



# Cutting

Manual circular shears

KS

Manual sheet metal shears

BSS

Precision sheet metal shears

HTBS

HTBS M

Motor-driven sheet metal shears

MTBS

MTBS D

Hydraulic sheet metal shears

HTBS E

HTBS



Sheet metal shears



Precision sheet metal shears



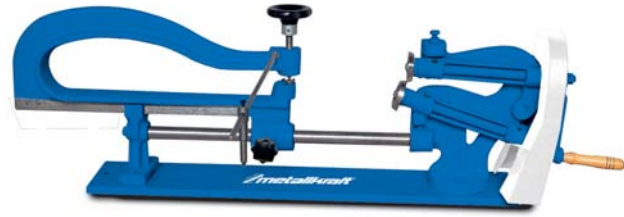
Motor-driven sheet metal shears



Hydraulic sheet metal shears

## KS 1 - Manual circular shears to cut arcs of a circle in steel and non-ferrous metals of a material thickness of up to 1.0 mm

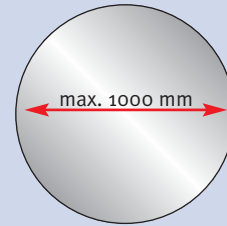
- appropriate to cut metals, paper and other material
- very stable and robust construction made of cast iron
- knife made of special steel K2379, with gunmetal bearing
- knives are hardened, can be regrinded and are adjustable
- optimum price/performance ratio



<b>Model</b>	<b>KS 1</b>
Item No	381 1001
€ plus VAT	<b>679.00</b>

<b>Technical data</b>	
Max. workpiece Ø	1000 mm
sheet thickness* max.	1.0 mm
Throat	600 mm
Throat height	200 mm
Dimensions in mm	1200 x 200 x 350
Weight	45 kg

\*The indications for cutting performance are referring to 29 kg/m<sup>2</sup> bending limit for steel sheets



<b>Accessories</b>	<b>Item No</b>	<b>€ plus VAT</b>
Kit of spare blades	388 0150	<b>99.00</b>

## BSS 1000 - Universally applicable steel shears for sheet metals, paper and other material with collapsible substructure



- perfect for craftsmen on site
- solid and robust construction
- little dimensions due to collapsible base
- easy to transport
- for steel plates (400 N/mm<sup>2</sup>) up to 1.2 mm and endless lines up to a width of 1020 mm
- the serially holding down clamp provides for perfect cutting results
- optimum price/performance ratio



**BSS 1000**  
with collapsed substructure

<b>Model</b>	<b>BSS 1000</b>
Item No	374 1100
€ plus VAT	<b>1'999.00</b>

<b>Technical data</b>	
Max. cutting width	1020 mm
Sheet thickness max.	1.20 mm
Dimensions in mm	1830x550x1225
Weight	97 kg

<b>Accessories</b>	<b>Item No</b>	<b>€ plus VAT</b>
Side stop BSS 1000	376 0110	<b>379.00</b>
Spare knife BSS 1000	376 0111	<b>749.00</b>

## BSS - universally applicable heavy type manual sheet metal shears for handicraft and industry

- for steel plates (400 N/mm<sup>2</sup>) up to 1,5 mm and endless lines up to a width of 1060 mm
- very stable and heavy construction made of cast iron
- open structure, therefore appropriate for endless cuts
- large cast iron working table (1300 x 600 mm)
- the serial holding-down clamp provides for perfect cutting results
- angle stop adjustable via crank handle
- optimum price/performance ratio



Model	BSS 1020	BSS 1250
Item No	381 6001	381 6002
€ plus VAT	2'669.00	3'139.00

### Technical data

Max. cutting width	1050 mm	1250 mm
Sheet thickness max.	1,50 mm	1,50 mm
stop range	50 - 450 mm	50 - 450 mm
Width of rear stop	550 mm	550 mm
Working table	600 x 1300	600 x 1500
Dimensions in mm	2000 x 850 x 1500	2450 x 1000 x 1820
Weight	390 kg	480 kg

### Accessories

Accessories	Item No	€ plus VAT
Spare knife BSS 1020	388 0042	675.00
Spare knife BSS 1250	388 0043	825.00

## HTBS - manual precision sheet metal shears type M - motor-driven to be used in the serial production



- manually operated precision table sheet metal shear
- to cut metal, paper, circuit boards, plastic material and other materials
- with angle stop at the front and at the rear
- serial with base

### HTBS 1000-10 M

- motor-driven and appropriate to be used in the serial production
- with illuminated cutting range
- safety device with start-up stop



HTBS 1000-10 M

Model	HTBS 1000
Item No	377 0310
€ plus VAT	2'529.00

### Technical data

Max. working width	1000 mm	1000 mm
Sheet thickness max.*	1.00 mm	1.00 mm
Cuts per min.	-	54
Motor power 400 V	-	0.75 kW
Weight	140 kg	185 kg
Dimensions in mm	1230 x 380 x 380	1250 x 950 x 535

### Accessories

Accessories	Artikel-Nr.	€ plus VAT
Standard knife HTBS 1000-10	376 5001	599.00
Special knife HTBS 1000-10	376 5003	889.00

## MTBS - heavy type motor-driven sheet metal shears with foot control

- appropriate to cut metals and other material
- torsion-free welded steel structure
- heavy type machine
- silent drive via braking motor and gear
- all mobile parts are running on maintenancefree bearings
- double off-center drawing at the blade carrying rail, by which a rapid and precise cut with little noise is being achieved
- due to the foot control both hands are free to supply the material
- serial width plastic coated holding-down clamp for material and manually adjustable width stop



