STEEL TECH

JION THE FUTURE

www.steeltecheg.com

Why Steel Tech ?

We have strong partnerships with more than 20 well-known European manufacturers .

We are not a resale company but a solution provider who works hand in hand with customers to find the best solutions.

We have a well-trained team with excellent experience from many projects.

We offer long warranty periods for most of the machines we delivered, up to 5 years.

We provide continuous technical support and aftersales service even after the warranty period.

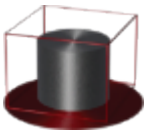
Table Of Contents

CNC Machining Center

Hermle High Performance-Line

Powerful, precision, highly dynamic machining centers! From compact to gigantic.

C 12



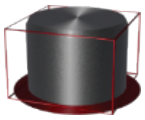
Ø 320 / H 265

Collision circle:
Ø 610 мм

Vertical table clearance
max: 430 мм

- Technical details

C 42 / C 42 U MT



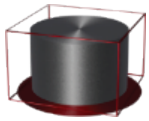
Ø 800 / H 560

Collision circle:
Ø 990 мм

Vertical table clearance
max: 700 мм

- Technical details

C 22



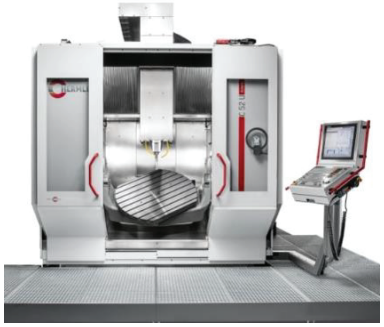
Ø 450 / H 370

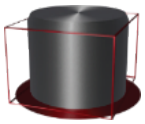
Collision circle:
Ø 610 мм

Vertical table clearance
max: 470 мм

- Technical details

C 52 / C 52 U MT





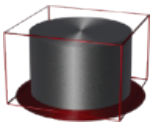
Ø 1000 / H 810

Collision circle:
Ø 1290 мм

Vertical table clearance
max: 950 мм

- Technical details

C 32



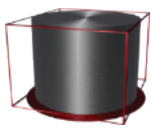
Ø 650 / H 420

Collision circle:
Ø 840 мм

Vertical table clearance
max: 635 мм

- Technical details

C 62 / C 62 U MT



Ø 1200 / H 900

Collision circle:
Ø 1400 мм

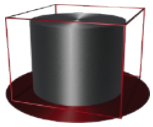
Vertical table clearance
max: 1100 мм

- Technical details

Hermle Performance-Line

The perfect entry into standard 5-axis/5-sided processing.

C 250



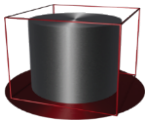
Ø 450 / H 355

Collision circle:
Ø 770 мм

Vertical table clearance
max: 550 мм

- Technical details

C 400



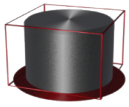
Ø 650 / H 500

Collision circle:
Ø 885 мм

Vertical table clearance
max: 625 мм

- Technical details

C 650

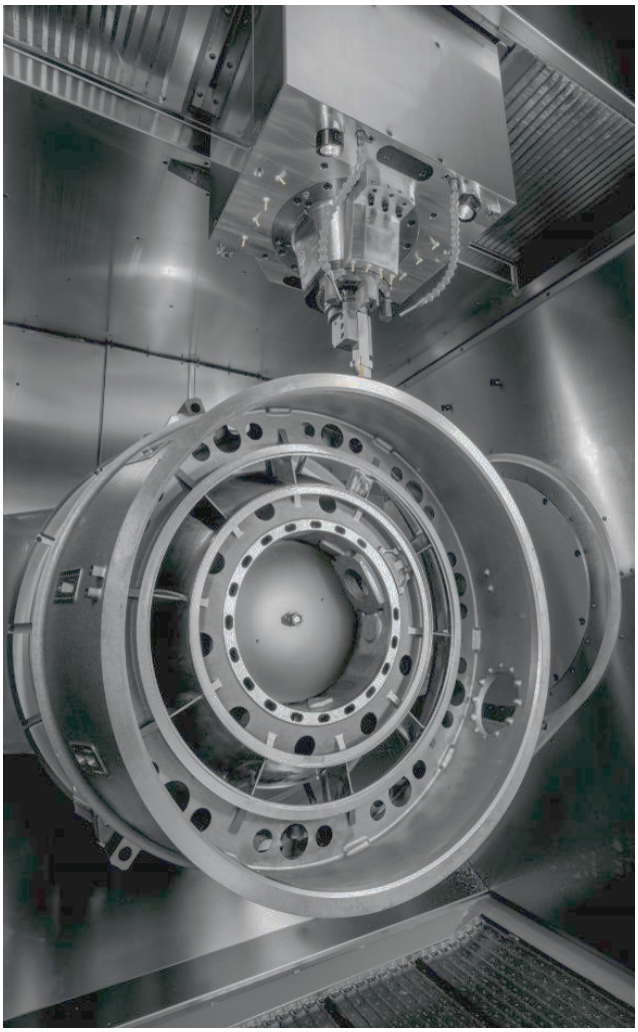


Ø 900 / H 600

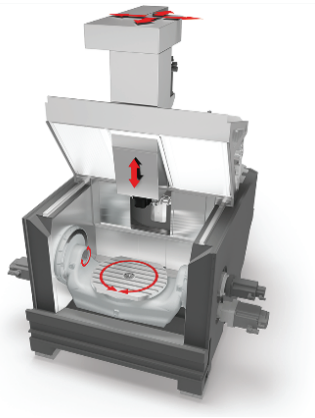
Collision circle:
Ø 1100 мм

Vertical table clearance
max: 775 мм

- Technical details

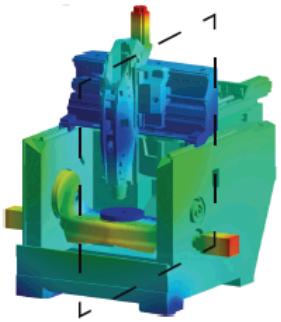


Ideal machine kinematics for 5-axis processing



- **Modified gantry design** of linear axes for maximum accuracy and rigidity at any point.
- **Double-support swiveling rotary table,** due to **the low center of gravity** and installation into **rigid walls of the monolithic bed,** allows ultra-precise processing of parts with larger mass and dimensions, even **at large negative swivel angles.**
- **High cutting speeds** and rapid linear traverses.
- The best working area / machine dimensions ratio.
- Optimum chip removal from the working area.
- Installation of the machine **without anchors at 3 or 4 points.**

Maximum symmetry in the machine tool

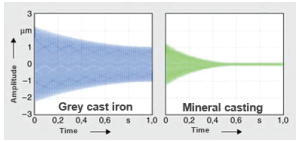


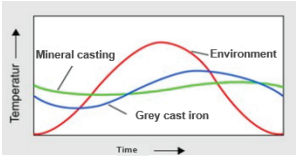
- The ideal machining results are achieved due to **maximum s ymmetrical one-piece machine bed,** designed for **high accuracy, rigidity and ideal force absorption** during processing.
- **The most symmetrical traverses, saddles, spindle cases and all types of tables** (cast iron) also allow to achieve **high accuracy and rigidity at any point in the working area,** regardless of the position of the axes.

Mineral casting design

The use of mineral casting in the manufacture of the machine bed allows:

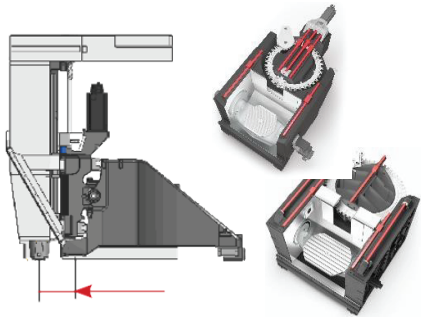
- **Significantly reduce the impact of vibrations** during processing (increase accuracy).
- **Significantly reduce thermal expansion of the bed** (increase accuracy). The reduction of heat transfer from the environment and from the working area is achieved not due to active cooling systems and correction sensors, but due to the properties of the bed material. It makes possible to simplify (or not use) heat control systems. This improves overall reliability of the machine tool.



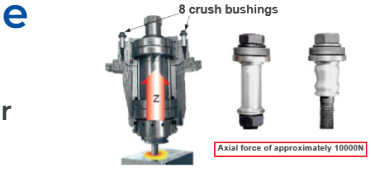


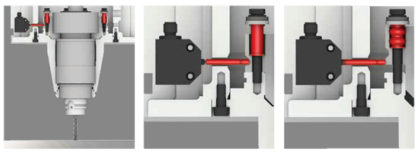
Modified gantry design

- The portal structure has a **constant and the smallest extension of the spindle axis from the Y-axis supports.** This allows to have a **high rigidity of the system at any point of the working area, at any Y-axis position.** (In contrast to the competitors solutions which provide a console Y-axis with max. overhang for the entire working area (deflection, bending), or with a variable overhang of the Y-axis (variable effort arm)).
- S**ymmetrical arrangement of linear guides and ball screws** for maximum balance and precision.



Patented collision protection of main spindle

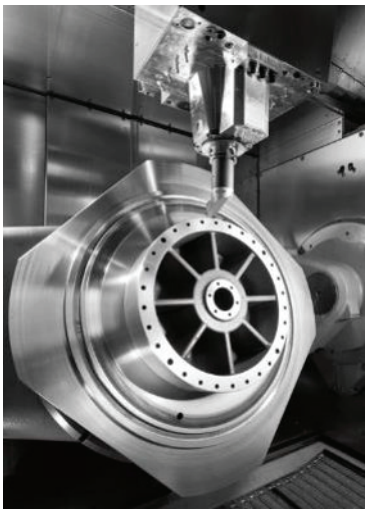




Most of our spindles have a **special anti-collision system - special crush bushings that absorb impact force, and also a collision sensor** that emergency stops the machine.

- **This minimizes risk for motor and spindle,** and allows **to decrease machine downtime for repairs** and **to save money on purchase (or repair)** of expensive spindle assemblies.
- Customers are able **to replace crush bushings themselves during one shift** and continue to work (if they have spare bushings in stock).

Spindles for customer tasks

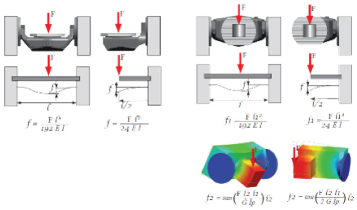


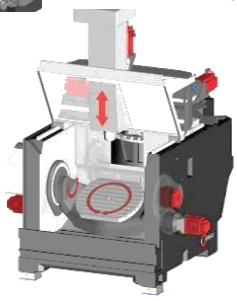
A wide range of spindles with various characteristics and modifications for different customer tasks:
- high-speed spindles (up to 42000 rpm);
- **high-torque spindles (up to 560 Nm);**
- spindles for turning.

Compact design of the spindle head

Even with high-torque spindles HERMLE achieves the maximum compactness of the spindle head. This makes it possible to use a shorter tool, even when the table has been swiveled 90° (lesser chance of collision, closer to the center of the table).

Swiveling rotary table



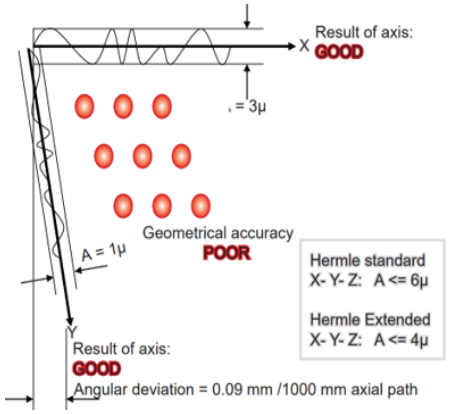


In contrast to other manufacturers we provide:

- **Double bearing A-axis configuration** for maximum cutting force and load capacity.
- A-axis in both single and **double drive versions for greater holding torque and load capacity** of the table.
- **The table is installed directly into the rigid walls of the monolithic bed,** and not on the additional supports bolted to the bed.
- **Patented A-axis adjustment system** (without changing the table in case of collision) **that improves machine maintainability on site.**
- **The table is driven by a gear transmission (reducer), and not by a belt.** This gives the highest accuracy, reliability of the system and the ability to work with heavy loads.
- We also have **planetary gearbox** to transfer greater torque from the drive to the small gear of the A-axis gear transmission.
- **Drives are placed outside the working area -** convenient for maintenance and diagnostics.

- **C-axis** can be made **with a high rotation speed for turning operations (MT).**

Geometric accuracy guaranteed



In contrast to other manufacturers:

- It does not only indicate the positioning accuracy, measured for each axis separately, but also **the geometric accuracy, which takes into account the position of these axes relative to each other.** It guarantees a real picture of accuracy.
- **HERMLE specifies geometric accuracy according to the most strict VDI/DIN 3441 standard** (and not ISO or JIS with root mean square value, measured on a small segment from a whole with any number of measurements).
- **HERMLE's internal requirements for assembly accuracy are the third more stringent** than those specified in the standard. **Optical direct measuring systems in all axes, including rotary axes.**

Tool magazine

- The tool magazine is integrated into the machine bed.
- **All tool magazines are disk type**. This design, unlike chain magazines, has significantly fewer connecting movable elements. It means **the most reliable and trouble-free construction.**
- **Pick-up magazine -** tool change is carried out directly **by the main spindle.** The absence of such assembly as a double grip significantly increases **the reliability and fail-safety of the system.**
- The design of the tool magazine **allows the use of tools of greater dimensions and greater weight.**
- If necessary, the number of tools can be increased by additional tool magazine modules.

High dynamics of linear and rotary axes

For large machines:

- Feed rate and rapid traverse of the axes X-, Y-, Z: up to 50-60-60 m/min;
- Rotation speed: C axes - up to 30 rpm, A axes – up to 20 rpm.

For other machines:

- Feed rate and rapid traverse of the axes X-, Y-, Z: up to 40-45-45 m/min (option: 60-60-60 m/min);
- Rotation speed: C axes - up to 65 rpm, A axes – up to 25 rpm.

X-axis with direct drive on all machine tools. This construction is

- characterized by high efficiency, dynamic, minimum wear and ease of maintenance.
  On C42,32,62 - **Y-axis** is also equipped with **a direct drive.**
- On C52 and C62 - **Y axis with two portal type drives.**
  Large diameter ball screws - up to Ø63 mm (depending on model).
- **All guides are roller and with large cross-section - up to 65 mm** (depending on model)

Coolant supply

The machine tools have:

» The possibility of supplying high productivity and large volume coolant through the spindle and tool with a **pressure of up to 80 bar.**
The coolant pressure is **regulated from 80 - 5 bar.**

» The filtration system has an additional control filter (except for the paper filter).
Continuous double walled stainless steel cladding.
The working area and table are flushed.

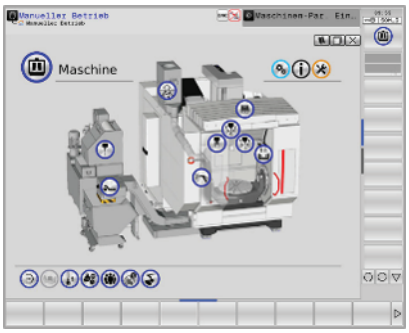
» Oil mist removal system.
Machine preheat (prerun) function.

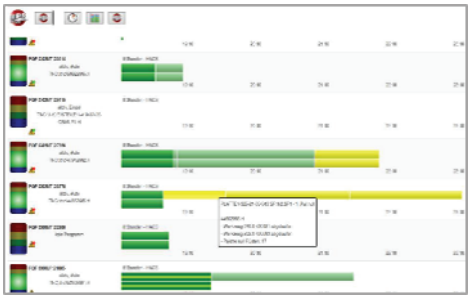
Chose of CNC system: Heidenhain TNC 640 or Siemens 840 D sl, including Operate

» Depending on the customer's preference, we can offer machines with either Heidenhain CNC (preferred) or Siemens CNC.

HERMLE developments in the interface add-in. Additional software

» HOME - a customizable interface.
» Navigator - control using a graphical menu.
» HACS - the intelligent order management system.
» HIMS – the central monitoring tool.
» HRD - Remote Desktop.
» HOTS - Operate Tool System.
» HTMC - Tool data including tool life.
» HFW - software for remote maintenance.
» WDS – the wear diagnostic system.





