73420 110

73476 101

73420 116

73476 104-105

73478

73420 111

Q

73420 115

Norkshop equipment

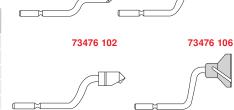
## 73476

## **Deburring tools**

## Applications

For crank countersinks and chamfers.

Туре	Diameter mm	73476
BC 3200 for drilled holes	3.2	101
BC 6300 for drilled holes	6.3	102
BC 1040 for drilled holes	10.4	104
BC 1650 for drilled holes	16.5	105
EX 2000 for external diameter	18.0	106



73478

## Recess deburring blade type BO 1000

#### Applications

For deburring grooves for O-rings on

Type		73478			Ð
BO 1000			102		
73479	Deburring blade type BC 1000				
0	rring internal threads with a				73479

73479

102

For cleaning and deburring internal threads with a diameter of at least 9 mm, all pitches. For all 55° and 60° thread flanks.

Type BC 1000

73.14

= The specified prices are unit prices. Only sold in the specified packing P) units. Always specify number of units in order information.

#### 73425 - 73430 Countersink deburring tool set EL 1300

#### Applications

For deburring and chamfering drilled holes with a diameter up to 30 mm.

#### 73425

#### Countersink deburring tool EL1300 Set contents:

Universal plastic handle EL 1000 with adjustable blade holder C and HSS countersunk head C 20.

#### 73428

Spare blade holder C For all type C countersink tools, with M7 external thread.

#### 73430

Replacement type C HSS countersinks, 90°.

73425
73428

73430 101

73430 102



			Deburring set		Blade holder C		Countersink C	
Туре	Length	Diameter	73425		73428		73430	
	mm	mm						
Countersink deburring tool EL 1300	-	-		101				
Blade holder C	131	-				101		
Countersink C 12	-	12						101
Countersink C 20	-	20						102
Countersink C 30	-	30						103

## 73435 - 73436 Mini deburring tool

13435 - 13430		Junnig						
Design With Softgrip holder. 73435 Mini set FT 3000 3 pieces. Set contents. 1 crank countersink, 1 triangular scraper, 1 x universal deburring tool.			73436 101 Crank countersink Applications For drilled holes with 73436 102 Triangular scraper Applications For fine and difficult w 73436 103 Universal deburring Applications For drilled holes, edge	vork. tool	.2 mm.			73435
Туре	73435							
Set FT 3000		101		73436 101	-	73436 102		73436 103
Туре	73436			2				15
Crank countersink		101		s-m		-	-	1 miles
Triangular scraper		102			0	2		1 1 1 2 -
Universal deburring tool		103						
73440 - 73446	Groove	deburri	ing tool set E	L 1400				
Applications For deburring longitudinal slot in shafts and hubs.	s, slots and ke	yways	73446 Replacement HSS b	lades type N.			-	73440
73440								
Groove deburring tool EL 14 Set contents: Universal plastic handle EL 10		abla		7	73446 101	7344	6 102	73446 103
blade holder N and 1 HSS bla		able		$\bigcirc$				
			Deburring set	Blades N				
Туре	Gr	oove width mm	73440	73446				
Groove deburring tool EL	1400	-		101				
N 70 K		1.2-8			101	4.50		
N 80 K		2.4-11			102			
		20 10			100			

eng/P () = Items with prices in brackets partly available from stock.

3.0-15

N 90 K

103

HIN 73.15

## **Deburring tools**

#### 73450 - 73455 Maxi triangular scraper set EL 1601

73455

with external thread.

#### Applications

For local material removal and deburring more difficult areas.

### 73450

Maxi triangular scraper set EL 1601 Set contents:

Universal plastic handle EL 1000 with adjustable blade holder T and 1 HSS triangular scraper blade T 60 with external thread.

#### 73453

Spare blade holder T

Spare triangular scraper blades type T, HSS



73455 101

Ŧ

73464 102

73450

73453

with internal thread.								
			Set		Holder		Blades	
Туре	Length mm	Size mm	73450		73453		73455	
EL 1601	-	-		101				
Blade holder T	112	-				101		
T 40, HSS	-	5 x 40						101
T 60, HSS	-	7 x 60						102



### 73460 - 73461

## Edge deburring tool set EL 1700

#### Applications

For 45° chamfers on workpiece edges.

- Set contents for 73460
- 1 Universal plastic handle EL 100 with adjustable blade holder EL 0750, 1
- $\ensuremath{\textbf{Adjusting screw}}$  for chamfer size, guide shoe is firmly attached to the blade holder,
- Blade L-1. 1





Workshop equipment

Туре 73460 73461	
Deburring set EL 1700 101	
Blade holder EL 0750 1	01



## **Double deburring tool DB**

#### 73463 73464 102 73463 Design For stainless steel. Plastic handle with hand guard and 2 HSS round cutting blades N 80. Applications For simultaneous two-sided deburring of narrow bars up to 12 mm, sheet metal parts and edges. Suitable for almost any material. The round cutting blades can be used to the full extent of both edges by turning.