Rear view MTBS 2550-40 D



**MTBS 1350-30**  
Motor-driven sheet metal shears  
with manual rear stop



### MTBS - motor-driven sheet metal shears with foot control

Model	Working width	Steel sheet thickness	Cutting angle	Rear stop	Stroke per min.	Cuts per min.	Weight	Dimensions LxWxH in mm	Item No	€ plus VAT
MTBS 1350-30	1350 mm	3.0 mm	1° 30'	550 mm	35	3.0 kW	990 kg	1700 x 1350 x 1200	381 5101	9'609.00
MTBS 2050-30	2050 mm	3.0 mm	2° 12'	550 mm	35	3.0 kW	1220 kg	2400 x 1350 x 1200	381 5102	11'549.00
MTBS 2550-25	2550 mm	2.5 mm	1° 30'	550 mm	35	3.0 kW	1400 kg	2860 x 1350 x 1200	381 5103	12'689.00
MTBS 3100-20	3100 mm	2.0 mm	1° 30'	550 mm	35	3.0 kW	1500 kg	3400 x 1350 x 1200	381 5104	15'599.00

### MTBS D - motor-driven sheet metal shears with motor-driven rear stop and digital display

Model	Working width	Steel sheet thickness	Cutting angle	Rear stop	Stroke per min.	Cuts per min.	Weight	Dimensions LxWxH in mm	Item No	€ plus VAT
MTBS 2050-40 D	2050 mm	4.0 mm	1° 30'	750 mm	42	7.5 kW	2800 kg	2550 x 2260 x 1330	381 5201	17'459.00
MTBS 2550-40 D	2550 mm	4.0 mm	1° 30'	750 mm	42	7.5 kW	3230 kg	3050 x 2260 x 1330	381 5202	18'879.00
MTBS 3100-40 D	3100 mm	4.0 mm	1° 30'	750 mm	42	7.5 kW	3730 kg	3650 x 2260 x 1330	381 5203	21'519.00



**MTBS 2050-40 D**  
 Motor-driven sheet metal shears  
 with motor-driven rear stop

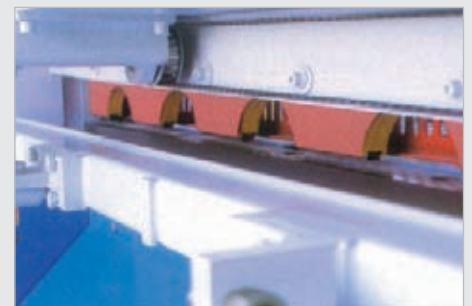


**NC control rear stop  
 for MTBS "D"**

- 50 programs can be saved or single-step control for rear stop and stroke
- high-speed positioning
- saving of starting point
- programmable stroke
- stroke counter



- supporting table with ball casters provide for easy and gentle material supply



- motor-driven rear stop 750 mm (also optional as 1000 mm)



- the pneumatic thin sheet lifting mechanism avoids that the sheet is bending downward behind the cutting edge when cutting thin materials and thus provides for highest stopping accuracy (optionally)

Accessories	Item No	€ plus VAT
Stop with T-slots, scale and tilting dog		
2000 mm	388 0001	<b>3'429.00</b>
3000 mm	388 0002	<b>4'549.00</b>
Extension angle stop 2000 mm	388 0003	<b>925.00</b>
Extension angle stop 3000 mm	388 0004	<b>1'449.00</b>
Adjustable angle stop 0-180°	388 0005	<b>1'139.00</b>
Spare knife MTBS 1350-30	388 0036	<b>1'369.00</b>
Spare knife MTBS 2050-30	388 0037	<b>2'049.00</b>
Spare knife MTBS 2550-25	388 0038	<b>2'509.00</b>
Spare knife MTBS 3100-20	388 0039	<b>2'669.00</b>
Spare knife MTBS 2050-40 D	388 0046	<b>2'279.00</b>
Spare knife MTBS 2550-40 D	388 0047	<b>2'739.00</b>
Spare knife MTBS 3100-40 D	388 0048	<b>2'909.00</b>
Cutting line illumination for D models (only for 381 5201, 381 5202 and 381 5203)	388 0044	<b>915.00</b>

Additional prices for optional equipment*	Item No	€ plus VAT
Pneumatic thin sheet lifting mechanism		
MTBS 1350	388 0006	<b>3'429.00</b>
MTBS 2050/ MTBS 2050 D	388 0007	<b>4'109.00</b>
MTBS 2550/ MTBS 2550 D	388 0008	<b>4'339.00</b>
MTBS 3100/ MTBS 3100 D	388 0009	<b>4'559.00</b>
Motor-driven rear stop 750 mm with digital display for MTBS	388 0010	<b>2'279.00</b>
Mechanic stroke counter	388 0012	<b>459.00</b>
Motor-driven rear stop 1000 mm for MTBS	388 0013	<b>3'419.00</b>
for MTBS D	388 0014	<b>1'139.00</b>
NC control rear stop with stroke counter for MTBS D	388 0015	<b>1'139.00</b>

\*Optional equipment cannot be retrofitted subsequently

## HTBS 3100-60 E - hydraulic sheet metal shears of up to 6 mm cutting performance and foot control

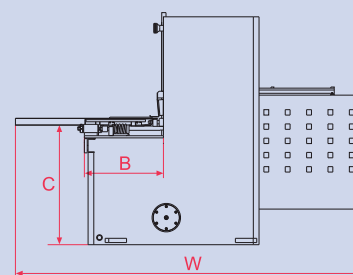
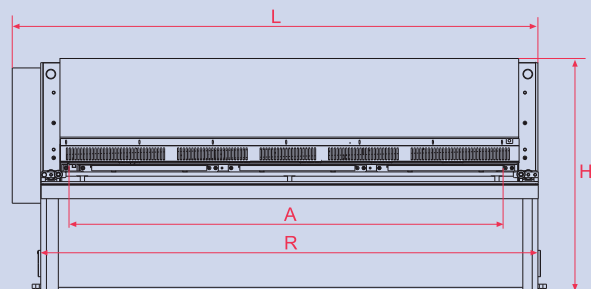
**New**

- cutting range from 0.3 to 6 mm
- rapid and precise adjustment of cut gap
- constant cutting angle
- digital position indicator
- supporting table including ball casters
- motor-driven rear stop 750 mm, foldable, adjustable via 2 ball screws
- scaled lateral stop including T grooves
- two support arms including T grooves
- hydraulic holding-down clamp
- mobile foot switch including safety cable
- finger guard
- illumination
- electrical and hydraulic components "SIEMENS", "REXROTH" or "OMRON"

Please indicate the type of material which needs to be manufactured when ordering!