Additional cycles. Regulating functions

Purpose of development:

» Improving accuracy, surface quality and reducing processing time simultaneously.
» Adaptation to specific processing, specific conditions.

Processing with max. 3D contour tolerance	Heavy-duty machining
Processing with min. 3D contour tolerance	Active Vibration Damping
Processing with max. 3D trajectory smoothing	High Production
Compensation for position errors that depend on acceleration	Adaptation of control bparameters depending on the load.
Adaptive feed control	Active Chatter Control

04 Main characteristics

C 12

Workpiece dimensions
Ø 320 x 265 mm
Collision circle Ø 610 mm

5-axis milling: max. 100 kg

TECHNICAL DATA

Traverse path X-Y-Z	330 - 440 - 350 mm
Main spindle drive: Speed	18000 / 15000 / 12000 / 30000 / 25000 / 42000 rpm
Main power Torque	35 /37 / 31 kW 17,5 /32 / 98 Nm
Rapid linear traverses X-Y-Z (dynamik):	50) 30 m/min
Control unit	TNC 640
Tool changer (pick-up	36 or 71 pockets
Swivelling rotary table: High torque tables: Clamping surface:	Ø 320 mm
Swivelling range:	+/- 115°
A axis speed (dynamik):	(55) 25 rpm
C axis speed (dynamik):	(80) 40 rpm
Table loading max.:	100 kg

Main characteristics

C 22

Workpiece dimensions
Ø 450 x 370 mm
Collision circle Ø 610 mm

5-axis milling: max. 300 kg

Workpiece dimensions
450 x 600 x 330 mm

3-axis milling: max. 750 kg

TECHNICAL DATA

Traverse path X-Y-Z	330 - 600 - 450 mm
Main spindle drive: Speed	18000 / 15000 / 12000 / 30000 / 25000 / 42000 rpm
Main power Torque	35 /37 / 31 kW 17,5 /32 / 98 Nm
Rapid linear traverses X-Y-Z (dynamik):	(50) 30 m/min
Control unit	TNC 640 / S 840 D sl
Tool changer (pick-up	55 pockets
Rigid clamping table	600 x 630 mm
Tool changer (pick-up	750 kg
Swivelling rotary table: High torque tables: Clamping surface:	Ø 320 mm
Swivelling range:	+/- 115°
A axis speed (dynamik):	(55) 25 rpm
C axis speed (dynamik):	(80) 40 rpm
Table loading max.:	100 kg

Main characteristics

C 32

Workpiece dimensions
Ø 650 x 420 mm
Collision circle Ø 840 mm

5-axis milling: max. 1000 kg

Workpiece dimensions
650 x 650 x 500 mm

3-axis milling: max. 1500 kg

TECHNICAL DATA

Traverse path X-Y-Z	500 - 650 - 650 mm	
Main spindle drive: Speed	18000 / 15000 42000/25000 rpm	
Main power Torque	35/31 /42 / 31 kW 17,5/98 /148 / 194 Nm	
Rapid linear traverses X-Y-Z (dynamik):	(60) 40 - (60) 45 - (60) 45 m/min	
Control unit	TNC 640 / S 840 D sl	
Tool changer (pick-up	36 pockets	
Swivelling rotary table: Worm Drive Tables	Ø 320 or Ø 450 x 360 mm	Ø 650 x 540 mm
Swivelling range:	+/- °130	130 -/+°
A axis speed (dynamik):	25 rpm	25 rpm
C axis speed (dynamik):	40 rpm	30 rpm
Table loading max.:	300 kg	600 kg
Worm Drive Tables	Ø 320 mm	Ø 650 x 540 mm
Swivelling range:	+/- °130	130 -/+°
A axis speed (dynamik):	55/25* rpm	25 rpm
C axis speed (dynamik):	80 rpm	65 rpm
Table loading max.:	200 kg	1000 / 600* kg

Main characteristics

C 42

Workpiece dimensions
Ø 800 x 560 mm
Collision circle Ø 990 mm

5 axis milling: max. 1400 kg
5 axis MT turning: max. 700 kg
5 axis MT milling: max. 1400 kg

Workpiece dimensions
650 x 650 x 500 mm

3-axis milling: max. 1500 kg

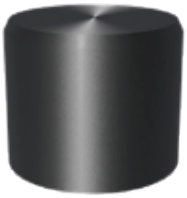
TECHNICAL DATA

Traverse path X-Y-Z		500 - 650 - 650 mm
Main spindle drive: Speed		18000 / 15000 42000/25000 rpm
Main power Torque		35/31 /42 / 31 kW 17,5/98 /148 / 194 Nm
Rapid linear traverses X-Y-Z (dynamik):		(60) 40 - (60) 45 - (60) 45 m/min
Control unit		TNC 640 / S 840 D sl
Tool changer (pick-up		42 pockets
Swivelling rotary table: Worm Drive Tables	Ø 440 mm	800 x 630 mm
Swivelling range:	++/- ˚130	130 -/+˚
A axis speed (dynamik):	25 rpm	15 rpm
C axis speed (dynamik):	35 rpm	25 rpm
Table loading max.:	450 kg	850 kg
High torque tables	Ø 440 mm	Ø 800 x 630 mm
Swivelling range:	+/- ˚130	130 -/+˚
A axis speed (dynamik):	55 rpm	25 rpm
C axis speed (dynamik):	65 rpm	65 rpm
Table loading max.:	450 kg	1400 kg

Main characteristics

C 52 / MT

Workpiece dimensions
Ø 1000 x 810 mm
Collision circle Ø 1290 mm



5 axis milling: max. 2000 kg
5 axis MT turning: max. 1000 kg
5 axis MT milling: max. 2000 kg

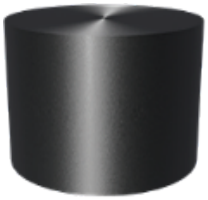
TECHNICAL DATA

Traverse path X-Y-Z	750 - 1100 - 1000 mm
Main spindle drive: Speed	18000/14000 /9000 rpm
Main power Torque	35 /56 / 70 kW 215 /356 / 560 Nm
Rapid linear traverses X-Y-Z (dynamik):	55 - 60 - 60 m/min
Control unit	TNC 640 / S 840 D sl
Tool changer (pick-up	60 pockets
Swivelling rotary table: Swivelling rotary table	Ø 700 / Ø 1150 x 900 mm
Swivelling range:	+130- / ˚100˚˚
A axis speed (dynamik):	20 rpm
C axis speed (dynamik):	30 rpm
Table loading max.:	2000 kg
C 52 U MT dynamic	Ø 1000 mm
Swivelling range:	+130- / ˚100˚
A axis speed (dynamik):	20 rpm
C axis speed (dynamik):	500 rpm
Table loading max.	turning: 1000 kg milling: 2000 kg

Main characteristics

C 62 / MT

Workpiece dimensions
Ø 1200 x 900 mm
Collision circle Ø 1400 mm



5 axis milling: max. 2500 kg
5 axis MT turning: max. 1500 kg
5 axis MT milling: max. 2500 kg

TECHNICAL DATA

Traverse path X-Y-Z			900 - 1300 - 1200 mm
Main spindle drive: Speed			14000/9000 / 18000/15000 rpm
Main power Torque			35 / 35 /56 / 70 kW 215 / 215 /356 / 560 Nm
Rapid linear traverses X-Y-Z			50 m/min
Control unit			TNC 640 / S 840 D sl
Tool changer (pick-up			70 pockets
Swivelling rotary table: Clamping surface:			Ø 900 / Ø 1350 x 1100 mm
Swivelling range:			+/- 130°
A axis speed (dynamik):			15 rpm
C axis speed (dynamik):			30 rpm
Table loading max.:			2500 kg
C 52 U MT dynamic			
Swivelling range:			+/- 130°
Clamping surface			Ø 1200 mm
A axis speed			15 rpm
C axis speed			400 rpm
Table loading max.	turning:	11500 kg	milling: 2500 kg

Main characteristics

C 250

Workpiece dimensions
Ø 450 x 355 mm
Collision circle Ø 770 mm

5-axis milling: max. 300 kg

Workpiece dimensions
600 x 550 x 450 mm

3-axis milling: max. 1100 kg

TECHNICAL DATA

Traverse path X-Y-Z	450 - 550 - 600 mm	
Main spindle drive: Speed	18000 / 15000 rpm	
Main power Torque	20 kW 173 Nm	
Rapid linear traverses X-Y-Z	35 m/min	
Control unit	TNC 640	
Tool changer (pick-up	30 pockets	
Rigid clamping table	800 x 616 mm	
Table loading max	1100 kg	
Swivelling rotary table		
Clamping surface	Ø 320 mm	Ø 450 x 360 mm
Swivelling range	+/- °115	115- /+ °
A axis speed	25 rpm	25 rpm
C axis speed	40 rpm	40 rpm
Table loading max	300 kg	300 kg

Main characteristics

C 400

Workpiece dimensions
Ø 650 x 500 mm
Collision circle Ø 885 mm

5-axis milling: max. 600 kg

Workpiece dimensions
850 x 700 x 500 mm

3-axis milling: max. 2000 kg

TECHNICAL DATA

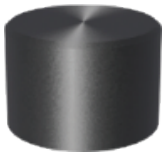
Traverse path X-Y-Z	500 - 700 - 850 mm	
Main spindle drive: Speed	18000/15000 rpm	
Main power Torque	20 kW 173 Nm	
Rapid linear traverses X-Y-Z	35 m/min	
Control unit	TNC 640	
Tool changer (pick-up	38 pockets	
Rigid clamping table	1070 x 700 mm	
Table loading max	2000 kg	
Swivelling rotary table		
Clamping surface	Ø 440 mm	Ø 650 x 540 mm
Swivelling range	+˚139- / ˚91139- / ˚91+ ˚	
A axis speed	25 rpm	25 rpm
C axis speed	30 rpm	30 rpm
Table loading max	450 kg	600 kg

Main characteristics

C 650

Workpiece dimensions
Ø 900 x 600 mm
Collision circle Ø 1100 mm

5-axis milling: max. 1500 kg



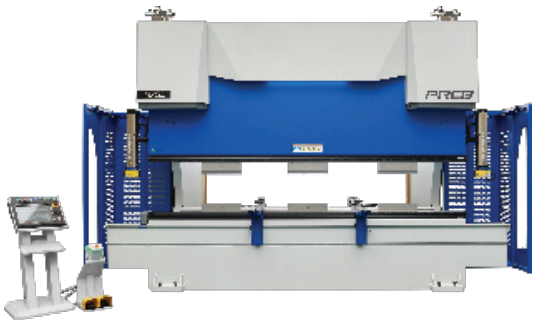
Workpiece dimensions
1050 x 900 x 600 mm

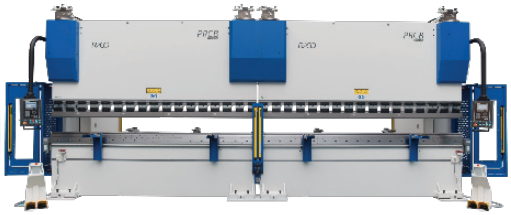
3-axis milling: max. 3000 kg v

TECHNICAL DATA

Traverse path X-Y-Z	600 - 900 - 1050 mm
Main spindle drive: Speed	18000 / 15000 rpm
Main power Torque	42 kW 148 Nm
Rapid linear traverses X-Y-Z	35 m/min
Control unit	TNC 640
Tool changer (pick-up	42 pockets
Rigid clamping table	1250 x 982 mm
Table loading max	3000 kg
Swivelling rotary table	
High torque tables	Ø 900 x 750 mm
Swivelling range	+/- 115°
A axis speed	25 rpm
C axis speed	25 rpm
Table loading max	1500 kg

HAYDRULIC PRESSBRAKE MACHINEMACHINE





PRCB HAYDRULIC PRESSBRAKE MACHINE

Affordable technology PRCB range is fully configurable following the customer's need. The standard range features models with capacities varying from 30 to 60ton. Furthermore, RICO is capable of building machinery with different configurations upon customers' request.

Tandem integration

Two press brakes may be used in tandem when bending large lengths.
This system enables the user to sychronise the two machines to guarantee the same speed and precision.
The Tandem system enables the two machines to be operated in simultaneous or stand-alone mode.

crowing table

This system enables the user to offset deformations of the beam while bending. By this, the angle remains constant throughout the length. The compensating arc is accurately calculated taking into account the design of the machine and its deformations under load. The process is automatic and the calculation takes into account the thickness of the sheet, type of material, opening of the V and length.

quick clamping

When there are frequent tooling changes, punches or dies can be changed over in a short time by using the quick clamps. The time saved will be higher as more often will be necessary to change tools. In all top clamping the punches can be removed directly from the front, so it is not necessary to slide it on one side. This operation compared to conventional allows a reduction of times greater than 8x.

Top customization

To meet all customer requirements, PRCB is a fully configurable machine. This versatility goes from sizing to optional equipment.

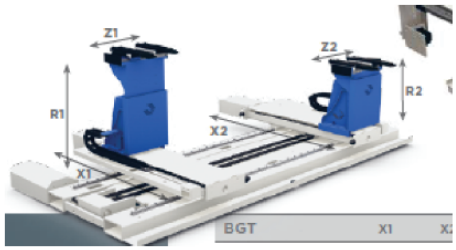
Equipment

The right machine configuration is essential to achieve maximum efficiency taking into account the type ofintended use.

TAYPE	ITEM
Control panel	Delem DA -53T control
Automatic axes	4 automatic axes: Y1+Y2+X+R
Back gauge	BGA back gauge (up to 200 Ton) BGAH back gauge (more than 200 Ton)
Front safety	Laser AKAS II-F
Rear safety	Safety barriers (Level IV)
Special systems	Standby function
Supports	SFS front support
Top clamping	Manual clamping
Bottom clamping	Manual clamping
Offline software	Profile TL

Back Gauges

BGA	X	R	Z1	Z2	X5
Stroke (mm)	750 (1000)	150	Under request	Under request	190
Speed (mm/s)	500	170	2000	2000	200
Precision (mm)	± 0,05	± 0,10	± 0,10	± 0,10	± 0,05
Type of motor	BRUSHLESS	BRUSHLESS	BRUSHLESS	BRUSHLESS	BRUSHLESS
Mechanical system	BALL SCREW	RACK	BELT	BELT	BALL SCREW



BGT	X1	X2	R1	R2	Z1	Z2
Stroke (mm)	800	800	200	200	UNDER REQUEST	UNDER REQUEST
Speed (mm/s)	600	600	200	200	550	550
Precision (mm)	± 0,05	± 0,10	± 0,05	± 0,05	± 0,10	± 0,10
Type of motor	BRUSHLESS	BRUSHLESS	BRUSHLESS	BRUSHLESS	BRUSHLESS	BRUSHLESS
Mechanical system	RACK	RACK	RACK	RACK	RACK	RACK

Frontal supports

SFS

· Supported on any position of the clamps;
. Manual height regulation;
. Device for approaching to the die;
. Load capacity:
- < 200 Ton: 75 kg per support
- ≥ 200 Ton: 150 kg per support.

SFH

Supported on sliding guides;
. Continuous manual height regulation;
. Millimetric scale;
. Ball transfer units to facilitate handling parts;
. Adjustable plate stop;
Load capacity – 2000 kg per support.

.

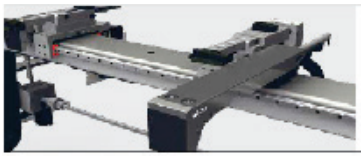
SFA

Supported on sliding guides;
. Can be placed at any point along the length;
. Manual height regulation;
. Millimetric scale;
. Ball transfer units to facilitate handling parts;
. Adjustable plate stop;
. Device for approaching to the die;
. Removable supports;
. Load capacity:
< 200 Ton: 100 kg per support
≥ 200 Ton: 150 kg per support.

Rear supports

SPA

SPA supports are installed in the fingers of the back gauge. They can be activated in predefined bending and enable the plate to slide until it lies adjacent to the back gauge.



Follower supports

ACFA

Automatic bending follower supports;
. Controlled by CNC;
. Recommended for heavy parts or large thin plate;
. Supported on longitudinal sliding rails;
. X and Y position adjustment;
. Load capacity – 180 kg per support.