		Deburring tool	Round	d cutting blade			
Туре	Pack = pieces	73463		73464			73464 101
Deburring tool DB	-		101				
Spare round cutting blade N 80	10				101	$((\bigcirc))$	
Spare round cutting blade N 80 M 42	10				102		
						$\sim$	



### = The specified prices are unit prices. Only sold in the specified packing units. Always specify number of units is acted in formation units. Always specify number of units in order information.

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HIN

### Deburring tool set

#### Applications

For precise, safe and fast deburring of drilled holes, straight, concave and convex edges and metal sheets.

#### Set contents

- Universal plastic handle EL 1000, 1
- Type B blade holder with 1
- 1 HSS blade B 10 for normal deburring work, for steel, aluminium and plastic HSS blade B 20 for regular deburring work, for brass and cast iron 1
- Type E blade holder with 1
- 1
- HSS blade E 100 for heavy-duty deburring work, for steel, aluminium and plastic
- HSS blade E 200 for heavy-duty deburring work, for brass and cast iron 1
- HSS blade E 300 for heavy-duty deburring work, for drilling holes in sheet metal and tubes 1
- Type N blade holder with 1
- HSS blade, for keyway width 2.4-11 mm 1
- Type C blade holder with 1
- HSS countersunk head C 20, 20 mm diameter 1
- Type D blade holder with 1
- HSS triangular scrapers 3.2 x 50 mm 2
- 1 D 66 blade for inside and cross-drilled holes
- D 50 blade for fine deburring work, with protective cap 1
- 1 Double deburring tool DB 2000 with
- 2 HSS round cutting blades for narrow workpieces and metal sheets With spare screws and T-handle wrench

Design	73465
in plastic box	101

## **Deburring tool sets**

#### 73466 101

#### Deburring tool set E.

73466

#### For medium and heavy-duty deburring work on drilled holes as well as straight, concave and convex edges.

## Set contents 73466 101

- Universal plastic handle EL 1000, 1 Blade holder E for blades with shank diameter 3.2 mm.
- 3 HSS blades, for difficult deburring work: E 100 blade for steel, aluminium and
- plastic
- E 200 blade for brass and cast iron. 1
- E 300 blade for drilled holes in sheet metal and 1 pipes

#### 10 each of Additional E 100 and E 200 blades,

10 E 300 blades for large burrs on straight edges.

#### Note:

For replacement blades E (shank diameter 3.2 mm), see art. no. 73420.

#### 73466 102 Deburring tool set B.

For precise deburring work on drilled holes as well as on straight, concave and convex edges.

	Set contents 73466 102
1	Universal plastic handle EL 1000,
1	Blade holder B for blades with shank diamete
	2.6 mm,
	2 HSS blades, for normal deburring work:

- B 10 blade for steel, aluminium and
  - plastic.
- B 20 blade for brass and cast iron, 1 10 each of additional B 10 and B 20 blades.

#### Note:

For replacement blades B (shank diameter 2.6 mm), see art. no. 73405.



73466 101

73465



73466 102

73456



	Content	Design	73466
Deburring tool set E	35 piece	in plastic box	101
Deburring tool set B	24 piece	in plastic box	102

#### 73456 Deburring tool set NB1402GT

## Applications

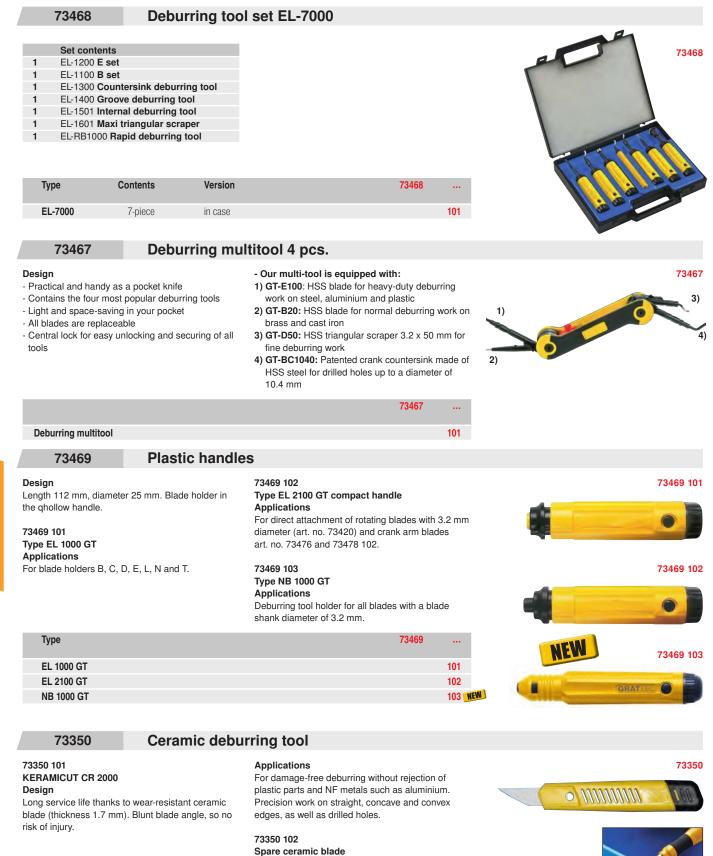
Starter set for ambitious hobby craftsmen and mechanics. Ideal for deburring and countersinking