<b>Model</b>	<b>HTBS 3100-60 E</b>	
Item No	382 3406	
<b>€ plus VAT</b>	<b>from 24'799.00</b>	
<b>Technical data</b>		
Cutting length	3100 mm	
Cutting performance for ST 45	6 mm	
Cutting performance for ST 70	4 mm	
Strokes per minute at complete cutting length	14	
Cutting angle	1.30°	
Adjustment of cutting gap	Min.	0.05 mm
	Max.	0.75 mm
Table height (C)	880 mm	
Table depth (B)	500 mm	
Table length (R)	3200 mm	
Number of blank holders	14	
Pressure of the blank holder	8.5 t	
Adjustment range rear stop	750 mm	
Motor power rear stop	0.55 kW	
Speed rear stop	120 mm/min.	
Driving power	11 kW	
Oil tank capacity	170 l	
Number of support consoles	2	
Length (L)	3750 mm	
Depth (D)	2350 mm	
Height (H)	1650 mm	
Weight	5650 kg	



All hydraulic sheet metal shears are delivered without oil.



- supporting table including ball casters
- hydraulic holding-down clamp
- finger guard



- optionally including programmable control ENC 100 (supports individual step and multiple programming with up to 50 programming steps and programming of other functions such as retraction, positioning of the rear stop, cutting length, number of pieces and lifting mechanism for sheets)



- with adjustable angle stop it is possible to exactly adjust any angle and the angle can be cut easily and rapidly (optionally)



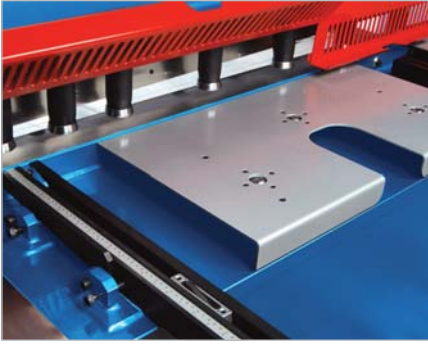
- optionally including motor-driven, automatic foldable rear stop
- the pneumatic thin sheet lifting mechanism avoids that the sheet is bending downward behind the cutting edge when cutting thin materials and thus provides for highest stopping accuracy (optionally)

Optional accessories (not retrofittable)	Item No	€ plus VAT
NC control ENC 100	388 2000	<b>1'139.00</b>
Adjustable angle stop 0-180°	388 2002	<b>1'139.00</b>
Pneumatic thin sheet lifting mechanism	388 2003	<b>4'569.00</b>
Motor-driven rear stop 1000 mm, automatically foldable	388 2004	<b>915.00</b>
Additional support arm L=2m (1 pc.)	388 2005	<b>3'425.00</b>
Additional support arm L=3m (1 pc.)	388 2006	<b>4'545.00</b>
Extension support arm L=2m (1 pc.)	388 2007	<b>925.00</b>
Extension support arm L=3m (1 pc.)	388 2008	<b>1'449.00</b>
Extension angle stop L=2m (1 pc.)	388 2009	<b>1'189.00</b>
Extension angle stop L=3m (1 pc.)	388 2010	<b>1'715.00</b>
Angle stop (1500 mm) on the right side	388 2011	<b>3'425.00</b>

Spare knife	Item No	€ plus VAT
1 kit spare knives HTBS 3100-60 E	388 2012	<b>3'189.00</b>

## HTBS - heavy, hydraulic sheet metal shears for professional use, including foot control and slewable control panel - NT types with throat 50 mm

- heavy steel welding construction
- cutting range from 0.5 to 20 mm
- manual adjustment of cutting gab via adjustment lever with Nonius
- constant low cutting angle for optimum cutting results
- Standard model with throat of 350 mm
- NT type with throat of 50 mm
- ergonomically positioned control panel
- digital position indicator
- broad supporting tables with ball casters
- motor-driven, automatic foldable rear stop 1000 mm, via 2 ball screws and adjustable linear guides
- lateral stop 1500 mm, scaled, with T grooves
- two support arms with T grooves (HTBS 4100-60 and HTBS 4100-130 including three support arms)
- holding-down clamp with self-adjustable pressure
- separated foldable finger guard 1000 mm
- light barrier for the rear stop area
- mobile foot switch including safety cable
- continuously variable cutting length
- illumination with cutting line display
- electric and hydraulic components "SIEMENS", "REXROTH" or "TELEMECANQUE"