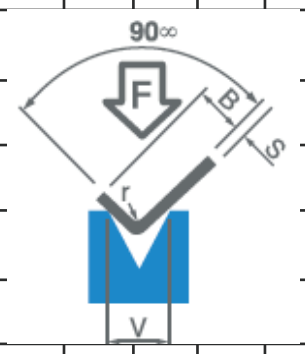
ACF1 / ACF2

Automatic bending follower supports.
Controlled by CNC;
. Recommended for heavy parts or large thin
plate;
. Supported on longitudinal sliding rails;
. X and Y position adjustment;
. Load capacity:
- ACF160 :1 kg per support
- ACF400 :2 kg per support.

Bending table

Required bending power (Ton/m) Rm=420 N/mm2 - Rm=700 N/mm2

R	B	V	0.5	0.8	0.6	1	1.2	1.5	2	2.5	3	4	5	6	8	10	12	15	20	25	30
0.5	3	4	4 7	6 10	12 20																
0.7	3.5	5	3 5	5 8	9 15	15 25															
0.8	4	6	2 4	3 6	7 12	11 19	18 30														
1	5.5	8		2 4	5 8	8 13	12 20	21 35													
1.3	6.5	10			4 6	6 10	9 12	15 26	30 50												
1.5	8	12				5 8	7 12	12 20	23 38	39 66											
2	10.5	16					5 8	8 13	16 26	27 45	44 71										
2.5	13	20						6 10	12 19	20 33	31 52	60 101									
3.2	15.5	25							9 15	14 24	23 38	44 73	76 126								
4.4	21	32								11 18	16 27	32 53	54 90	85 142							
5	26	40									12 21	23 38	39 66	62 103	121 202						
6.5	32.5	50										18 30	29 48	45 76	88 147	151 252					
8	41	63											22 37	33 55	70 117	109 182	173 288				
10	52	80												25 42	46 77	79 131	124 207	213 354			
12	65	100													35 59	58 96	91 151	155 258	302 504		
15	81.5	125														44 74	66 110	113 189	220 367	378 630	
20	104	160															50 83	81 135	158 263	269 448	425 709
25	130	200																62 104	115 192	197 328	310 517
37	163	250																	89 148	144 24	227 378
45	195	300																		120 200	173 288



HYDRAULIC SHEAR MACHINE

The best vertical cut

HGR shears have a unique cutting system that offers a vibration-free cut, greatly reducing cutting noise and increasing cutting quality.

VARIABLE RAKE ANGLE

All HGR shears have variable rake angle automatically adjusted by the control depending on the thickness and type of sheet material.

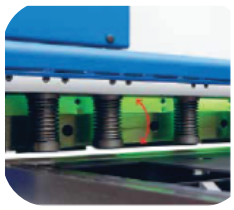
Frontal supports

vertical cut

blade holder on bearings
This system ensures the homogeneous distribution of the load along the entire length of the machine, resulting in a smooth cut, free of vibration

Angle variation

versatility
As a means of minimizing the "helix" effect, the HGR guillotine allows the corresponding angle variation as a function of the plate thickness. This rake variation is performed automatically.

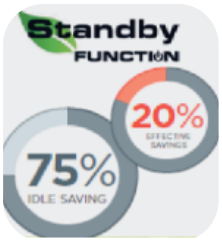


RAE system

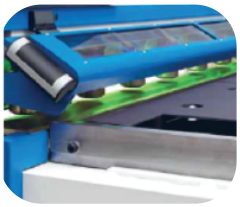
confort
While cutting, back gauge retracts automatically preventing collision with the plate.

standby function

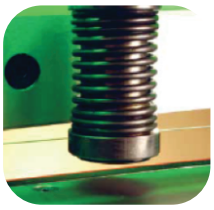
effective savings
This function is activated automatically whenever the machine didn't make a cut in the last 5 minutes, even if it is being programmed.



tilting finger protection



laser cutting line



EL GO

P 40

P40T

Cybelec

Cybtouch 6G

DELEM

DAC-360

	Length	Mild steel 420 N mm2	Stainless steel (700 N mm2)	Rake Angle	Angle	Angle	Hold Down Jacks	Back Gauge	Throat Depth	Motor Power	Oil Capacity	Total Length (A)	Total Height (B)	Width (C)	Height Under the Floor mm	Aprox. weight kg
	mm	Thickness mm			Stroke/min qt		qt	mm	mm	kw	lts	Dimensions				Kg
HGR 204	2050	4	2,5	1,5 0,7	22	33	12	1000	135	5,5	55	2600	1720	2330	0	3750
HGR 2054	2550				17	27	14					3100	1720	2330	0	4600
HGR 304	3050				16	27	12					3600	1720	2400	0	5200
HGR 404	4050				11	18	12		155	7,5	110	4600	1790	2550	0	7350
HGR 604	6050				10	16	31		264	11	150	6600	2220	2630	0	17300
HGR 206	2050	6	4	1,5 0,7	29	40	12	1000	155	11	100	2600	1720	2330	0	4500
HGR 2506	2550				17	25	14				110	3100	1720	2330	0	5140
HGR 306	3050				17	25	12					3600	1720	2400	0	6000
HGR 406	4050				12	18	12				145	4600	1790	2550	0	9640
HGR 606	6050				9	14	31		272		150	6600	2220	2630	0	23000
HGR 208	2050	8	5	2/ 0,7	14	21	12	1000	205	11	130	2620	1950	2610	0	5750
HGR 2508	2550				13	20	14					3120	1950	2600	0	6500
HGR 308	3050				10	16	17					3610	2010	2620	0	7760
HGR 408	4050				7	12	22				150	4610	2480	2710	0	12300
HGR 608	6050				9	12	31		265	15	190	6610	1950	2680	0	28700
HGR 210	2050	10	7	2/1	16	24	12	1000	205	15	130	2620	1950	2610	0	6300
HGR 2510	2550				15	23	14					3120	1950	2620	0	7050
HGR 310	3050				12	19	17					3610	2250	2620	0	8700
HGR 410	4050				8	13	22		210		205	4610	2810	2520	0	13500
HGR 610	6050				4	7	31		277		190	6620	2200	3060	0	33800
HGR 213	2050	13	8	2/1	14	20	12	1000	210	18,5	210	2630	2200	2500	0	8300
HGR 2513	2550				13	19	14					3130	2200	2500	0	9720
HGR 310	3050				10	15	17					3620	2250	2500	0	1150
HGR 413	3050				8	13	17					4660	2300	2580	0	14500
HGR 613	6050				4	7	17	1200	227		235	6780	3000	3370	0	49500
HGR 316	3050	16	12	1,5/3	7	14	17	1000	220	22	225	3720	2300	2550	0	12360
HGR 416	4050				4	8	22	1200				4700	2630	2880	0	19000
HGR 320	3050	20	14	1,5/3	6	9	17	1200	215	37	430	3850	2660	2880	0	19200
HGR 420	4050				4	7	22					4760	2530	2880	0	24500
HGR 325	3050	25	17	1,5/3	5	7	17	1200	215	37	430	3870	2660	2890	0	21500

Profile bending machines

Full hydraulic machines with three driven rolls with independent hydraulic motors and two bending rolls driven by massive hydraulic pistons. Roccia SR3W are developed on modern 3D CAD CAM stations to grant the structural stiffness typical of every Roccia machine and to develop the right geometry necessary to achieve a smooth and linear profile bending process. The rolls are assembled on rigid electro welded frames machined on CNC boring machines to grant the precision that every Roccia machine offers even when pushed to their limit.

	SR3W110		SR3W140		SR3W160		SR3W190		SR3W210		SR3W250		SR3W305		SR3W365	
PROF.	MEASURE	DIAM	MEASURE	DIAM	MEASURE	DIAM	MEASURE	DIAM	MEASURE	DIAM	MEASURE	DIAM	MEASURE	DIAM	MEASURE	DIAM
	11025 10**40	1.350 380	25*140 10*50	1.800 450	40*150 10*50	1.500 500	40*170 10*50	1.500 6.00	45*180	2.200	50*200	2.000	70*250	.1.000 200	80*300	2.500
	30*180	1.000	4*190	1.600	50*240	1.800	60*250	1.800	60*280	2.300	60*300	2.600	80*320	6.000	100*400	5.000
	60	1.200	80	1.200	95	2.500	105	1.600	115	3.400	125	2.000	160	4.500	200	3000
	75	750	90	1.000	110	1.650	125	1.300	135	2.000	150	2.200	200	5.400	230	6.900
	3*140 2*50	2.800 500	141,3 *6,5 2*60	4.000 550	7*168,3 2*60	3.000 550	6,35*219,1 2*60	6.000 700	9*273	8.000	355,6 *5,33	10.00	8*368,8	10.200	12*508	16.000
	5*50*100	1.200	5*70*140	2.500	8*70*180	3.000	8*75*200	4.000	8*100*200	6.000	10*100*230	4.000	12*125*250	12.000	8*100*300	16.000
	5*90	2.000	8*100	1.000	10*125	3.800	10*150	4.500	12*180	6.000	18*200	6.000	12*220	6.800	10*250	8.000
	10*100	2.000	15*120	3.600	12*150	3.800	18*180	5.400	20*200	5.400	20*200	6.000	25*200	6.000	28*200	6.000
	10*90 5*40	2.600 520	12*100	3.000	10*120	3.000	15*160	4.800	18*180	5.400	20*180	5.400	20*200	6.000	28*200	6.000
	12*100	1.600	13*120	1.250	12*150	2.000	15*160	1.900	200	6.300	20*225	3.500	250	7.500	300	9.000
	12*100	1.600	13*120	13*1.20	12*150	2.000	15*160	1.900	200	6.300	20*225	3.500	250	7.500	300	9.000
	12*100	1.600	13*120	1.250	12*150	2.000	15*160	1.900	200	6.300	20*225	3.500	250	7.500	300	9.000
	160	1.200	200	1.000	240	4.500	300	1.500	400	3000	450	4.000	500	4000	600	3.500
	160	1.200	200	1.000	240	4.500	300	1.500	400	3000	450	4.000	500	4000	600	3.500
	INP 160	2.000	INP 200	1.800	INP 240	4.500	INP 300	1.500	INP 400	3000	INP 450	4.000	INP 500	4000	INP 600	3.500
	HEA 140 HEB 120	1.600 2.000	HEA 160 HEB 140	2.500 2.500	HEA 180 HEB 160	2.500 2.500	HEA 220 HEB 180	2.500 2.000	HEA 240 HEB 220	4.500 4.500	HEA 280 HEB 240	4.000 4.000	HEA 280 HEB 240	12.000 8.000	HEA 600 HEB 600	4.000 4.000
	100	3.600	120	3.500	180	12.000	180	7000	220	9000	260	10.000	280	10.000	320	20.000
	100	3.000	160	4.000	180	5.500	200	6000	260	8000	270	8000	300	4000	420	20.000
	HEB 120	3.600	HEA 120 HEB 120	3.500 3.500	HEA 160 HEB 140	7.000 4.000	HEA 180 HEB 160	6.000 8.000	HEA 200 HEB 180	8.000 5.000	HEA 220 HEB 200	10.000 7.000	HEA 260 HEB 240	15.000 8.000	HEA 400 HEB 360	30.000 24.000

CNC plate rolling machines

Plate bending machine 3 ,2, and 4 rolls, with a range of thickness from 0.1mm up to 300mm 'cold rolling', with plate widths from 50mm to 8000mm, plus auxiliary handling options Angle rolls to bend beams / sections. Dished End production lines for plates up to 50mm thick.

3 ROLL PLATE BENDING MACHINE – HR3WR

-A Roccia 3 roll bending machine utilizes 3 driven rolls to ensure the rolling torque power transfer.
-Hydraulic MOTORS/PLANETARY GEARBOXES.
-ROLL DESIGN CALCULATION.
-ROLL CAMBER CALCULATION: are done on sophisticated 3D cad software that produces all the critical data required for every step of the rolling process.
-Exclusive heavy duty CONE ROLLING DEVICE.

4 ROLL PLATE BENDING MACHINE – HR4WR

-A Roccia four roll bending machine utilizes 2 driven rolls to ensure the rolling torque power transfer.
-Hydraulic MOTORS/PLANETARY GEARBOXES.
-ROLL DESIGN CALCULATION.
-ROLL CAMBER CALCULATION: are done on sophisticated 3D cad software that produces all the critical data required for every step of the rolling process.
-Exclusive heavy duty CONE ROLLING DEVICE.
-ROCCIA plate bending rolls use SWING ARM TECHNOLOGY.

NC GALILEO

-Unlimited memory
-Production costs saving
-USB port
-Users creation

CNC NEWTON

-Unlimited memory
-Material libraries creation
-Programming speed
-Users creation

CNC PARAMETRIC GIOTTO

-Unlimited memory
-Material libraries creation
-Programming speed
-Axes interpolation

MACHINE MODEL	PLATE LENGTH		BENDING THICKNESS(5xTR)		PRE-BENDING THICKNESS(5xTR)		BENDING THICKNESS(1,1xTR)		PRE-BENDING THICKNESS(1,1xTR)		TOP ROLL DIAMETER	
HR3W2008	2050	80,71”	8	0,24”	4	0,16”	3,9	0,154”	2,6	0,102”	160	6,30”
HR3W2010	2050	80,71”	10	0,31”	6	0,24”	5,2	0,205”	3,9	0,154”	190	7,48”
HR3W2013	2050	80,71”	13	0,39”	8	0,31”	6,5	0,256”	5,2	0,205”	210	8,27”
HR3W2018	2050	80,71”	18	0,51”	10	0,39”	8,45	0,333”	6,5	0,256”	230	9,06”
HR3W2020	2050	80,71”	20	0,71”	14	0,55”	11,7	0,461”	9,1	0,256”	260	10,24”
HR3W2025	2050	80,71”	25	0,98”	20	0,79”	16,25	0,640”	13	0,512”	300	11,81”
HR3W2030	2050	80,71”	30	1,18”	25	0,98”	19,5	0,768”	16,25	0,640”	330	12,99”
HR3W2040	2050	80,71”	40	1,57”	30	1,18”	26	1,024”	19,5	0,768”	380	14,96”
HR3W2050	2050	80,71”	50	1,97”	40	1,57”	32,5	1,280”	26	1,024”	430	16,93”
HR3W2080	2050	80,71”	80	3,15”	60	2,36”	52	2,047”	39	1,535”	550	21,65”
HR3W2506	2600	102,36”	6	0,24”	4	0,16”	3,9	0,154”	2,6	0,102”	190	7,48”
HR3W2508	2600	102,36”	8	0,31”	6	0,24”	5,2	0,205”	3,9	0,154”	200	7,87”
HR3W2510	2600	102,36”	10	,039”	8	0,31”	6,5	0,256”	5,2	0,205”	210	8,27”
HR3W2513	2600	102,36”	13	0,51”	10	0,39”	8,45	0,333”	6,5	0,256”	240	9,45”
HR3W2516	2600	102,36”	16	0,63”	14	0,51”	10,4	0,409”	8,45	0,333”	260	10,24”
HR3W2522	2600	102,36”	22	0,87”	16	0,63”	14,3	0,563”	10,4	0,409”	320	12,60”
HR3W2525	2600	102,36”	25	0,98”	20	0,79”	16,25	0,640”	13	0,512”	330	12,99”
HR3W2530	2600	102,36”	30	1,18”	25	0,98”	19,5	0,768”	16,25	0,640”	350	13,78”
HR3W2535	2600	102,36”	35	1,38”	30	1,18”	22,75	0,896”	19,5	0,768”	370	14,57”
HR3W2540	2600	102,36”	40	1,57”	32	1,26”	26	1,024”	19,5	0,768”	400	15,75”
HR3W2550	2600	102,36”	50	1,97”	40	1,57”	32,5	1,280”	26	1,024”	450	17,72”
HR3W3006	3100	122,05”	6	0,24”	4	0,16”	3,9	0,154	2,6	0,102”	200	7,87”
HR3W3008	3100	122,05”	8	0,31”	6	0,24”	5,2	0,205”	3,9	0,154”	220	8,66”
HR3W3010	3100	122,05”	10	0,39”	8	0,31”	6,5	0,256”	5,2	0,205”	240	9,45”
HR3W3013	3100	122,05”	13	0,51”	10	0,31”	8,45	0,333”	6,5	0,256”	280	11,02”
HR3W3016	3100	122,05”	16	,0”63	14	0,47”	10,4	0,409”	7,8	0,307”	300	11,81”
HR3W3020	3100	122,05”	20	0,79	16	0,63”	13	0,512”	10,4	0,409”	340	13,39”
HR3W3025	3100	122,05”	25	0,98”	20	0,79”	16,25	0,640”	13	0,512	370	14,57”
HR3W3032	3100	122,05”	32	1,26”	25	0,98”	20,8	0,819”	16,25	0,640”	400	15,75”
HR3W3040	3100	122,05”	40	1,57”	30	1,18”	26	1,024”	19,5	0,768”	450	17,72”
HR3W3045	3100	122,05”	45	1,77”	35	1,38”	29,25	1,152”	22,75	0,896”	480	18,90”
HR3W3050	3100	122,05”	50	1,97”	40	1,57”	32,5	1,280”	26	1,024	510	20,08”
HR3W3060	3100	122,05”	60	2,36	50	1,97”	39	1,535	32,5	1,280	600	23,62
HR3W3070	3100	122,05”	70	2,76	55	2,17	45,5	1,791	35,75	1,407	680	26,77
HR3W3080	3100	122,05”	80	3,15	60	2,36”	52	2,047	39	1,535”	750	29,53
HR3W3090	3100	122,05”	90	3,54”	70	2,76”	58,5	2,303	45,5	1,791”	780	30,71”
HR3W30110	3100	122,05”	110	4,33	80	3,15”	71,5	2,815”	52	2,047”	820	32,28”
HR3W30125	3100	122,05”	125	4,92”	100	3,94	81,25	3,199”	65	2,559”	940	37,01”
HR3W30150	3100	122,05”	150	5,91”	120	4,72”	97,5	3,839	78	3,071”	1000	39,37”
HR3W4006	4100	161,42	6	0,24	4	0,16”	3,9	0,154”	2,6	0,102”	240	9,45
HR3W4008	4100	161,42	8	0,31”	6	0,24”	0,24”	0,205”	3,9	0,154”	270	10,63”
HR3W4010	4100	161,42	10	0,39”	8	0,31”	6,5	0,256	5,2	0,205”	320	12,60”
HR3W4012	4100	161,42	12	0,47	10	0,39	7,8	0,307	6,5	0,256	340	13,39”
HR3W4016	4100	161,42	16	0,63	14	0,55”	10,4	0,409	9,1	0,358”	380	14,96”
HR3W4020	4100	161,42	20	0,79	16	0,63	13	0,512	10,4	0,409”	410	16,14”
HR3W4025	4100	161,42	25	0,98	20	0,79	16,25	0,640	13	0,512”	460	18,11”
HR3W4032	4100	161,42	32	1,26”	25	0,98	20,8	0,819”	16,25	0,640”	510	20,08”
HR3W4040	4100	161,42	40	1,57”	32	1,26	26	1,024	20,8	0,819”	580	22,83”