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| HEM 73.17

## Deburring tools | Scrapers







ena/P

73.18

Workshop equipment



## Deburring tool set NB1401GT

## Applications

73352

Ideal for scraping and cleaning surfaces, as well as deburring work on edges and pipe or workpiece

sections	made from aluminium, copper or plastic. Set contents NB1000GT CR1500GT GT-E100 blade GT-E100TIN blade GT-E100S blade GT-E150 blade			
	Type Contents	733		COMBOBUR
NB14	01GT 7-piece		101	COMBOBORR

### 73480

## **Triangular scraper SC 8000**

#### 73480 201 Design

#### 73480 202 Spare triangular scraper blade type T 80,

double-sided.

Triangular scraper SC 8000 with 4 x 80 mm doublesided, hollow-ground scraper blade. The projection adiuatable of the blede

of the blade is adjustable.				73480 202
Туре	73480		Value	
SC 8000		201		
Blade T 80/4x80		202		

#### 73481 - 73483 **Reverse deburring tool**

#### Applications

#### 73482 101 Design

For deburring the front and back sides of drilled holes. By pressing on the shank head, the deburring blade can be placed in a vertical position for inserting into the drilled hole.

#### 73481

EL-RC3000 DRILLING patent protected. Design

3-piece. 1 reverse deburring tool each for diameters 3-5.5/5-10/10-22 mm. Hexagon socket screwdriver for blade changes included in the shank. In storage box.

Swivelling HSS blade BR1000 for diameters 3-5.5 mm. With retractable blade and hex key to change the blade.

#### 73482 102 Design

Swivelling HSS blade BR2000 for diameters 5.5-10 mm. With retractable blade and hex key to change the blade.

### 73482 103

Design

Swivelling HSS blade BR2200 for diameters 10-22 mm. With retractable blade and hex key to change the blade.

#### 73483

Replacement blades for reverse deburring tool art. no. 73481-73482.

	Set	Individual	Replac	cement blades	
Application range diameter	73481	73482		73483	
mm					
3–22	101				
3–5.5			101	101	1
5.5–10			102	102	2
10–22			103	103	3







HIM 73.19



73480 201

GRATTES

NEW

73352

Table sheet metal shears

70 x 6

#### 73610 - 73612 Hand lever sheet metal shears 73611 73610 Design 73611 Robust, stable construction made from quality steel. Replacement upper blade. Levers with strong springs make cutting easier. The high-quality, durable cutting blades are hardened 73612 Replacement lower blade. and tempered. Applications For sheet metal plates and round steel bars. 73612 Note: Long cutting blades 300, 400 or 500 mm and circular blade deliverable on request. Metal shears Upper blade Lower blade Model Blade length **Cutting performance** mm weight 73610 73611 73612 mm plates round bars metal sheets kg 201 201 2BR4 120 4 11 50 x 4 8 201 2BR5 150 5 11 60 x 5 10 202 202 202

18

## 73613 **Zmetallkraft**

#### Design

2**B**R6

- Heavy-duty manual table sheet metal shears

180

6

- Extremely stable and heavy cast iron construction
- Open design, large cast iron workbench
- The standard retainer ensures good cutting results
- Detachable mitre stop on workbench
- Adjustable side stop via hand crank
- Applications

For sheet metal panels of up to 1.5 mm and continuous lengths up to a width of 1250 mm.



203

203

203

Туре И	Vidth of cut max. mm	Max. sheet thickness mm tensile strength 400 N/mm ²	Limit stop range mm	Workbench (L x W) mm	Dimensions (L x W x H) mm	Weight approx. kg	73613	
BSS 1020 E	1050	1.50	0-600	1280 x 600	2000 x 850 x 1500	435		101



HIN