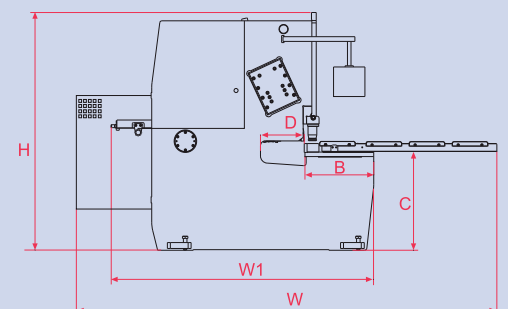
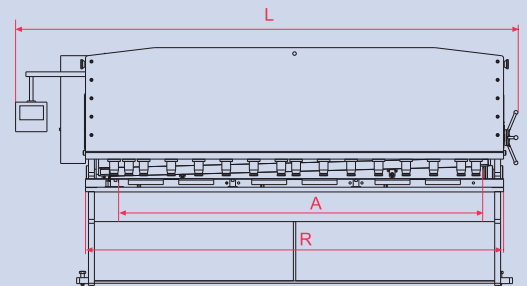
- wide supporting tables with ball casters
- self-adjusted, independently working holding-down clamp provide for correct clamping of the sheet
- the foldable finger guard allows better insight of the workpiece at the provided cutting position

Please indicate the type of material which needs to be machined when ordering



**HTBS 3100-100**  
Fig. with optional  
NC control ENC 100

Model	HTBS 3100-60 NT	HTBS 3100-80 NT	HTBS 3100-100 NT	HTBS 3100-130 NT
Item No	382 3306	382 3308	382 3310	382 3313
€ plus VAT	from 26'989.00	upon request	upon request	upon request
<b>Technical data</b>				
Cutting length	3100 mm	3100 mm	3100 mm	3100 mm
Cutting performance for ST 45	6 mm	8 mm	10 mm	13 mm
Cutting performance for ST 70	4 mm	5 mm	6 mm	8 mm
Stayer throat (D)	50 mm	50 mm	50 mm	50 mm
Strokes per minute at complete cutting length	15	11	13	13
Cutting angle	1.30°	1.30°	1.30°	1.45°
Adjustment of cutting gap	Min. 0.05 mm Max. 0.75 mm	0.05 mm 1.05 mm	0.05 mm 1.05 mm	0.05 mm 1.45 mm
Table height (C)	865 mm	865 mm	865 mm	845 mm
Table depth (B)	500 mm	580 mm	580 mm	600 mm
Table length (R)	3515 mm	3515 mm	3515 mm	3550 mm
Number of holding-down clamps	16	16	16	16
Pressure of the holding-down clamps	14 t	22 t	22 t	37 t
Adjustable range rear stop	1000 mm	1000 mm	1000 mm	1000 mm
Motor power rear stop	0.75 kW	0.75 kW	0.75 kW	0.75 kW
Speed rear stop	120 mm/min.	120 mm/min.	120 mm/min.	120 mm/min.
Driving power	15 kW	15 kW	22 kW	30 kW
Oil tank capacity	200 l	200 l	200 l	330 l
Number of support consoles	2	2	2	2
Length (L)	4110 mm	4200 mm	4200 mm	4280 mm
Depth (D1)	2200 mm	2250 mm	2250 mm	2300 mm
Total depth (D)	3700 mm	3600 mm	3600 mm	3600 mm
Height (H)	2100 mm	1950 mm	2100 mm	2350 mm
Weight	7250 kg	8900 kg	11800 kg	



All hydraulic sheet metal shears are delivered without oil.

New



- it is possible to cut steel sheets which are longer than the actual length of the knife due to the large throat of 350 mm (not applicable for NT models)



- motor-driven, automatic foldable rear stop 1000 mm, adjustable by 2 ball screws and linear guide



- manual adjustment of cutting gap via adjustment lever with Nonius

Model	HTBS 3100-60	HTBS 3100-100	HTBS 3100-130	HTBS 3100-160	HTBS 3100-200	HTBS 4100-60	HTBS 4100-130
Item No	382 1306	382 1310	382 1313	382 1316	382 1320	382 1406	382 1413
€ plus VAT	upon request	upon request	upon request	upon request	upon request	upon request	upon request
<b>Technical data</b>							
Cutting length	3100 mm	3100 mm	3100 mm	3100 mm	3100 mm	4100 mm	4100 mm
Cutting performance for ST 45		6 mm	10 mm	13 mm	16 mm	20 mm	6 mm 13 mm
Cutting performance for ST 70		4 mm	6 mm	8 mm	10 mm	13 mm	4 mm 8 mm
Stayer throat (D)	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm
Strokes per minute at complete cutting length	15	13	13	10	6	12	8
Cutting angle	1.30°	1.30°	1.45°	2°	2°	1.30°	1.45°
Adjustment of cutting gap	Min. 0.05 mm Max. 0.75 mm	0.05 mm 1.05 mm	0.05 mm 1.45 mm	0.07 mm 1.80 mm	0.09 mm 2.20 mm	0.05 mm 0.75 mm	0.05 mm 1.45 mm
Table height (C)	865 mm	865 mm	845 mm	818 mm	886 mm	865 mm	818 mm
Table depth (B)	500 mm	580 mm	600 mm	550 mm	570 mm	580 mm	550 mm
Table length (R)	3515 mm	3515 mm	3550 mm	3580 mm	3670 mm	4510 mm	4520 mm
Number of holding-down clamp	16	16	16	14	14	20	18
Pressure of the holding-down clamp	14 t	22 t	37 t	61 t	77 t	17 t	62 t
Adjustment range rear stop	1000 mm	1000 mm	1000 mm	1000 mm	1000 mm	1000 mm	1000 mm
Motor power rear stop	0.75 kW	0.75 kW	0.75 kW	0.75 kW	0.75 kW	0.75 kW	0.75 kW
Speed rear stop	120 mm/min.	120 mm/min.	120 mm/min.	120 mm/min.	120 mm/min.	120 mm/min.	120 mm/min.
Driving power	15 kW	22 kW	30 kW	37 kW	45 kW	15 kW	30 kW
Oil tank capacity	200 l	200 l	330 l	410 l	450 l	200 l	330 l
Number of support consoles	2	2	2	2	2	3	3
Length (L)	4110 mm	4200 mm	4280 mm	4550 mm	4450 mm	5230 mm	5350 mm
Depth (D1)	2200 mm	2250 mm	2300 mm	2250 mm	2260 mm	2300 mm	2250 mm
Total depth (D)	3700 mm	3600 mm	3600 mm	3825 mm	3400 mm	3600 mm	3850 mm
Height (H)	2100 mm	2100 mm	2350 mm	2250 mm	2450 mm	2150 mm	2250 mm
Weight	7650 kg	9300 kg	12500 kg	15000 kg	21700 kg	11750 kg	16300 kg

All hydraulic sheet metal shears are delivered without oil.