MACHINE MODEL	PLATE LENGTH		BENDING THICKNESS(5xTR)		PRE-BENDING THICKNESS(5xTR)		BENDING THICKNESS(1,1xTR)		PRE-BENDING THICKNESS(1,1xTR)		TOP ROLL DIAMETER	
HR4W1207	1250	49,21"	7	0,28"	4	0,16"	4,55	0,179"	2,6	0,102"	125	4,92"
HR4W1707	1750	68,90	7	0,28"	4	0,16"	4,55	0,179"	2,6	0,102"	140	5,51"
HR4W2007	2050	80,71"	7	0,28"	4	0,16"	4,55	0,179"	2,6	0,102"	160	6,30"
HR4W2008	2050	80,71"	8	0,31"	6	0,24"	5,2	0,205"	3,9	0,154"	190	7,48"
HR4W2010	2050	80,71"	10	0,39"	8	0,31"	6,5	0,256"	5,2	0,205"	210	8,27"
HR4W2014	2050	80,71"	14	0,55"	10	0,39"	9,1	0,358"	6,5	0,256"	225	8,86
HR4W2016	2050	80,71"	16	0,63"	12	0,47"	10,4	0,409"	7,8	0,307"	250	9,84"
HR4W2018	2050	80,71"	18	0,71"	14	0,55"	11,7	0,461"	9,1	0,358"	270	10,63"
HR4W2020	2050	80,71"	20	0,79"	16	0,63"	13	0,512"	10,4	0,409"	280	11,02"
HR4W2025	2050	80,71"	25	0,98"	20	0,79"	16,25	0,640"	13	0,512"	300	11,81"
HR4W2028	2050	80,71"	28	1,10"	22	0,87"	18,2	0,717"	14,3	0,563"	320	12,60"
HR4W2035	2050	80,71"	35	1,38	28	1,10"	22,75	0,896"	18,2	0,717"	350	13,78"
HR4W2040	2050	80,71"	40	1,57"	30	1,18"	26	1,024"	19,5	0,768"	380	14,96"
HR4W2050	2050	80,71"	50	1,97"	40	1,57"	32,5	1,280"	26	1,024"	430	16,93"
HREW2060	2050	80,71"	60	2,36"	50	1,97"	39	1,535"	32,5	1,280"	500	19,69"
HR4W2070	2050	80,71"	70	2,76"	50	1,97	45,5	1,791"	32,5	1,280"	570	22,44"
HR4W2080	2050	80,71"	80	3,15"	65	2,56"	52	2,047"	42,25	1,663"	570	22,44"
HR4W2506	2600	102,36"	6	0,24"	4	0,16	4,55	0,179"	2,6	0,102"	180	7,09"
HR4W2508	2600	102,36"	8	0,31"	6	0,24"	5,2	0,205"	3,9	0,154"	200	7,87"
HR4W2510	2600	102,36"	10	0,39"	8	0,31"	6,5	0,256"	5,2	0,205"	220	8,66"
HR4W2513	2600	102,36"	13	0,51"	10	0,39"	8,45	0,333"	6,5	0,256"	240	9,45"
HR4W2516	2600	102,36"	16	0,63"	12	0,47"	10,4	0,409"	7,8	0,307"	270	10,63"
HR4W2518	2600	102,36"	18	0,71"	14	0,55	11,7	0,461"	9,1	0,358"	280	11,02"
HR4W2522	2600	102,36"	22	0,87"	18	0,71"	14,3	0,563"	11,7	0,461"	330	12,99"
HR4W2528	2600	102,36"	28	1,10"	20	0,79"	18,2	0,717"	13	0,512"	340	13,39"
HR4W2530	2600	102,36"	30	1,18	25	0,98"	19,5	0,768"	16,25	0,640"	360	14,17"
HR4W2532	2600	102,36"	32	1,26"	24	0,94"	20,8	0,819"	15,6	0,614"	370	14,57"
HR4W2535	2600	102,36"	35	1,38"	30	1,18"	22,75	0,896"	19,5	0,768"	400	15,75"
HR4W2545	2600	102,36"	45	1,77"	35	1,38"	29,25	1,152"	19,5	0,896"	450	17,72"
HR4W2550	2600	102,36"	50	1,97"	40	1,57"	32,5	1,280"	26	1,024"	510	20,08"
HR4W2560	2600	102,36"	60	2,36"	50	1,97"	39	1,535"	32,5	1,280"	530	20,87"
HR4W2570	2600	102,36"	70	2,76	60	2,36"	45,5	1,791"	39	1,535"	570	22,44"
HR4W3006	3100	122,05"	6	0,24"	4	0,16"	3,9	0,154"	2,6	0,102"	210	8,27"
HR4W3008	3100	122,05"	8	0,31"	6	0,24"	5,2	0,205"	3,9	0,154"	230	9,06"
HR4W3010	3100	122,05"	10	0,39"	8	0,31"	6,5	0,256"	5,2	0,205"	250	9,84"
HR4W3014	3100	122,05"	14	0,55"	12	0,47"	9,1	0,358"	7,8	0,307"	390	11,42"
HR4W3016	3100	122,05"	16	0,63"	13	0,51"	10,4	0,409"	8,45	0,333"	310	12,20"
HR4W3022	3100	122,05"	22	0,87"	18	0,71"	14,3	0,563"	11,7	0,461"	350	14,57"
HR4W3025	3100	122,05"	25	0,98"	20	0,79"	16,25	0,640"	13	0,512"	370	14,96"
HR4W3028	3100	122,05"	28	1,10"	22	0,86"	18,2	0,717"	13	0,512"	380	15,75"
HR4W3032	3100	122,05"	32	1,26"	28	0,98"	20,8	0,819"	16,25	0,640"	400	16,93"
HR4W3035	3100	122,05"	35	1,38"	32	1,10"	22,75	0,896"	18,2	0,717"	430	17,72"
HR4W3040	3100	122,05"	40	1,57"	35	1,26"	26	1,024"	20,8	0,819"	450	18,90"
HR4W3045	3100	122,05"	45	1,77"	40	1,57	29,25	1,152"	22,75	0,896"	480	20,87"
HR4W3050	3100	122,05"	50	1,97"	50	1,97"	32,5	1,280"	26	1,024"	530	24,80"
HR4W3065	3100	122,05"	65	2,56"	60	2,36"	42,25	1,663"	32,5	1,280"	630	29,53"
HR4W3085	3100	122,05"	85	3,35"	80	3,15"	55,25	2,175"	39	1,535"	750	32,28"
HR4W30100	3100	122,05"	100	3,94"	100	3,94"	71,5	2,815"	52	2,047"	820	37,40"
HR4W30125	3100	122,05"	125	4,92"	120	4,72"	81,25	3,199"	65	2,559"	950	40,94"
HR4W30150	3100	122,05"	150	5,91"	4	0,16"	97,5	3,839"	78	3,071"	1040	9,65"
HR4W4006	4100	161,42"	6	0,24"	6	0,24"	3,9	0,154"	2,6	0,102"	245	10,63"
HR4W4008	4100	161,42"	8	0,31"	8	0,31"	5,2	0,205"	3,9	0,154"	270	12,60"
HR4W4010	4100	161,42	10	0,39"	10	0,39"	6,5	0,256"	5,2	0,205"	320	13,78"
HR4W4012	4100	161,42	12	0,47"	14	0,55"	7,8	0,307"	6,5	0,256"	350	14,96"
HR4W4016	4100	161,42	16	0,63"	16	0,63"	10,4	0,409"	9,1	0,358"	380	16,54"
HR4W4020	4100	161,42	20	0,79	20	0,79"	13	0,512"	10,4	0,409"	420	18,11"
HR4W4025	4100	161,42	25	0,98"	25	0,98"	16,25	0,640"	13	0,512"	460	20,08
HR4W4032	4100	161,42	32	1,26"	16	1,26"	20,8	0,819	16,25	0,640"	510	22,83"
HR4W4040	4100	161,42	40	1,57"	32	1,57"	26	1,024"	20,8	0,819"	580	25,59"
HR4W4050	4100	161,42	50	1,97"	40	1,77"	32,5	1,280"	26	1,024"	650	25,59
HR4W4060	4100	161,42	60	2,36"	45	1,26	39	1,535"	29,25	1,152"	700	22,83"

TUBE BENDERS

Full electric benders

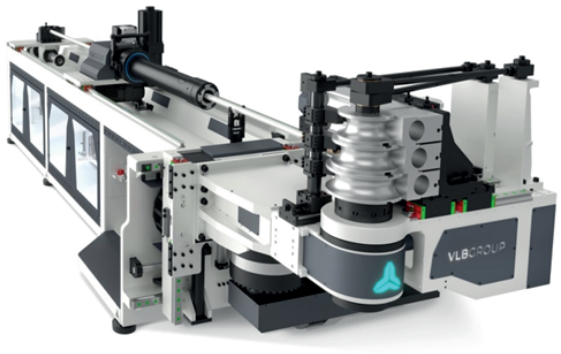
FULLY ELECTRIC CNC TUBE BENDERS.

EB SERIES

The EB-CNC series electric VLB bending machines are equipped with the latest Electric Motion technology. With up to 9 fully electric drive axis, pipes with a diameter of 6 to 150 mm can be bent. Equipped with a Booster system, it is possible to achieve radii up to 1D with reduced marks in the inner bend. The drives on all axes are optimized to reduce energy consumption and increase speed, making these machines ideal for high volume production batches that require high consistency

TUBE CUTTING SYSTEM

COMPACT RIGHT AND LEFT TURN BENDING

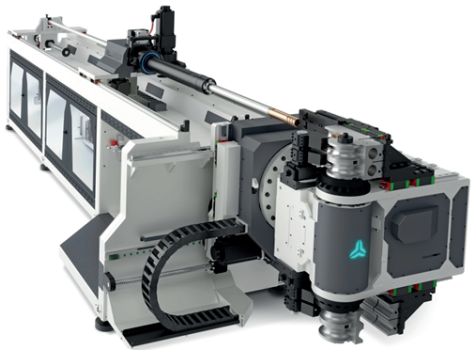


Technical features	EB43CNC	EB53CNC	EB63CNC	EB83CNC	EB100CNC	EB130CNC	EB150CNC
Maximum capacity (45\mm2)	Ø43x2mm	Ø53x2mm	Ø63x2mm	Ø83x2mm	Ø100x2mm	Ø130x2mm	Ø150x2mm
Controlled axles	9	9	9	9	9	9	9
X axis precision	+\- 0.05mm	+\- 0.05mm	+\- 0.05mm	+\- 0.05mm	+\- 0.05mm	+\- 0.05mm	+\- 0.05mm
Y axis precision	+\- 0.05˚	+\- 0.05˚	+\- 0.05˚	+\- 0.05˚	+\- 0.05˚	+\- 0.05˚	+\- 0.05˚
Z axis precision	+\- 0.05˚	+\- 0.05˚	+\- 0.05˚	+\- 0.05˚	+\- 0.05˚	+\- 0.05˚	+\- 0.05˚
Maximum bending radius	230mm	230mm	230mm	230mm	230mm	230mm	230mm

Tube Bending Machines (EB-RH SERIES)

VLB's fully electric EB-RH series bending machines, with rotating heads, contain the mostadvanced Electric Motion technology on the market with 11 fully electric drive shafts. The bending head moves 360º on a radial axis and on horizontal and vertical axes. This system offers complete freedom of movement and allows the production of very complex parts in an automatic bending cycle. This range of machines is capable of bending pipes and profiles from 6 to 53 mm with even radii up to 1D with minimal marking when equipped with the booster system.

FREEDOM OF MOVEMENT.
EASY INTEGRATION



Technical features	EB43RH-CNC	EB53RH-CNC
Maximum capacity (45\mm2)	Ø43X2mm	Ø53x2mm
Controlled axles	10	10
X axis precision	+\- 0.05mm	+\- 0.05mm
Y axis precision	+\- 0.05˚	+\- 0.05˚
Z axis precision	+\- 0.05˚	+\- 0.05˚
Maximum bending radius	250mm	275mm

VLB 3D Software

The EB series is at the forefront of automation and control.

- 21.5 inch touchscreen (1920x1080) with high resolution, multi touch widescreen
- Intel Core i6500-5 quad core 3.2 Ghz
- 8 Gb of DDR4 RAM
- Integrated graphics card Intel HD graphics HD530 / 510 64 GB Msata HD
- 2 Ethernet ports + RS-232 serial port + 8 USB ports
- Windows® 10 IOT Enterprise 2016 PC system
- With the capacity to store over 1,000,000 programs of up to 30 bending programs each.

ELECTRIC NC TUBE BENDERS
ECO SERIES

The bending machines of the ECO-NC series are easy to operate, robustly constructed and achieve excellent bending results. Entering a new bending program is very intuitive with the help of an industrial touch controller and the accurate and user-friendly VLB 2D software. The NC program precisely controls the bend angle (Y-axis) and rotation (Z-axis). The distance between the bends (X-axis) is configured using easily adjustable and very precise mechanical stops.