## Accessory for heavy, hydraulic sheet metal shears HTBS



· optionally including programmable control ENC 100 (supports individual step and multiple programming with up to 50 programming steps and programming of other functions such as retraction, positioning of the rear stop, cutting length, number of pieces and lifting mechanism for sheets)



· with adjustable angle stop it is possible to exactly adjust any angle and the angle can be cut easily and rapidly (optionally)



· the pneumatic thin sheet lifting mechanism avoids that the sheet is bending downward behind the cutting edge when cutting thin materials and thus provides for highest stopping accuracy (optionally)

Optional accessories (not retrofittable)	Item No	€ plus VAT.
NC control ENC 100	388 0601	1'139.00
CNC control DAC 350	388 0602	4'699.00
Motor-driven adjustment of cut gap	388 0603	3'349.00
Adjustable angle stop 0-180°	388 0604	1'139.00
Rear stop 1250 mm	388 0605	7'899.00
Pneumatic thin steel sheet lifting mechanism "Standard" for HTBS 3100-60 / 3100-100 / 3100-130	388 0606	4'569.00
Pneumatic thin steel sheet lifting mechanism "Standard" for HTBS 3100-160 / 3100-200 / 4100-60 / 4100-130	388 0607	6'089.00
Pneumatic thin steel sheet lifting mechanism "two stage" for HTBS 3100-60 / 3100-100	388 0608	12'229.00
Pneumatic thin steel sheet lifting mechanism "two stage" for HTBS 3100-130	388 0609	14'109.00
Pneumatic thin steel sheet lifting mechanism "two stage" for HTBS 3100-160	388 0610	17'119.00
Pneumatic thin steel sheet lifting mechanism "two stage" for HTBS 4100-60	388 0611	16'179.00
Pneumatic thin steel sheet lifting mechanism "two stage" for HTBS 4100-130	388 0612	18'059.00
Pneumatic thin steel sheet lifting mechanism "return to sender" max. 6mm for HTBS 3100-60	388 0613	17'779.00
Pneumatic thin steel sheet lifting mechanism "return to sender" max. 6mm for HTBS 3100-100 / 3100-130	388 0614	20'409.00
Pneumatic thin steel sheet lifting mechanism "return to sender" max. 6mm for HTBS 4100-60	388 0615	24'359.00
Pneumatic thin steel sheet lifting mechanism "return to sender" max. 6mm for HTBS 4100-130	388 0616	26'989.00
Steel sheet lifting mechanism including conveyor belt and collector for remnants for HTBS 3100-60 / 3100-100 / 3100-130	388 0617	26'329.00
Stack conveyor for HTBS 3100-60 / 3100-100 / 3100-130	388 0618	25'019.00
CNC feed system for HTBS 3100-60 / 3100-100 / 3100-130	388 0619	32'919.00
CNC feed system for HTBS 3100-160 / 3100-200 / 4100-60 / 4100-130	388 0620	46'079.00
Stayer throat 500mm instead 350mm for HTBS 3100-60	388 0621	5'929.00

Optional accessories (not retrofittable)	Item No	€ plus VAT
Stayer throat 500 mm instead 350 mm for HTBS 3100-100	388 0622	6'589.00
Stayer throat 500 mm instead 350 mm for HTBS 3100-130	388 0623	7'239.00
Stayer throat 500 mm instead 350 mm for HTBS 3100-160	388 0624	7'899.00
Stayer throat 500 mm instead 350 mm for HTBS 3100-200	388 0625	8'559.00
Stayer throat 500 mm instead 350 mm for HTBS 4100-60	388 0626	7'239.00
Stayer throat 500 mm instead 350 mm for HTBS 4100-130	388 0627	8'559.00
Hydraulic rear stop, automatically foldable for HTBS 3100-160 / 3100-200 / 4100-130	388 0628	9'129.00
Additional support arm L=2m (1 pc.)	388 0629	3'429.00
Additional support arm L=3m (1 pc.)	388 0630	4'549.00
Extension support arm L=2m (1 pc.)	388 0631	925.00
Extension support arm L=3m (1 pc.)	388 0632	1'449.00
Extension angle stop L=2m (1 pc.)	388 0633	1'189.00
Extension angle stop L=3m (1 pc.)	388 0634	1'719.00
Angle stop (1500 mm) on the right side	388 0635	3'429.00
Safety light barrier	388 0636	4'569.00
Laser cutting line for HTBS 3100-60 - 3100-200	388 0637	3'429.00
Laser cutting line for HTBS 4100-60 / 4100-130	388 0638	6'849.00
Adjustment blank holder force	388 063	3'769.00
Control panes at the opposite side	388 0646	2'259.00

Spare knife	Item No	€ plus VAT
1 kit spare knives HTBS 3100-60 - 3100-100	388 0640	3.189,00
1 kit spare knives HTBS 3100-130	388 0641	3.559,00
1 kit spare knives HTBS 3100-160	388 0642	4.419,00
1 kit spare knives HTBS 3100-200	388 0643	6.989,00
1 kit spare knives HTBS 4100-60	388 0644	4.419,00
1 kit spare knives HTBS 4100-130	388 0645	6.379,00

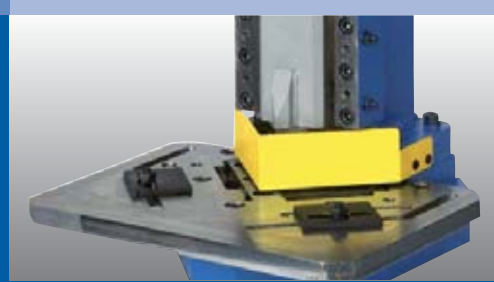


# Notching & Punching

Manual and hydraulic notching machines  
AKM

Hydraulic profiling steel shears/Hole punchers  
HPS

Hydraulic hole punchers  
HLS



Manual notching machines



Hydraulic notching machines



Hydraulic profiling steel shears/Hole punchers



Hydraulic hole punchers

## AKM - hydraulic notching machines with fixed angle 90°

## AKM V - hydraulic notching machines with adjustable angle from 30 to 140°

- for steel sheets from 0.4 to 6 mm (stainless steel up to 4 mm)
- heavy and solid welding structure
- precise steel table with flushed countersunk scales and T-slots for an exact adjustment of the stops
- rapid angle setting with mechanic adjustment of top cutter and bottom blade

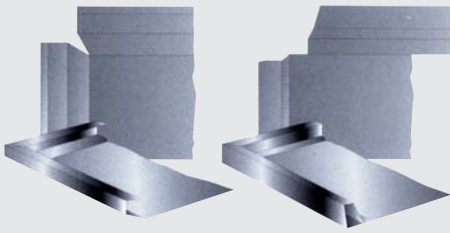
- high-quality knives also appropriate to cut stainless steel
- automatic adaption of the cutting gap to the thickness and material of the workpiece with the type AKM V
- automatic bottom blade adjustment for exact cuts
- top cutter with two cutting edges

- time-saving stroke adjustment to adapt to the cutting length
- with three hydraulic cylinders for better load distribution



Working table with T-slots and immersed scales

- hydraulic holding-down clamp with automatic die clearance adjustment (AKM 200-60 V)



Punching examples



Series AKM  
with fixed angle

### AKM - Notching machine with fixed angle

Model	Cutting capacity <sup>1)</sup>	Cutting range in mm	Cutting angle	Oil tank contents	Motor power 400 V	Weight	Dimensions LxWxH in mm	Item No	€ plus VAT
AKM 200-40	4 mm	200 x 200	90°	36 litres	4.0 kW	550 kg	950 x 950 x 1100	381 7000	7'229.00

### AKM V - Notching machine with variable angle setting

Model	Cutting capacity <sup>1)</sup>	Cutting range in mm	Cutting angle	Oil tank contents	Motor power 400 V	Weight	Dimensions LxWxH in mm	Item No	€ plus VAT
AKM 200-40 V	4/2 <sup>3)</sup> mm	200 x 200	30 - 140°	50 litres	4.0 kW	950 kg	1050 x 900 x 1300	381 7002	11'689.00
AKM 200-60 V	6/4 <sup>2)</sup> mm	200 x 200	30 - 140°	50 litres	4.0 kW	1000 kg	1050 x 900 x 1300	381 7005	13'589.00

1) The values are related to the tensile strength of the material of 400 N/mm<sup>2</sup> 2) Cutting power at 60° / Cutting power at 30°

**!** We recommend to use machine oil of the following properties for the hydraulic notching machines mentioned on this double side such as e.g. Agip Precis HLP 46:

ISO viscosity class	46	Viscosity index (DIN ISO 2909)	97
Kinematic viscosity (DIN 51 562)		Open up flash point (DIN ISO 2592)	32 °C
mm <sup>2</sup> /s at 40°C	46	Pour point, (DIN ISO 2909)	-25 °C
mm <sup>2</sup> /s at 100°C	6,7	Density at 15°C (DIN 51 757)	875 kg/m <sup>3</sup>



**Series AKM V**  
with adjustable angle

Accessories	Item No	€ plus VAT
<b>Spare knife for steel (1 kit)</b>		
for AKM 200-40	388 0016	<b>829.00</b>
for AKM 200-40 V	388 0018	<b>945.00</b>
for AKM 200-60 V	388 0019	<b>1'065.00</b>

Knives are also appropriate to cut stainless steel.

Then the indicating cutting capacity for stainless steel will half, e.g.:  
for AKM 200-40 from 4 mm to 2 mm.

## AKM 100 D - Manual notching machine

- robust construction
- for rapid and easy rectangular notching of metal plates
- with adjustable top and bottom cutting edge
- with degree scale at the bottom cutting edge
- adjustable stops to repeat the notching procedure



<b>Model</b>	<b>AKM 100 D</b>
Item No	377 0511
<b>€ plus VAT</b>	<b>1'099.00</b>

Technical data	
Cutting performance*	3 mm
Cutting range in mm	100 x 100
Cutting angle	90°
Working table in mm	380 x 280
Weight	105 kg
Dimensions LxWxH in mm	450 x 390 x 1020

\* Indications referring to steel sheets with a tensile strength of 400 N/qmm

Accessories	Item No	€ plus VAT
Spare knife AKM 100 D	388 0700	<b>839.00</b>

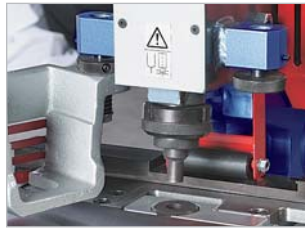
## HPS - Combined hydraulic profile steel shears/hole punchers with 5 machining stations and foot control