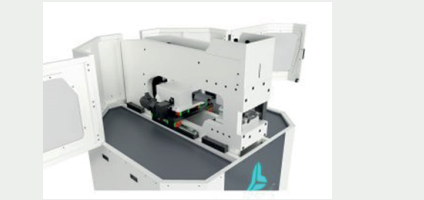
- Semi-automatic bending machine
- Fixed radius
- Compact design

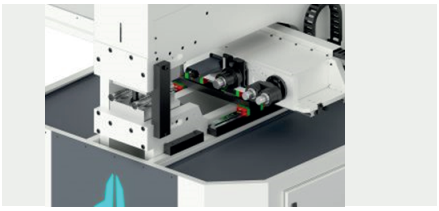
Technical features	ECO63NC	ECO92NC
Maximum capacity (45\mm2)	Ø63x3mm	Ø92x4mm
Controlled axles(NC1- NC2)	1-2	1-2
Y axis precision	+\- 0.1˚	+\- 0.1˚
Z axis precision	+\- 0.05˚	+\- 0.05˚
Maximum bending radius	180mm	255mm
Standard working length	3000mm	3000mm

PIPE END FORMING MACHINES

The EF-series is enormously versatile, the numerical control, easy to program VLB's EF series end prep machines are fast, accurate and very versatile.

- They enable the endforming of pipes with high complexity, high deformation levels and high repeatability.
- The sequence of tools and their linear positioning is driven by a servo motor and controlled by an easy-to-program numerical command, which guarantees movement speed and enormous precision.
- the tube end forming machines can be equipped with up to 6 f orming stations, including rotary stations for specific tasks and special jobs.





EASE OF USE ON MAINTENANCE

In addition to the technical possibilities, the EF tube forming machines have also been developed with an eye on the use of operation and maintenance of the machines.

There are no moving parts that cause high friction. All components are of a high quality and equipped with high performance linear guides, which means that the cycle time, electricity consumption and the need and cost of maintenance are significantly reduced.

HMI INTERFACE

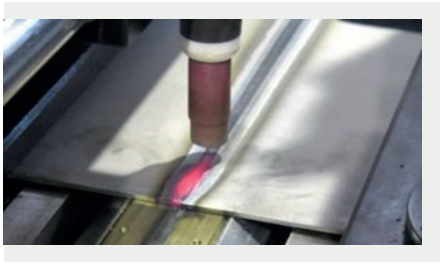
The powerful control of the EF pipe end machining is easily programmable via the touchscreen.

ROLL FORMING LINES FORSHEET METAL

Decades of experience in the sheetmetal processing industry

- Automatic profiling lines. VLB develops, produces and installs roll forming lines and provides technical support. The design of the VLB roll forming machines is based on decades of experience in the sheet metal processing industry.

- Nothing has been left to chance; our automatic profiling lines are future-proof. New roller sets or modules can always be added later. The RF series roll forming lines are fast, accurate and flexible, allowing sheet thicknesses from 0.3mm to 12mm at sheet widths up to 1400mm.



CONTROL

Components are integrated in the automatic VLB roll forming lines. They are individually controlled by a powerful and intuitive CNC controller. This guarantees the connection between all process steps from the plate spool to the automatic unloading table.

PLATE WELDING UNIT

For companies with a high production speed, this welding system ensures that the ends of the plate on the coil are automatically welded (end of the coil with a new beginning), which saves a lot of time when replacing the coil and the material waste is considerable reduced.

VERTICAL PLATE STORAGE SYSTEM

The vertical plate storage system is used when it is not possible to make a pit in the floor, which contributes to the continuous operation of the roll forming line

CNC plasma cutting machine

CARACAL

High precision CNC plasma compact cutting machine.

The CARACAL is designed for both standard and high-precision plasma systems. It is characterized by simple installation and easy maintenance, but from the point of view of control, it includes the most modern type of communication and control.

The material cutting table is divided into individual suction sections, which open and close based on the software calculated position of the machine. The machine concept combines advantages of the compact design and standard portal machine where machine is not in uenced by the temperature and vibration from the cutting table. It is thanks of the in depended standing of the cutting table. This solution allows to cut thicker materials or standard table can be easy replaced by simple water bath

The machine is equipped with professional touching screen CNC controller and wireless remote control.

STANDARD EQUIPMENT

- Steel, heavy duty machined portal
- Precision rack and pinions
- Double linear slides in cross axis
- Linear slide in longitudinal axis
- Floating cutting head
- Anti-collision sensor for plasma cutting
- Laser cross for plate alignment

CNC CONTROL

- Professional industry CNC control system
- 15 "color touch screen with protective glass
- Digitally controlled AC servo system
- Built-in automatic technology for plasma cutting

TECHNOLOGY

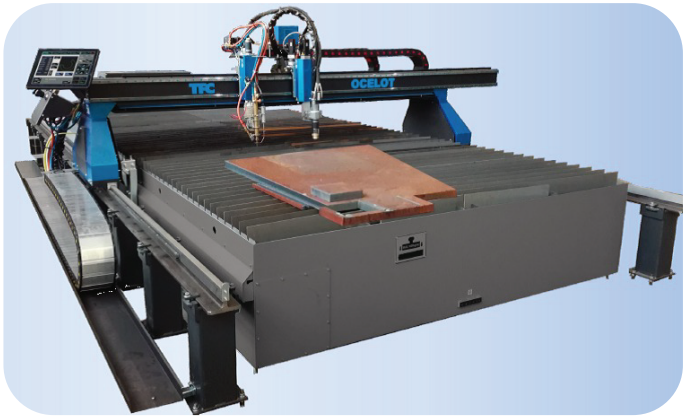
- Plasma cutting
- Plasma marking - according plasma unt

TECHNICAL PARAMETERS

- Cutting width 2000 - 1000 mm
- Cutting length 6000 - 2000 mm
- MAX. travel speed 20 mtr/ min
- MAX. cutting thickness 30 mm

OCELOT

Heavy-duty CNC gas and plasma cutting machine.



The OCELOT cutting machine is designed for medium-sized and large companies, the production of which requires cutting shapes in larger series and with a large range of thickness of the cut material. It is equipped with a high level of automation and the latest cutting technologies.

OCELOT is a portal type of cutting machine, which by its construction is predetermined for high operating loads. It is suitable for high performance plasma sources and for gas cutting up to a material thickness of 200 mm. The basis of the machine is a heavy-duty machined portal with a double linear guide. The machine track is made of solid and precise rails.

The machine is equipped with professional touch screen CNC controller. Communication between CNC, servo system and other accessories is fully digital.

STANDARD EQUIPMENT

Steel, heavy duty machined portal
Precision rack and pinions
Double linear slides in cross axis
Heavy duty machined rails in the longitudinal axis
Floating cutting head
Heat protection
Anti-collision sensor for plasma cutting
Laser cross for plate alignment

TECHNOLOGY

Plasma cutting
Gas cutting
Plasma marking - depends on the plasma unit
Pipe cutting

TECHNICAL PARAMETERS

Cutting width 3500 - 1500 mm
Cutting length 20000 - 3000 mm
MAX. travel speed 20 mtr/ min
MAX. cutting heads 1 x plasma + 4 x gas

CNC CONTROL

Professional industry CNC control system
17 "color touch screen with protective glass
Digitally controlled AC servo system
Built-in automatic technology for plasma cutting
Built-in automatic technology for gas cutting

WILDCAT

Precision CNC plasma and gas cutting machine.

WILDCAT is the portal CNC cutting machine that combines gas and plasma cutting technology at a very reasonable price. It can be equipped with both standard air plasma and plasma for high precise cutting.

The WILDCAT cutting machine is designed for small and medium-sized companies, the production of which requires precise cutting with a range of cut material of 1 to 100 mm. As standard it is supplied either as a plasma cutting machine or in combination with 1 gas cutting torch. It can be placed on separate support or as an economical option for replacement with a plasma torch.

The machine is equipped with professional touch screen CNC controller. Communication between CNC, servo system and other accessories is fully digital.

STANDARD EQUIPMENT

Steel, heavy duty machined portal
Precision rack and pinions
Double linear slides in cross axis
Linear slide in longitudinal axis
Floating cutting head
Anticollision sensor for plasma cutting
Laser cross for plate alignment

TECHNOLOGY

Plasma cutting
Gas cutting
Plasma marking - according plasma unt

TECHNICAL PARAMETERS

Cutting width 2500 - 1500 mm
Cutting length 12000 - 3000 mm
MAX. travel speed 12 mtr/ min
NOs of cutting heads 1 x plazma + 1 x gas

CNC CONTROL

Professional industry CNC control system
15 "color touch screen with protective glass
Digitally controlled AC servo system
Built-in automatic technology for plasma cutting

Hydraulic Punching machine

NARGESA, is characterized by its versatility, it can make several working functions like punching in metal sheet, flat bar, pipe, angle, U profile, T profile, UPN, IPN... Bending, Cutting, inlaying, punching, pipe notching tube, embossing... it can be adapted any kind of tooling, even one made by the customer himself. Its versatility and easy use, makes it an essential item for a metal working workshop.

MACHINE	MX700	MX340
Hydraulic power	70 Tn.	40 Tn
Working speed	9 mm/seg	7,1 mm/sec
Return speed	14 mm/seg	9,3 mm/sec
Punch displacement	160 mm	100 mm
Neck	350 mm	180 mm
Table Dimensions	600x350 mm	245x265 mm
Motor power	5,5 KW/ 7,5 HP	2,2 KW/ 3 HP
Tension 3 phase	400 V	230/400 V
Weight	2000 Kg	615 Kg

Automatic Scroll Making

The Automatic Scroll Making programmer, makes all kinds of pieces for the ornamental forging, balusters, scrolls, etc...
Maximum twisting capacity: square 40 mm, maximum bending: square 25 mm.

- Maximum twisting Capacity 40 mm or 8/3 1" inches.
- Maximum bending capacity: 25 mm or 1" inches.
- Maximum scrolling and bending capacity in flat bar, clod or handrail 50x10 mm or 2"x 8/3" inches.
- Maximum continuous twisting length: 1.620 mm.
- Possibility of buying the tooling for the machine in mm or inches.
- Motor power: 4Kw / 5,5 HP. > CNC programmer to make high productions.
- 3-phased tension: 400/230 V.
- Adjustable rotation speed from 0 to 10 r.p.m.
- Adjustable millimeter scale on its head to make all parts the same.
- Working method by twisting and flexion in cold.
- Machine suitable for small, medium and big productions.
- Safe and reliable transmission by a motor reducer with treated flat pinions, accomplishing a great performance with little maintenance.
- Its perfect for making all kind of standard ornamental pieces and essential to make your own designs which are much more demanded in the market.
- It's got two working sites, one for twisting and another one for bending with no neck limit.

Control panel MT500A

The control panel of the scroll forming machine MT500A, is characterized by its simplicity and easy use. It's got a high production capacity that allows programming the starting point and theending point of the piece to be made.
Easy use
Digital display.
Touch pad.
Piece counter.
Automatic unbolt
Capacity for 8 different memories.
Independent cotrol panel.

Automatic Twisting Machine

Automatic Twisting Machine Nargesa MT150A, with a piece programmer, makes all kind of pieces for the ornamental forging, balusters, scrolls, etc... Maximum twisting capacity: square 20 mm, Maximum bending capacity square 16 mm.

Control panel MT150A

The electric panel of the scroll forming Machine MT150A is characterized by its simplicity and easy handling. Great capacity of productionand it allows to program the starting point and the end point of the piece to be made.

- Easy handling.
- Digital Screen.
- Touchpad.
- Piece counter.
- Automatic unbolt.
- Capacity for different 8 memorias.

NON-MANDREL TUBE AND PIPE BENDER

The new generation of non-mandrel machines can bend up to 180º curves on hollow profiles ensuring the best bent finishes in today's market. Equipped with a Touch Screen control grants the user interact action with the standard features offered using the latest 4.0 technology

CC60

- Maximum working stroke: 60,3mm o 2" Schedule-40 o 4/1 "2 x 4mm.
- Maximum radius of curvature: 320 mm or 12,60"
- CNC control with 7" touch-screen included.
- 4.0 Technology
- Automatic rotation speed from 1.1 up 1.5 rpm
- Automatic unlocking
- Automatic and programmable springback
- Offset head for complex parts
- Reinforcement tool post support included
- Packaging included.

CC90

- Maximum working stroke: 90mm o 3" Schedule-40 o 2/1 "3 x 6mm.
- Maximum radius of curvature: 346 mm or 13.62".
- CNC control with 7" touch-screen included.
- 4.0 Technology.
- Automatic rotation speed from 0.75 up 2.2 rpm.
- Automatic unlocking.
- Automatic and programmable springback.
- Offset head for complex parts.
- Reinforcement strap included.
- Packaging included

ESA S625 CONTROL PANEL

> Stores up to 10,000 programs.
> Up to 50 different angles on the same piece can be programmed.
> Dimensions may be programmed in inches or millimetres.
> A library of available dies with the possibility of programming new ones.
> A library of differently shaped pipes with varying thicknesses.
> The CNC can be supplied in more than 20 different languages.
> Automatic or manual rotation speed adjustment from 1.5 to 5.4 rpm.
> Manual or automatic operation.
> Automatic elastic recovery correction (springback).
> Piece counter.
> Independent correction of the programmable final curve degree.
> 4.0 Technology.
> On-screen alarm diagnostics
> Preventive maintenance warning.
> Can be remotely connected by the manufacturer without having to travel to the machine site.
> Warning on screen if the tool post support needs to be used.
> 7" colour touch-screen with 800 x 480 resolutions.
> 128 MB silicon disk.
> 2 analogue inputs, 12 bit resolution.
> 16 digital inputs (24 Vdc).
> 16 digital outputs (24 Vcc, 0.7 A max.) Protected against overloads and short circuits.
> 1 RS232 serial port.
> 1 CAN port with 9 D-Sub F connector contacts.
> 24 Vdc power source.
> 1 USB port.

Robustness and speed

The weight of the machine in comparison to other brands provides an idea of how it's built. Some of our units are almost double in weight than our competitors. These are not DIY machines; they're pipe benders that can work 24 hours a day. Made of robust materials, which are tempered in areas subject to wear, and activated with a helical-cut pinion planetary gear system. The rotation speed is also something to be taken into account. It can reach 4.5 rpm for more aggressive production; in many cases, more than twice as much when compared to similar machines in today's market.

Horizontal Hydraulic Press Brake

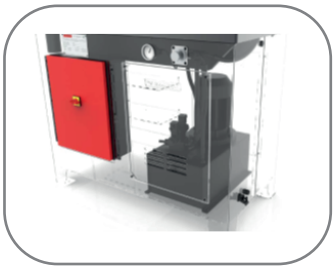
HORIZONTAL HYDRAULIC PRESS BRAKE

The versatility of the 20 Tons, Horizontal Press Brake NARGESA PP200CNC allows us to bend, f old, bend, cut, form, enlarge and reduce flaring, swagging, assembling... all kinds of metal materials such as iron, steel, stainless, copper, brass, aluminium...

- Pipe bending at fixed radius up to 150º could be considered one of the good features of these presses
- Cutting, piercing and punching flat bars or metal sheets turn this horizontal bending press into a punching shears machine
- Stretching and reducing pipes on the ends in order to make parts that fit or weld later
- It is also a solution to bend different profiles at different radius and keeping the ends straight, like when manufacturing handles and flanges
- Cold forge uses horizontal presses to make and form different shapes of balusters
- Tube notching to assemble at 90 degrees
- Folding operations with wrought iron machines permit to completely bend the parts or pieces unlike conventional flat bar section bending machines
- Folding flat bars and sheets into completely close shapes.
- Conception of this horizontal bending press brake allows to make folding operations impossible to becarried out on a conventional press brake.
- Fast tool change, punches and dies: This change does not take more than 30 seconds most of the times.
- A set of punch and folding die is supplied along with the machine.
- Performance by a safety double activation hold pedal.
- Low noise level, improving the quality of work of the operator.

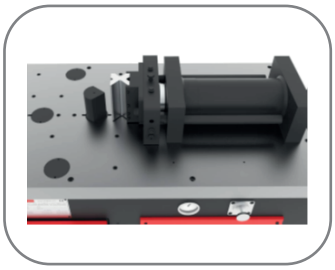
Hydraulic System

Mon block hydraulic power unit with positioning and pressure regulation valves The hydraulic system can be regulated by means of pressure adjustment valves that affect the piston force. Pressure regulator with pressure gauge that allows to control the force carried out at any time.



Guided hydraulic cylinder

The hydraulic cylinder placed on the work bench allows us to transfer all the force directly on the tools. Fully guided hydraulic piston to prevent any bending during the folding operation.



Cylindrical fastening bolts

Cylindrical fastening bolts easy to install, to guarantee maximum firmness to the tools during machining operations. Plugs to prevent the residues of the folding from entering inside the machine.