### Advantages of punching compared to drilling

- high time-saving - cycle times
- no chips
- no cooling

- cutting, punching and notching of flat steel, angular steel and bar material
- heavy and solid welding structure
- one- or two-cylinder type
- with powerful 400 volt motor (3 PH / 50 Hz)

With MUBEA tool holder



- punching station with quick-action tool holder for stamps and die plates
- slewable stripper



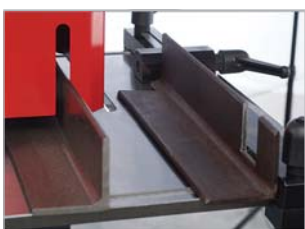
- different optional punching tools and holders



- with optional tools it is also possible to cut U, T and L profiles at the bar steel station



- application examples bar steel station, square bar and round material



- the notching station is serially equipped with a rectangular blade, optionally a V blade is available



- high-quality hydraulic piece parts and infinitely variable adjustable stroke



**HPS 45 M**  
One-cylinder type



**HPS 55/80/110**  
two cylinder type for independent working  
with two foot pedals



**Flat steel station**  
· bottom blade with four cutting edges  
· easily adjustable holding-down clamp  
· table with angular stops



**Angular steel station**  
· angle of 45/90°  
· with 1000 mm rear stop  
· for HPS 45 manually all others with automatic cutting release



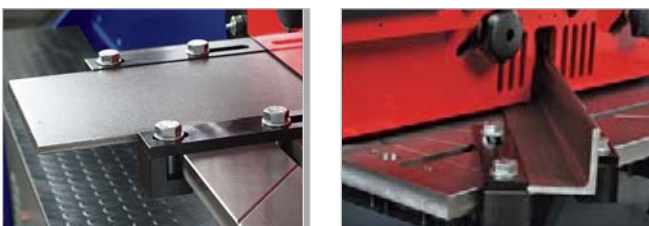
**Bar steel station**  
· with holding-down clamp  
· 1000 mm rear stop



· application examples angular steel station



**Notching station**  
· perfect for straight and angular notching works  
· table with scales and stop



· application examples flat steel station  
· supporting table with adjustable stops



**Punching station**  
· max. capacity  $\varnothing$  27 x 13  
and  $\varnothing$  18 x 18



**HPS 45**  
One-cylinder type  
for 90° cuts



**HPS 45 M**  
One-cylinder type  
for 90/45° cuts



**HPS 45 rear view**  
with rear stop 1000 mm



**HPS 55/80/110**  
serially equipped with 1000 mm rear stop  
with automatic cutting release



**HPS 55/80/110**  
Two-cylinder type for simultaneous working  
on two stations; 90/45° cuts

Model	HPS 45	HPS 45 M	HPS 55-110	HPS 55-110 L	HPS 80-150	HPS 80-150 L	HPS 110-180 L
Item No	381 9011	381 9012	381 9013	381 9014	381 9015	381 9016	381 9017
€ plus VAT	7'669.00	8'829.00	11'849.00	13'779.00	16'819.00	19'399.00	25'459.00
<b>Technical data</b>							
Pressure	45 tons	45 tons	55 tons	55 tons	80 tons	80 tons	110 tons
Ø in max. steel sheet thickness* Ø 27 x 13	Ø 18 x 18	Ø 18 x 18	Ø 20 x 20	Ø 20 x 20	Ø 24 x 24	Ø 24 x 24	Ø 28 x 28
Throat	160 mm	160 mm	250 mm	250 mm	300 mm	300 mm	610 mm
Stroke	21 mm	21 mm	60 mm	60 mm	70 mm	70 mm	80 mm
Stroke / min.	20	20	37	37	38	38	28
Working height hole puncher	1010 mm	1010 mm	1080 mm	1088 mm	1195 mm	1195 mm	1260 mm
Working table size	450 x 160 mm	450 x 160 mm	550 x 250 mm	550 x 510 mm	550 x 300 mm	550 x 510 mm	550 x 610 mm
Oil tank contents	33 l	33 l	76 l	76 l	76 l	76 l	76 l
Motor power 50 Hz	3 kW	3 kW	5.5 kW	5.5 kW	11 kW	11 kW	11 kW
Net weight	870 kg	950 kg	1250 kg	1660 kg	2240 kg	2510 kg	3560 kg
Dimensions in mm	1460 x 1400 x 1620	1460 x 1580 x 1450	1480 x 1800 x 1730	1980 x 1800 x 1730	2025 x 1780 x 2700	2120 x 2025 x 1780	2560 x 2550 x 1790
<b>Flat steel station</b>							
Max. material thickness	200 x 13 mm	200 x 13 mm	200 x 20 mm	200 x 20 mm	300 x 20 mm	300 x 20 mm	400 x 20 mm
Max. material size	300 x 10 mm	300 x 10 mm	300 x 15 mm	300 x 15 mm	450 x 15 mm	450 x 15 mm	600 x 15 mm
Cutter length	305 mm	305 mm	305 mm	305 mm	475 mm	475 mm	605 mm
Angular cut	80 mm	80 mm	60 mm	60 mm	80 mm	80 mm	100 mm
Working height	1010 mm	1010 mm	890 mm	890 mm	1032 mm	1032 mm	1085 mm
<b>Angular steel station</b>							
90° cut in mm	80 x 80 x 8	80 x 80 x 8	120 x 120 x 10	120 x 120 x 10	130 x 130 x 13	130 x 130 x 13	152 x 152 x 13
45° cut in mm	-	60 x 60 x 6	70 x 70 x 7	70 x 70 x 7	70 x 70 x 7	70 x 70 x 7	70 x 70 x 7
Working height	1020 mm	1020 mm	1100 mm	1100 mm	1250 mm	1250 mm	1305 mm
<b>Bar steel station</b>							
Round steel Ø	30 mm	25 mm	16-40 mm	16-40 mm	45 mm	45 mm	50 mm
Square bar steel	30 mm	22 mm	16-40 mm	16-40 mm	45 mm	45 mm	50 mm
Working height	1040 mm	1130 mm	1060 mm	1060 mm	1310 mm	1310 mm	1380 mm
<b>Optional equipment</b>							
U profile knife	100 mm	100 mm	120 mm	120 mm	140 mm	140 mm	160 mm
T profile knife	40 mm	40 mm	50 mm	50 mm	60 mm	60 mm	60 mm
L profile knife	100 mm	100 mm	120 mm	120 mm	140 mm	140 mm	160 mm
<b>Notching (rectangle)</b>							
Max. material thickness	7 mm	7 mm	10 mm	10 mm	12 mm	12 mm	13 mm
Width	40 mm	40 mm	42 mm	42 mm	52 mm	52 mm	52 mm
Depth	50 mm	50 mm	90 mm	90 mm	90 mm	90 mm	90 mm
Dimensions	40 x 40 x 7 mm	40 x 40 x 7 mm	42 x 42 x 10 mm	42 x 42 x 10 mm	52 x 52 x 12 mm	52 x 52 x 12 mm	52 x 52 x 13 mm
<b>Optional equipment</b>							
V notching tool max.	4 mm	4 mm	6 mm	6 mm	6 mm	6 mm	6 mm
V- 90° width	75 mm	75 mm	95 mm	95 mm	125 mm	125 mm	125 mm
V- 90° depth	75 mm	75 mm	95 mm	95 mm	125 mm	125 mm	125 mm

\* Values are referring to a tensile strength of the material of 400 N/mm<sup>2</sup>

**Scope of delivery:**

- Machines are delivered without punching tools.
- Please order the tools specially for your application
- Machines are delivered including oil.

Please indicate the type of material which needs to be machined when ordering!



We recommend to use a machine oil with the following properties for the machines on this page, e.g. Agip Precis HLP 46:

ISO viscosity class	46	Viscosity index (DIN ISO 2909)	97
Kinematic viscosity (DIN 51 562)		Open cup flash point (DIN ISO 2592)	32 °C
mm <sup>2</sup> /s at 40°C	46	Pour point, (DIN ISO 2909)	-25 °C
mm <sup>2</sup> /s at 100°C	6,7	Density at 15°C (DIN 51 757)	875 kg/m <sup>3</sup>

Accessories*	Item No	€ plus VAT
<b>HPS 45/ HPS 45 M</b>		
L blade for bar steel station	388 0020	969.00
T blade for bar steel station	388 0021	969.00
U blade for bar steel station	388 0022	969.00
V blade for notching	388 0032	845.00
<b>HPS 55-110/ HPS 55-110 L</b>		
L blade for bar steel station	388 0023	499.00
T blade for bar steel station	388 0024	499.00
U blade for bar steel station	388 0025	499.00
V blade for notching	388 0033	1'275.00

Accessories*	Item No	€ plus VAT
<b>HPS 80-150/ HPS 80-150 L</b>		
L blade for bar steel station	388 0026	639.00
T blade for bar steel station	388 0027	639.00
U blade for bar steel station	388 0028	639.00
V blade for notching	388 0034	1'409.00
<b>HPS 110-180 L</b>		
L blade for bar steel station	388 0029	779.00
T blade for bar steel station	388 0030	779.00
U blade for bar steel station	388 0031	779.00
V blade for notching	388 0035	1'539.00

\* When ordering please indicate the exact dimensions of the material which needs to be machined. We will be pleased to advise in selecting the appropriate stamp and die-plates for your application.

## HLS - hydraulic hole punchers with foot control with 55, 80 or 110 tons punching pressure

- to punch steel sheets, flat and U steel
- heavy and solid welding structure
- punching table with scale and stops
- very large throat (up to 610 mm)
- time-saving continuously variable stroke setting
- with powerful 400 volt motor (3 PH / 50 Hz)

With MUBEA tool holder



Series HLS

**Scope of delivery:**

- Machines are delivered without punching tools.
- Please order the tools specially for your application
- Machines are delivered including oil.

Please indicate the type of material which needs to be machined when ordering!

Model	HLS 55	HLS 80	HLS 110
Item No	381 8054	381 8079	381 8109
€ plus VAT	8'509.00	12'399.00	16'549.00

**Technical data**

Pressure	55 tons	80 tons	110 tons
Ø in max. steel sheet thickness*	Ø 40 x 10 Ø 20 x 20	Ø 40 x 14 Ø 24 x 24	Ø 40 x 20 Ø 28 x 28
Throat	510 mm	510 mm	610 mm
Stroke	60 mm	70 mm	80 mm
Stroke / min.	37	38	28
Working height hole puncher	1100 mm	1195 mm	1275 mm
Working table size	550 x 510 mm	550 x 510 mm	550 x 610 mm
Oil tank contents <sup>2)</sup>	76 l	76 l	76 l
Motor power 50 Hz	5,5 kW / 400 V	11 kW / 400 V	11 kW / 400 V
Dimensions in mm	1340 x 930 x 1850	1520 x 930 x 2000	1690 x 930 x 2180
Weight	1300 kg	1940 kg	2660 kg

\* Values are referring to a tensile strength of the material of 400 N/mm<sup>2</sup>

Please find our recommendations regarding machine oil on the previous catalogue page.



- punching station with quick-action tool holder for stamps and die-plates
- slewable stripper



- to punch flat steel, U steel and also rectangular steel tubes



- punching of flat material



- different optional punching tools upon request



- different optional punching tools upon request