Work table without frame

The work bench is frameless, this is great for the movement of the parts to be machined for there isn't any element that obstructs its movement. The table is manufactured in a 60mm monoblock of welded steel, stabilized and machined. The operator's working position must be at the side of the machine for accomplishing a better vision and control, as well as greater safety for the user since he will be outside the radius of action of the tools.

Working strength	20 Ton. (200 KN).
Working speed	9,8 mm/s.
Return speed	35 mm/s.
Maximum displacement	250 mm.
Repeatability	0,05 mm.
Bench size	600x1170 mm.
Working height	950 mm.
Engine power	2.2 KW / 3 CV a 1400 r.p.m.
Electric Tension	230 / 400 V three-phased
Intensity	9/5 A.
Hydraulic pressure	50 a 215 Kg/cm2.
Hydraulic pump	7,5 litres/minute
Tank Capacity	27 litres
Machine dimensions	660x1180x1130 mm.
Weight	665 Kg.

Section bending machine

The pipe and section bending machines Nargesa with two or three traction rollers, either hydraulic or mechanic system are ideal for making all kinds of bends, curves, shapes on different pipes and profiles no matter the material to be use: aluminium, stainless steel, mild steel, copper, galvanized pipe...

machine	MC150B	MC200	MC400	MC200 H	MC550	MC650
Drive rollers	Two	Two	Three	Two	Three	Three
Diameter of axes	40 mm	40 mm	40 mm	40 mm	50 mm	Inferiors 65 mm / Superior 80 mm
Useful axes length	74 mm	74 mm	80 mm	74 mm	90 mm	130 mm
Center distance between lower axes	230 mm	286 mm		286 mm	286 mm	
Maximum capacity for bending round pipe	2 inches or 50 mm	2’ 1/2 inches or 63.5 mm	2’ 1/2 inches or 63.5 mm.	3’ inches or 76.2 mm.	3’ inches or 76.2 mm.	4’ inches or 101,6 mm
Motor Power	0.75 KW / 1 HP	1,1 KW / 1,5 HP	1,1 KW / 1,5 HP	1,1 KW / 1,5 HP	3 KW / 4CV	3 KW/4 CV
Voltage supply	230 V	3 phased 230/400 V	3 phased 230/400 V	3 phased 230/400 V	3 phased 230/400 V	3 phased 230/400 V
Rollers speed	6 RPM	8 RPM	7 RPM	8 RPM	3 to 7 RPM	3 to 7 RPM
Width	700 mm	700 mm	650 mm	700 mm	1380 mm	1380mm
Depth	950 mm	830 mm	740 mm	830 mm	1070 mm	1070 mm
Height	1250 mm	1380 mm	1360 mm.	1530 mm.	2090 mm.	2090 mm
Volume	0,83 m3	0.80 m3	0,65 m3	0,90 m3	3,08 m	3,08 m3
Net Weight	270 Kg.	320 Kg.	365 Kg.	360 Kg.	840 Kg.	1290 Kg.
Gross Weight	280 Kg	335 Kg	380 Kg	375 Kg.	906 Kg.	1321 Kg

MMA WELDING MACHINES

Light and flexible » Very compact and powerful inverter » Suitable for cellulose
Intuitive operation » Generator safe

URANOS 1500

Light job shop fabrication, medium-heavy job shop fabrication, building sites, shipyards, plants machinery construction, oil refinery plants construction, repair and overhaul, outdoor working, vehicle bodywork repair, building, installers, blacksmiths.

TERRA 150A – 180A

Control the current in a perfectly linear manner, obtaining a particularly stable and accurate welding arc, quality welding and a general improvement in power source performance. Weld perfectly and with all types of electrode such as basic, rutile, high performance rutile, high penetration rutile, cast iron, stainless steel.

TERRA 220-270-350 -500

robust and reliable three phase power sources for TIG DC Lift and electrode welding. This arc generation is based on tried and tested inverter technology, and dimensions are particularly compact thanks to the Three-Level® power platform. The entire welding process is digitally controlled by a DSP microprocessor.

hot start

HOT START

Automatically supplies a surplus of energy upon starting which allows the electrode to be immediately removed and promptly begin welding.

arc force

ARC FORCE

Activates automatically, with a shot of current which prevents the electrode from sticking to the piece that is being welded, avoids overheating of the electrodes, unpleasant dazzling and saves the electrode gun.

anti sticking

ANTI STICKING

Automatically enters into operation after approximately 2/1 sec. from the Arc-Force, cutting out the power from the generator thus allowing the removal of the electrode.

EQUIPMENT

Power source	Terra 150	Uranos 1500	TERRA180	TERRA220	Terra270	Terra350	Terra500
Remote Control	NO	Rc18	NO	RC 100 / RC180 / RC 200	RC 100 / RC180 / RC 200	RC 100 / RC 100MP/ RC180 / RC 200	RC 100 / RC180 / RC 200
Stick electrode holder	70mm^2/ L 4 m	70mm^2/ L 4 m	70mm^2/ L 4 m	70mm^2/ L 4 m	70mm^2/ L 4 m	70mm^2/ L 4 m	70mm^2/ L 4 m
Work Cable	70mm^2/ L 4 m	70mm^2/ L 4 m	70mm^2/ L 4 m	70mm^2/ L 4 m	70mm^2/ L 4 m	70mm^2/ L 4 m	70mm^2/ L 4 m

TECHNICAL FEATURES

Inverter technology	Inverter Three Level	Inverter Three Level	Inverter Three Level	Inverter Three Level	Inverter Three Level	Inverter Three Level	Inverter Three Level
Communication	CANBUS Analog communication	CANBUS Analog communication	CANBUS Analog communication	CANBUS Analog communication	CANBUS Analog communication	CANBUS Analog communication	CANBUS Analog communication
Welding parameters display A/V	No	No	No	Digital	Digital	Digital	Digital
VDR	Included	Included	Included	Included	Included	Included	Included
Power supply function forlow voltage electric tools (ELV)	Included	Included	Included	Included	Included	Included	Included

TECHNICAL FEATURES

Dimensions	280x110x 220 mm	260x120x 190 mm	410x150x 330 mm	410x150x 330 mm	500x190x 400 mm	500x190x 400 mm	620x240x 460 mm
Weight	4.1 kg.	2.6 kg.	8.0 kg.	11.3 kg.	16.1 kg.	16.5kg.	27.3 kg.
Power supply (50/60 Hz)	1x230V±15%	1x230V	1x230V ±15%	3x400Vac ±15%	3x400Vac±15%	3x400Vac±15%	3x400V±15%
Maximum input power	7.5kVA	6.6kVA	8.5kVA	11.0kVA	14kVA	19kVA	29.7kVA
Maximum input current	33A	28.7A	36.8A	15.9A	20.2A	27.6A	42.1A
Efficiency	83%	87%	83%	85%	85%	85%	90%
Slow blow line fuse	16A	16A	16A	10A	16A	25A	40A
Open circuit voltage	78Vdc	85V	80Vdc	70Vdc	70Vdc	70Vdc	61Vdc
IP protection rate	IP23S	IP23S	IP23S	IP23S	IP23S	IP23S	IP23S
Insulation class	H	H	H	H	H	H	H
Power supply cable	3x1.5 mm2	3x1.5 mm2	3x2.5 mm2	4x2.5 mm2	4x2.5 mm2	4x4 mm2	4x6 mm2 - 5 m
Adjustment range	5-150A	5-150A	5-170A	3-220A	3-270A	3-350A	3-500A
Duty cycle @100% MMA -40 °C	100A	110A	120A	150A	240A	290A	420A

DC TIG WELDING MACHINES (TERRA Series)

TERRA 180 TLH

The TERRA 180 TLH is a simple and reliable single-phase power source for TIG DC and electrode welding.
Arc generation is based on tried and tested inverter technology, and dimensions are particularly compact.
The entire welding process is digitally controled by a microprocessor.

TERRA 270 THL

The TERRA 270 TLH is equipped with a new control panel that is simpler and more intuitive to use, yet still offers you all the benefits of technology.
The control panel also lets you choose the type of TIG welding current (constant, pulse or fast pulse).
You can even select welding programs for standard and special electrodes in MMA mode.

TERRA 320 THL

The TERRA 320 TLH are a simple and reliable three-phase power source for TIG DC and electrode welding.
Generation is based on tried and tested inverter technology, and dimensions are particularly compact thanks to the Three-Level® power platform.
The entire welding process is digitally controlled by a DSP microprocessor.

DC TIG WELDING MACHINES (URANOS Series)

Uranos 1800 TLH

TIG DC HF Start - MMA
Single-phase 1x115V - 1x230V
greenWave®inverter technology
TIG ST1700 U/D torch integrated
TIG mode selection (constant, pulse or fast pulse)

URANOS 2200 THL

Advanced TIG system
URANOS 2200 TLH is an inverter power source for TIG DC HF and electrode (MMA) welding. Due to the multitude of functions and technical solutions, this product is designed for high quality and precise welding applications (such as in the case of stainless steel).

EQUIPMENT

Power source	TERRA 180 THL	TERRA 270 THL	TERRA 320 THL	Uranos 1800 TLH	URANOS 2200 THL
Stick electrode holder	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m
Work Cable	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m
Remote control	RC 100 / RC180 RC 200/	RC 100 / RC180 RC 200/	RC 100 / RC180 RC 200/	RC 100 / RC180 / RC 200	RC 100 / RC180 RC 200/

TECHNICAL FEATURES

Processes	TIG DC - MMA	TIG DC - MMA	TIG DC - MMA	TIG DC HF - TIG DC Lift - MMA	TIG DC - MMA
Functions	Hot Start / Arc Force / DPC/ Easy Joining / Fast Pulse/Restate / programs	Hot Start / Arc Force / DPC/ Easy Joining / Fast Pulse/Restate / programs	Hot Start / Arc Force / DPC/ Easy Joining / Fast Pulse/Restate / programs	Hot Start / Arc Force / DPC/ Synergic Easy Joining/ Fast Pulse /Restate / programs	Hot Start / Arc Force / DPC/ Easy Joining / Fast Pulse/Restate / programs
Inverter technology	**Inverter Three Level**	**Inverter Three Level**	**Inverter Three Level**	**Inverter Three Level**	**Inverter Three Level**
Communication	CANBUS Digital communication	CANBUS Digital communication	CANBUS Digital communication	CANBUS Digital communication	CANBUS Digital communication
Welding parameters display A/V	Digital	Digital	Digital	Digital	Digital
VDR	Included	Included	Included	Included	Included
Power supply function forlow voltage electric tools (ELV)	Included	Included	Included	Included	Included

TECH DATA

Dimensions	410x150x330 mm	500x190x400 mm	500x190x400 mm	410x150x330mm	620x270x460 mm
Weight	8.4 kg.	16.1 kg.	20.5 kg.	9.4kg	23.7 kg.
Power supply (50/60 Hz)	1x230V ±%15	3x400Vac±%15	3x400V ±%15	1x115/230V±%15	1x230Vac±%15
Maximum input power	8.5 kVA	14 kVA	15.9 kVA	3.3/5.5 kVA	5.2 kVA
Maximum input current	36.8A	20.2A	23.2 A	28.7/24.0 A	25.0 A
Efficiency	%81	%85	%88	%85	%85
Slow blow line fuse	16A	16A	25A	20/16 A	16A
Open circuit voltage	106Vdc	70Vdc	61Vdc	106 / 80Vdc	94Vdc
IP protection rate	IP23S	IP23S	IP23S	IP23S	IP23S
Insulation class	H	H	H	H	H
Power supply cable	3x2.5 mm2	4x2.5 mm2	4x2.5 mm2	3x2.5 mm2	3x2.5 mm2
Adjustment range	3-170A	3-270A	3-320A	3-180A	3-220A
Duty cycle @100% MMA 40 °C	160A	250A	280 A	140A	165A

AC/ DC TIG WELDING MACHINES

Perfect welding results thanks to “Digital Drop”

» The new family of power sources for TIG AC and DC welding combines the proven UPFR® technology, with embedded power factor corrector

» (PF=1) on a single phase network, and the new DIGITAL POWER® technology that allows DDWC® (Digital Dynamic Welding Control) even in extreme conditions like the AC process.

URANOS NX 2200-1700 AC/DC

Light job shop fabrication, boiler and tank construction, building sites, shipyards, automobile Industry, nuclear industry, food industry, chemical industry, repairs and overhaul, vehicle bodywork repair, workshops.

URANOS NX 3200 – 2700 AC\DC

An inverter power source made to satisfy all TIG AC and TIG DC welding needs. A wide range of functions plus advanced technical solutions make this product an extremely valid choice for applications like aluminium welding that demand top quality and precision.

URANOS NX 5000 – 4000 AC\DC

Power sources are green@wave® units. Green@wave® is technology for energy saving according to EN12-3-61000, and for greater environmental responsibility.
URANOS AC/DC power sources are equipped with the U.P.F.R. (unity power factor rectification) technology for extremely high efficiency in mains current absorption. They can also be connected to a Weld@Net system to achieve complete and efficient control of multiple welding systems.

EQUIPMENT

Power source	URANOS NX 1700	URANOS NX 2200	URANOS NX 2700	URANOS NX 3200	URANOS NX 4000	URANOS NX 5000
Stick electrode holder	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m
Work Cable	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m
Remote control	RC 100 / RC180 RC 200/ DgMig	RC 100 / RC180 RC 200/ DgMig	RC 100 / RC180 RC 200/ DgMig	RC 100 / RC180 RC 200/ DgMig	RC 100 / RC180 / RC 200	RC 100 / RC180 / RC 200

TECHNICAL FEATURES

Processes	MIG\MAG - TIG DC - MMA	MIG\MAG - TIG DC - MMA	MIG\MAG - TIG DC - MMA	MIG\MAG - TIG DC - MMA	MIG\MAG - TIG DC - MMA	MIG\MAG - TIG DC - MMA
Functions	Hot Start / Arc Force DPC/ Easy Joining/ Fast Pulse/Restate programs/ Fuzzy Logic/ Easy Rounding/ Extra Energy	Hot Start / Arc Force DPC/ Easy Joining/ Fast Pulse/Restate programs/ Fuzzy Logic/ Easy Rounding/ Extra Energy	Hot Start / Arc Force DPC/ Easy Joining/ Fast Pulse/Restate programs/ Fuzzy Logic/ Easy Rounding/ Extra Energy	Hot Start / Arc Force DPC/ Easy Joining/ Fast Pulse/Restate programs/ Fuzzy Logic/ Easy Rounding/ Extra Energy	Hot Start / Arc Force DPC/ Easy Joining/ Fast Pulse/Restate programs/ Fuzzy Logic/ Easy Rounding/ Extra Energy	Hot Start / Arc Force DPC/ Easy Joining/ Fast Pulse/Restate programs/ Fuzzy Logic/ Easy Rounding/ Extra Energy
Inverter technology	**Inverter Three Level**	**Inverter Three Level**	**Inverter Three Level**	**Inverter Three Level**	**Inverter Three Level**	**Inverter Three Level**
Communication	CANBUS Digital communication	CANBUS Digital communication	CANBUS Digital communication	CANBUS Digital communication	CANBUS Digital communication	CANBUS Digital communication
Welding parameters display A/V	Digital	Digital	Digital	Digital	Digital	Digital
VDR	Included	Included	Included	Included	Included	Included
Power supply function forlow voltage electric tools (ELV)	Included	Included	Included	Included	Included	Included

TECH DATA

Dimensions	500x190x400 mm	500x190x400 mm	620x240x460 mm	620x240x460 mm	690x290x510 mm	690x290x510 mm
Weight	18.8kg	18.8kg	27 kg	27 kg	35.4Kg	37.3Kg
Power supply (50/60 Hz)	1x230V ±%15	1x230V ±%15	3x230V ±%15	3x230V ±%15	3x230V ±%15	3x230V ±%15
Maximum input power	5 KVA	6.4KVA	10.9KVA	14.3 KVA	13.8KVA	19.8 KVA
Maximum input current	21.7A	27.6 A	27.2A	35.0A	32.4 A	48 A
Efficiency	%80	%80	%80	%80	%81	%79
Slow blow line fuse	16 A	20 A	20 A	25 A	40 A	40 A
Open circuit voltage	80Vdc	80Vdc	80Vdc	80Vdc	73Vdc	73Vdc
IP protection rate	IP23S	IP23S	IP23S	IP23S	IP23S	IP23S
Insulation class	H	H	H	H	H	H
Power supply cable	3x2.5 mm2	3x2.5 mm2	4x4 mm2	4x4 mm2	4x4 mm2	4x6 mm2
Adjustment range	3-170A	3-220A	3-270A	3-320A	3-400A	3-500A
Duty cycle @100% MMA 40 °C	130 A	150 A	230 A	250 A	350 A	390 A

MIG\MAG WELDING MACHINES (TERRA Series)

Designed for amazing welding performance:

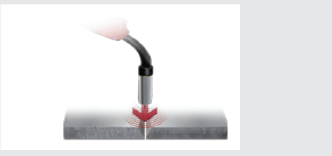
- Particularly efficient MIG/MAG standard process for extremely precise welds
- Enables very homogeneous and clean metallurgical properties
- Very stable and perfectly controllable electric arc
- High welding speed and melting capacity

TERRA 320 SMC

Arc generation is based on patented Three Level® inverter platform, a highly successful, tried and tested solution. The TERRA SMC is the perfect welding power source for simple, reliable and modern wire fed welding. It is particularly suited to the continuous processes and high welding volumes typical of light and heavy metal fabrication, shipbuilding, plant construction and mechanical workshops in general.

TERRA 320- 400- 500 MSE

The TERRA 400 ,320 and 500 MSE form a complete series of three-phase power sources for conventional MIG/MAG wire welding. Arc generation is based on patented Three Level® inverter platform, a highly successful, tried and tested solution. Inverter technology improves portability and reduces power consumption compared to conventional electro-mechanical machines.



Smart Start

This innovative smart start control always guarantees reliable starts and reduced weld spatter.

Burn Back

Improved functioning lets you extinguish the arc safely without the risk of sticking.

Wire Ready

Using this special function, programmed burning of the wire is obtained (wire never stuck) and perfect wire preparation for the following arc strike.

EQUIPMENT

Power source	TERRA 320 SMC	TERRA 320 MSE	TERRA 400 MSE	TERRA 500MSE
Stick electrode holder	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m
Work Cable	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m

TECHNICAL FEATURES

Processes	MIG\MAG - TIG DC - MMA	MIG\MAG - TIG DC - MMA	MIG\MAG - TIG DC - MMA	MIG\MAG - TIG DC - MMA
Processes	Synergic/ Smart start Burn Back/ Wire Ready	Synergic/ Smart start Burn Back/ Wire Ready	Synergic/ Smart start Burn Back/ Wire Ready	Synergic/ Smart start Burn Back/ Wire Ready
Inverter technology	**Inverter Three Level**	**Inverter Three Level**	**Inverter Three Level**	**Inverter Three Level**
Communication	CANBUS Digital communication	CANBUS Digital communication	CANBUS Digital communication	CANBUS Digital communication
Welding parameters display A/V	Digital	Digital	Digital	Digital
VDR	Included	Included	Included	Included
Power supply function forlow voltage electric tools (ELV)	Included	Included	Included	Included

TECH DATA

Dimensions	620x240x460mm	620x240x460mm	620x240x460 mm	620x240x460 mm
Weight	33 kg.	20.2kg	22.5kg.	27.3 kg
Power supply (50/60 Hz)	3x400V±%15	3x400V±%15	3x400V±%15	3x400V±%15
Maximum input power	14.8kVA	16.2kVA	22.0kVA	29.7kVA
Maximum input current	21.4A	23.2A	31.5A	42.1A
Efficiency	%89	%88	%89	%90
Slow blow line fuse	20A	25A	30A	40A
Open circuit voltage	61Vdc	61Vdc	61Vdc	61Vdc
IP protection rate	IP23S	IP23S	IP23S	IP23S
Insulation class	H	H	H	H
Power supply cable	3x2.5 mm2	3x2.5 mm2	4x4 mm2	4x6 mm2
Adjustment range	3A-320A	3A-320A	3A-400A	3A-500A
Duty cycle @100% MMA -40 °C	240A	260A	340A	420A

PULSED MIG/MAG WELDING MACHINES (TERRA NX Series)

TERRA NX 320-400 PMC

- Integrated wire feeder (Compact)
- ThreeLevel® patented inverter technology
- Master Software Terra NX PMC/PME unique & included
- MIG/MAG, Pulse MIG/MAG, MMA, TIG DC Lift
- 4 Böhler Welding MIG/MAG processes
- Böhler Arc Programs
- 3.5" LCD graphic color display

EQUIPMENT

Power source	TERRA NX 320 PMC	TERRA NX400 PMC
Remote Control	RC 100 / RC180 RC 200/ DgMig	RC 100 / RC180 RC 200/ DgMig
Stick electrode holder	70 mm² / L 4 m	70 mm² / L 4 m
Work Cable	70 mm² / L 4 m	70 mm² / L 4 m

TECHNICAL FEATURES

Inverter technology	Inverter Three Level	Inverter Three Level
Communication	CANBUS Digital communication	CANBUS Digital communication
Welding parameters display A/V	Digital	Digital
VDR	Included	Included
Power supply function forlow voltage electric tools (ELV)	Included	Included

TECHNICAL FEATURES

Dimensions	690 x 290 x 510 mm	690 x 290 x 510 mm
Weight	33.0kg	34.0kg
Power supply (50/60 Hz)	3 x 400 V ± 15 %	3 x 400 V ± 15 %
Maximum input power	14.2 kVA	22.0 kVA
Maximum input current	21.4 A	31.5 A
Efficiency	89%	89%
Slow blow line fuse	20 A	30 A
Open circuit voltage	61 Vdc	61 Vdc
IP protection rate	IP23S	IP23S
Insulation class	H	H
Power supply cable	4 x 2.5 mm2 - 5 m	4 x 4 mm2 - 5 m
Adjustment range	3 - 320A	3 - 400 A
Duty cycle @100% MMA -40 °C	240 A	340 A

TERRA NX 320-400-500 PME

- Separate wire feeder
- ThreeLevel® patented inverter technology
- Master Software Terra NX PMC/PME unique & included
- MIG/MAG, Pulse MIG/MAG, MMA, TIG DC Lift
- 4 Böhler Welding MIG/MAG processes
- Böhler Arc Welding Programs
- 3.5" LCD graphic color display

EQUIPMENT

Power source	TERRA NX 320 PME	TERRA NX400 PME	TERRA NX500 PME
Remote Control	RC 100 / RC180 RC 200/ DgMig	RC 100 / RC180 RC 200/ DgMig	RC 100 / RC180 RC 200/ DgMig
Stick electrode holder	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m
Work Cable	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m

TECHNICAL FEATURES

Inverter technology	Inverter Three Level	Inverter Three Level	Inverter Three Level
Communication	CANBUS Digital communication	CANBUS Digital communication	CANBUS Digital communication
Welding parameters display A/V	Digital	Digital	Digital
VDR	Included	Included	Included
Power supply function forlow voltage electric tools (ELV)	Included	Included	Included

TECHNICAL FEATURES

Dimensions	620 x 240 x 460 mm	690 x 290 x 510 mm	690 x 290 x 510 mm
Weight	20.2 kg	27.5 kg	32.5 kg
Power supply (50/60 Hz)	3 x 400 V ± 15 %	3 x 400 V ± 15 %	3 x 400 V ± 15 %
Maximum input power	16.2 kVA	22.0 kVA	29.7 kVA
Maximum input current	23.2 A	31.5 A	42.1 A
Efficiency	88 %	89 %	90 %
Slow blow line fuse	25 A	30 A	40 A
Open circuit voltage	61 Vdc	61 Vdc	61 Vdc
IP protection rate	IP23S	IP23S	IP23S
Insulation class	H	H	H
Power supply cable	4 x 2.5 mm2 - 5 m	4 x 4 mm2 - 5 m	4 x 6 mm2 - 5 m
Adjustment range	3 - 320A	3 - 400A	3 - 500A
Duty cycle @100% MMA -40 °C	260A	340 A	420A

MIG/MAG WELDING MACHINES (URANOS Series)

Inverter power sources designed to satisfy the welding needs of all fields of application. A wide range of functions plus advanced technical solutions make these units an extremely valid choice for all applications demanding reliability, top quality and high productivity.

URANOS 2000 SMC

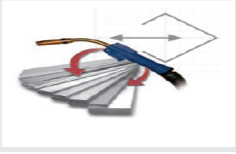
SMC power sources can perform MIG/ MAG (GMAW), TIG DC Lift (GTAW) and electrode (MMA-SMAW) welding.
Entering in the MIG/MAG menu with a single adjustment URANOS 2000 SMC is ready to weld. It is possible to complete the work program by adding additional functions with a simple push of the keys, such as welding voltage and dynamics.

URAOS 2700 SMC

SMC power sources can perform MIG/MAG (GMAW), TIG DC Lift (GTAW) and electrode (MMA-SMAW) welding. The Classic version offers excellent agility and functionality with simple and intuitive adjustments. System performance can be increased from basic to synergic welding functions with the Smart versions.

Crater Filler

Allows regulation of the wire speed value during the weld closing phase.



Programs

Allows the storage and management of 8 welding programs which can be personalized by the operator.

Wire Ready

Using this special function, programmed burning of the wire is obtained (wire never stuck) and perfect wire preparation for the following arc strike.

EQUIPMENT

Power source	URANOS 2000 SMC	URANOS 2700 SMC
Stick electrode holder	70 mm² / L 4 m	70 mm² / L 4 m
Work Cable	70 mm² / L 4 m	70 mm² / L 4 m

TECHNICAL FEATURES

Processes	MIG\MAG - TIG DC - MMA	MIG\MAG - TIG DC - MMA
Functions	Synergic/Crater filler / program / Wire Ready	Synergic/Crater filler / program / Wire Ready
Inverter technology	Inverter Three Level	Inverter Three Level
Communication	CANBUS Digital communication	CANBUS Digital communication
Welding parameters display A/V	Digital	Digital
VDR	Included	Included
Power supply function forlow voltage electric tools (ELV)	Included	Included

TECH DATA

Dimensions	485x210x400 mm	620x240x460mm
Weight	12.8 kg.	23.7 kg.
Power supply (50/60 Hz)	1x230Vac ±%15	3x230/400Vac
Maximum input power	5.7 kVA	9,1/9.1 kVA
Maximum input current	24.7A	22.8/13.1A
Efficiency	%85	%86/ 88
Slow blow line fuse	25A	20/16A
Open circuit voltage	58Vdc	92Vdc
IP protection rate	IP23S	IP23S
Insulation class	H	H
Power supply cable	3x2.5 mm2	4x2.5 mm2
Adjustment range	5A-200	5A-270
Duty cycle @100% MMA -40 °C	130A	230A/210A

PULSED MIG/MAG WELDING MACHINES (URANOS Series)

Perfect welding results thanks to “Digital Drop”

- Enables optimum MIG/MAG pulse welding with consistent and reproducible performance thanks to new welding technology
- Extremely stable and concentrated arc
- Simple parameter control for efficient work

URANOS 2700 PMC

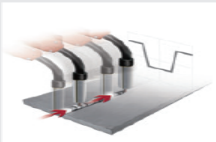
URANOS 2700 PMC power sources are equipped with the latest control systems developed and patented to ensure excellent performance.
These power sources are digitally controlled completely and incorporate a DSP (Digital Signal Processor).
GreenWave® technology is built in, guaranteeing high power factor current absorption.
The result is increase power output with reduced consumption and draw on the supply grid.

URAOS NX - 3200 - 4000 – 5000PME

Inverter power source designed to satisfy the welding needs of all fields of application. A wide range of functions plus advanced technical solutions make these units an extremely valid choice for all applications demanding reliability, top quality and high productivity.
power sources can perform MIG/MAG (GMAW), pulsed MIG/MAG (GMAW-P), TIG DC Lift and electrode (MMA-SMAW) welding.
The generator control is entirely managed using digital technology with the DSP (Digital Signal Processor).

Smart Start

This innovative smart start control always guarantees reliable starts and reduced weld spatter.



Mig Bilevel

Permits adjustment of the secondary wire speed in the bilevel welding mode.

Double Pulse

Allows better welding of thin items and a smooth appearance of the line of welding to be obtained.

EQUIPMENT

Power source	URANOS 2700 PMC	URANOSNX3200 PME	URANOSNX4000 PME	RANOSNX5000 PME
Stick electrode holder	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m
Work Cable	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m
Remote control	RC 100 / RC180 RC 200/ DgMig	RC 100 / RC180 RC 200/ DgMig	RC 100 / RC180 RC 200/ DgMig	RC 100 / RC180 RC 200/ DgMig

TECHNICAL FEATURES

Processes	MIG\MAG - TIG DC - MMA	MIG\MAG - TIG DC - MMA	MIG\MAG - TIG DC - MMA	MIG\MAG - TIG DC - MMA
Functions	Crater filler / programs wire ready/ smart start mig bilevel/ double pulse Synergic	Crater filler / programs wire ready/ smart start mig bilevel/ double pulse Synergic	Crater filler / programs wire ready/ smart start mig bilevel/ double pulse Synergic	Crater filler / programs wire ready/ smart start mig bilevel/ double pulse Synergic
Inverter technology	**Inverter Three Level**	**Inverter Three Level**	**Inverter Three Level**	**Inverter Three Level**
Communication	CANBUS Digital communication	CANBUS Digital communication	CANBUS Digital communication	CANBUS Digital communication
Welding parameters display A/V	Digital	Digital	Digital	Digital
VDR	Included	Included	Included	Included
Power supply function forlow voltage electric tools (ELV)	Included	Included	Included	Included

TECH DATA

Dimensions	660x290x510 mm	660x290x510 mm	660x290x510 mm	660x290x510 mm
Weight	23.7 kg.	26 kg	36.2 kg.	37 kg.
Power supply (50/60 Hz)	3x400/230Vac	3x400/230Vac	3x400/230Vac	3x400230Vac
Maximum input power	9.1/9.1 kVA	13.3kVA	16 kVA	22.9 KVA
Maximum input current	33A	32.9A	43.7A	33A
Efficiency	%88/86	%85	%88	%88
Slow blow line fuse	20/16A	20/ 30A	25/ 45A	30A
Open circuit voltage	92Vdc	75Vdc	73Vdc	73Vdc
IP protection rate	IP23S	IP23S	IP23S	IP23S
Insulation class	H	H	H	H
Power supply cable	4x2.5 mm2	4x4 mm2	4x6 mm2	4x4 mm2
Adjustment range	3-270A	3-320A	3-400A	3-500A
Duty cycle @100% MMA -40 °C	230A/210A	230A/250A	360A	420A

MULTIPROCESS MIG/MAG WELDING MACHINES (URANOS Series)

URANOS 2700 MTE

The MIG welding process is available both in standard and in pulsed mode.
The most relevant URANOS innovation is the inclusion of the new DDWC® digital control with high computational power and fast calculation speed.
This allows the system to react extremely quick to changes in welding conditions, recalculating and adjusting all the parameters to the optimum value and providing an “intelligent” welding arc that continually adapts itself to always ensure an optimal process.

URAOS NX 4000 - 3200 5000 GSM

»High Capacity
Allows you to store 600 welding programs allocated in 12 welding processes. In addition 240 personalized parameters (welding jobs) make it easy to define your NX.
» Enhanced Connectivity
» Digital Control & Can-Bus Communication

Smart Start

This innovative smart start control always guarantees reliable starts and reduced weld spatter.

Pulse Slope

You can set a gradual slope up from minimum to maximum current in pulsed TIG welding

Double Pulse

Allows better welding of thin items and a smooth appearance of the line of welding to be obtained.

EQUIPMENT

Power source	URANOS 2700 MTE	URANOSNX3200 GSM	URANOSNX4000 GSM	URANOSNX5000 GSM
Stick electrode holder	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m
Work Cable	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m	70 mm² / L 4 m
Remote control	RC 100 / RC180 / RC 200/ DgMig/ st-digitig	RC 100 / RC180 / RC 200/ DgMig/ st-digitig	RC 100 / RC180 / RC 200/ DgMig/ st-digitig	RC 100 / RC180 / RC 200/ DgMig/ st-digitig

TECHNICAL FEATURES

Processes	TIG DC Standard\ MIG/MAG\pulsed MIG/MAG \MMA	TIG DC Standard\ MIG/MAG\pulsed MIG/MAG \MMA	TIG DC Standard\ MIG/MAG\pulsed MIG/MAG \MMA	TIG DC Standard\ MIG/MAG\pulsed MIG/MAG \MMA
Functions	Fast pulse / programs / wire ready/ smart start / Pulse slope/ double pulse / Synergic/ Easy Joining/ pulse slope	Fast pulse / programs / wire ready/ smart start / Pulse slope/ double pulse / Synergic/ Easy Joining/ pulse slope	Fast pulse / programs / wire ready/ smart start / Pulse slope/ double pulse / Synergic/ Easy Joining/ pulse slope	Fast pulse / programs / wire ready/ smart start / Pulse slope/ double pulse / Synergic/ Easy Joining/ pulse slope
Inverter technology	**Inverter Three Level**	**Inverter Three Level**	**Inverter Three Level**	**Inverter Three Level**
Communication	CANBUS Digital communication	CANBUS Digital communication	CANBUS Digital communication	CANBUS Digital communication
Welding parameters display A/V	Digital	Digital	Digital	Digital
VDR	Included	Included	Included	Included
Power supply function forlow voltage electric tools (ELV)	Included	Included	Included	Included

TECH DATA

Dimensions	620x270x460 mm	620x270x460 mm	690x290x510 mm	620x270x460 mm
Weight	25.0 kg.	27.6 kg.	36.5 kg.	38.0 kg.
Power supply (50/60 Hz)	3x230/400Vac	3x230v	3x400	3x400V
Maximum input power	9.1/9.1 kVA	]3.3kVA	16.1 kVA	22.9 KVA
Maximum input current	22.8/13.1A	32.9A	24.4 A	33A
Efficiency	%88/86	%85	%88	%88
Slow blow line fuse	20/16A	30 A	25A	30A
Open circuit voltage	92Vdc	75Vdc	73Vdc	73Vdc
IP protection rate	IP23S	IP23S	IP23S	IP23S
Insulation class	H	H	H	H
Power supply cable	4x2.5 mm2	4x4 mm2	4x6 mm2	4x4 mm2
Adjustment range	3-270A	3-320A	3-400A	3-500A
Duty cycle @100% MMA 40 °C	230A/210A	270A	400A	470A

MANUAL PLASMA CUTTING MACHINES

Professional cutting

The Saber series offers a line of plasma cutting based on the latest inverter technology. They are compact and easy to use, able to perform precise cuts and with excellent quality. They are truly powerful, versatile and reliable cutting tools, ideal for all maintenance work, on-site and in the shop, and for all types of materials, continuous and orifice plates.

SABER 40 CHP

Easy to use, simply switch on and cut Small torch
perfect for a precise work Lower current draw
(greenWave inverter)
Single-phase 1x115V - 1x230V
greenWave® inverter technology
SP40 plasma torch integrated
Cuts up to 15mm steel

SABER 70 CHP

Easy to use, simply switch on and cut Small torch
perfect for a precise work Lower current draw
(greenWave inverter)
Three-phase mains supply
greenWave® inverter technology
SP70 plasma torch integrated
Cuts up to 25mm steel

EQUIPMENT	SABER 40 CHP	Saber 70 CHP
input voltage	1x115/230V±%15	3x400V±%15
Fuse protection	16A/20A	16A/20A
Efficiency	%78	%89
power factor	0.99	0.95
Adjustment range	20-40 A	20-70A
Duty cycle 40 - %35- °C	40 - % 40 A	70 - % 50 A
Duty cycle 40 - %60- °C	35 - % 60 A	65 - % 60 A
Duty cycle - 40 - %100 °C	30 - % 100A	55 - % 100 A
Weight	11 kg	18.6 kg
IP protection rate	IP23S	IP23S
Materials	Carbon steels - Aluminized and galvanized steels - Stainless Steels - Cast irons - Aluminum and aluminium alloys - Copper and copper alloys	Carbon steels - Aluminized and galvanized steels - Stainless Steels - Cast irons - Aluminum and aluminium alloys - Copper and copper alloys
Cutting performances	Division - 20mmMaximum cutting - 16mm Quality cut - 12mm Piercing - 10mm	Separation - 35mm Max cut - 28mm Recommended cut - 20mm Perforation - 15mm

PIPELINE ORBITAL WELDING MACHINES

pipeRunner

High quality pipeline girth welds with a result of outstanding material properties in combination with time and material savings and low repairing rate are nowadays key success factors for pipeline contractors. We are achieving all these requirements with our pipeRunner® orbital system. It is the perfect combination for pipeline orbital welding.

Functional Features and Advantages

- Intelligent intuitive and logical arrangement of all operating elements (e.g. torch positioner, spool-holder, release lever etc..)
- Electronics fully integrated
- Light Weight design makes it very easy to handle
- Electric Motor is top quality DC brushless
- The System is modular and possible to upgrade
- Designed for vertical up FCAW welding but also enabled for vertical down with GMAW (e.g. root pass)
- Programming is simple
- Software is already included and can work on any PC, heavy duty tablet is optional
- Up to 11 different passes can be planned
- Metric and Imperial units
- Ergonomics
- 4 handle aluminium space frame makes the pipeRunner simple to handle
- Wire feeding unit can be installed opposite part of the frame as incorporated pedestal

Remote control

Remote control with all functions integrated

- Welding programs
- Torch movements
- Oscillation width
- Wire speed
- Travel speed
- Testing functions

Positioning Bands

Böhler Welding pipeRunner® positioning bands are state of the art in terms of production technology and precision.

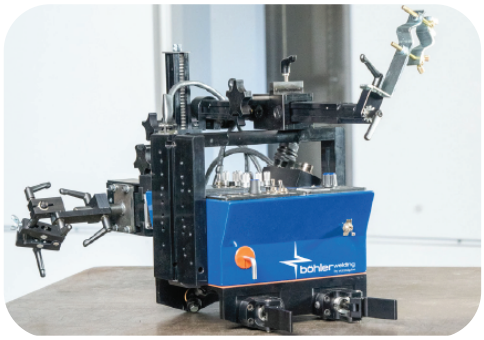
Made from special austenitic stainless steel for springs, rolled and pressed to reach the nominal diameter and the right circularity with the maximum precision, their lifetime is 3-2 times longer than conventional bands.

Technical Data

Horizontal torch movement	65 mm (2.56 inch)
Vertical torch movement	30 mm
Oscillating width	60-0 mm (2.36-0 inch)
Torch head inclination	± 25°
Oscillation speed	350-0 cm/min (138-0 inch/min)
Travel speed	1.6-0 m/min (63-0 inch/min)
Wire diameter	1.6 - 1.0 mm
Oscillation dwell time	Individually adjustable
Weight	14 kg w/o spool
Dimensions	480x400x260 mm (19x16x10 inch)
Maximum wire feed speed	19 m/min (75 inch/min)
Maximum welding current	300A/%100 (CO_2)

RailRunner

railRunner is the perfect track-mounted welding carriage for heavy duty welding operations. Any welding position is possible as well as any type of joint, either fillet, lap and butt weld above all thanks to its multifunctional programmable oscillator. Ideal for the welding of beams, frames and tanks.



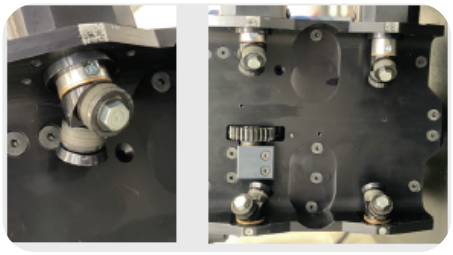
- EASY AND FAST SET-UP
- RUGGED & TIRELESS
- VERSATILE FOR ON-SITE
- AND IN-SHOP WELDING

MAIN BENEFITS

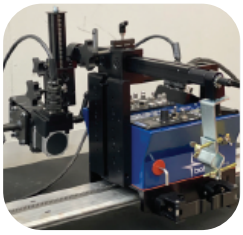
- High Voltage remoted
- Welding Process and movements in one hand Movements control, Wire Speed, Arc length/Voltage Control, Arc on/Off, All parameters display
- Connection with the preferred Böhler Welding MIG-MAG Equipment via the CAN-BUS connector
- Quick release Insulated torch holder Detach and re-attach the torch holder quickly
- It can be operated using 230/115/42 V single phase, 60/50 Hz AC.
- Tool – less set-up for positioning and adjustments accurately
- Operates in the forward or reverse direction
- Duty cycle can reach %100 for neverending welding
- Travel speed up 80 cm/min
- High Load capacity (above 25 kgs)
- Operates in the forward or reverse direction.
- Feedback ensures constant travel speed in any position and any carriage load with automatic compensation
- Can be set up to weld at the front, center or back of the carriage.
- Limit switch –built in limit switches front and back for end stop operation.
- Modular concept– rack box and arm which allows greater reach and flexibility, with a torch overhang of over 500mm possible
- ack welding option - programmed on distance
- Suitable for both Welding and Cutting
- Suitable for straight and curved surfaces
- Self-Aligning wheels and quick installation paddle-lock.

Built-in Welding Equipment control display

Self-aligning wheels

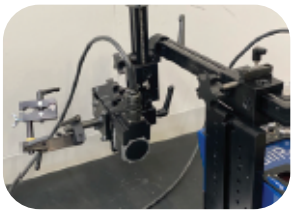


Dovetail racking

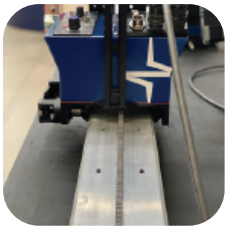


Torch holder with memory

Oscillator



Tracks



Technical Data

Speed Range	80-3 cm/min
Weight	7.7 kg (excl. oscillator and racking)
Racking weight	4.0 kg
Total weight	17.0 kg
Working Temperature	-50 + °15°C
Supply Voltage	230-115-42 VAC 60/50 Hz 30W
Dimension LxWxH	431.8x355.7x327.3

Technical Data

Linear Oscillator	
Oscillation frequency	166-8 Hz
Oscillation max stroke	38 mm
Dwell times	5-0 sec. Left-center-right
Load capacity	25 kg
Radial Oscillator	
Oscillation speed	45-°1°/sec
Oscillation stroke	45-1°
Dwell times	5-0 sec. Left-center-right
Load capacity	25 kg

WheelRunner

wheelRunner is the right answer when looking for a welding carriage for fillet and lap welds. Frames, T-beams and generally any longitudinal seam, can be profitably welded using this excellent equipment, both on-site and in-shop.

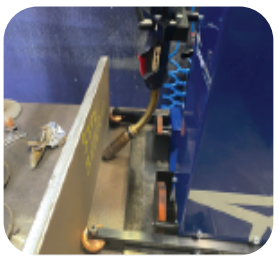
- EASY AND FAST SET-UP
- RUGGED & TIRELESS
- VERSATILE FOR ON-SITE
- AND IN-SHOP WELDING

MAIN BENEFITS

- Connection with the preferred Böhler Welding MIG-MAG Equipment via the CAN-BUS connector
- Built-in Welding Equipment control display
- Quick release Insulated torch holder – Detach and re-attach the torch holder quickly
- It can be operated using 42/115/230 V single phase, 50/60 Hz AC.
- Tool – less set-up for positioning and adjustments
- Operates in the forward or reverse direction
- Duty cycle can reach 100% for neverending welding
- Travel speed up to 160 cm/min
- Operates in the forward or reverse direction.
- Feedback ensures constant travel speed in any position and any carriage load with automatic compensation
- Can be set up to weld at the front, center or back of the carriage.
- Limit switch –built in limit switches front and back for end stop operation.
- Modular concept– rack box and arm which allows greater reach and flexibility, with a torch overhang of over 500mm possible
- Tack welding option - programmed on distance
- Suitable for both Welding and Cutting
- Suitable for straight and curved surfaces
- Adjustable guide rolls mounted on the front or back to follow-up seam variations and/or curved surfaces
- Limit switch
- Magnet base for positional welding

Built-in Welding Equipment control display

Easy positioning



Adjustable guide rolls

Torch holder with memory

Technical Data

Speed Range	160-8 cm/min
Torch vertical stroke	45 mm
Torch horizontal stroke	45 mm
Weight	14.1 kg
Working Temperature	-15°C + 50°C
Supply Voltage	230-115-42 VAC 60/50 Hz 30W
Dimension LxWxH	431.8x355.7x327.3

ROBOT WELDING SYSTEM- CO-BRO

- Quick and easy integration in the production flow.
- Simple, intuitive programming.
- Significant improvement in efficiency.
- Versatility.
- Access to all welding data.

PLUG&PLAY

The CO-BRO® provides perfect synergic integration between a robot arm, a welding system and a control panel with a 12” graphic interface. Connections, movement and welding control programs are all extremely easy and intuitive. Operations are just as rapid and secure as those of a smartphone.

FULL SET

CO-BRO® is a complete system where you will find all the components, hardware and software you need: control programs, control devices with start and stop buttons, torches for MIG and TIG welding, torch support, safety galvanic isolations, robot interfaces and much more. All included.

CE

A SAFE, CERTIFIED SYSTEM

The CO-BRO® is CE certified. Moreover, connecting the CO-BRO® to Weld@Net network establishes an advanced welding system that qualifies for Industry 4.0.

EQUIPMENT	CO-BRO® - TIG AC/DC PACKAGES	CO-BRO® - MIG/MAG PACKAGES
URANOS NX power sources	URANOS NX 2700 AC/DC URANOS NX 3200 AC/DC URANOS NX 4000 AC/DC	URANOS NX 3200 PME/GSM URANOS NX 4000 PME/GSM URANOS NX 5000 PME/GSM
WF wire feeder		WF 3000 WF 4000
WU cooling unit	WU 2000 WU 3000	WU 2000 WU 3200
Urcap software	YES	YES
2 control box start/emergency	YES	YES
Welding torch	TIG	MIG (URANOS NX PME/GSM) TIG (URANOS NX GSM)
Clamping accessories	Overhanging arm Isolation Flange	Overhanging arm Isolation Flange
Böhler Arc processes	YES	YES

orbital welding Machines

Portable Power Source for orbital tube welding

Compatible with all Polysoude TM welding heads and welding heads using filler wire

- Automatic welding procedure
- generation with an intelligent and
- intuitive user interface combined
- with the latest most reliable
- industrial electronics
- Real time welding data acquisition
- High precision inverter power
- source, compact design with
- integrated water cooling system

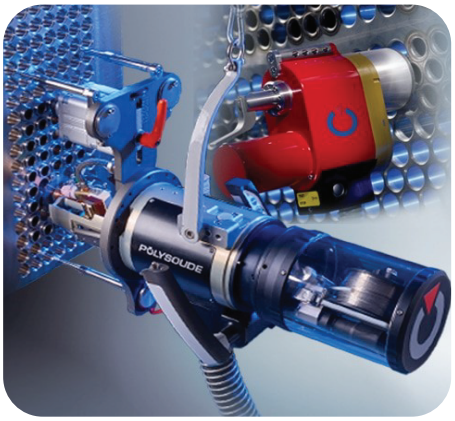
POWER SOURCE SPECIFICATION

	P3 UHP	P4	P6/4--6 axes	PC 300 TR CW TIG	PC 350 AC/DC CW TIG
	TIG	TIG- TIG CW		TIG –TIG CW- TIG HW	TIG –TIG CW- TIG HW
Process	Compact and ultralightweight, 3-axis Smart Welding Station	Advanced -Intelligent, portable 4-axis Smart Welding Station	Advanced - Intelligent, Cold and Hot Wire 6-axis Smart Welding Station	Unique - High power, multipurpose, multi-axis, multiprocess power source	Unique - High power, multipurpose, multi-axis, multiprocess power source
Motion controls	Torch rotation	Torch rotation- Wire feeding	Torch rotation- Wire feeding- AVC- OSC	Torch rotation: constant or pulsed/ automatic wire retract AVC – Arc Voltage Control OSC – Torch or electrode oscillation	Torch rotation: constant or pulsed /automatic wire retract AVC – Arc Voltage Control OSC – Torch or electrode oscillation
Cooling unit	Optional	Integrated	Integrated External for P6 HW	External	
Input Power - Voltage (± %10)	Single phase + Earth - 115 V / 230 V	Single phase + Earth - 100 V/115 V/200 V/230 V	Three-phase + Earth -415/400 V Option: multi-voltage kit - 200 to 480 V	500/440 -/415/380/200 V	415/400/380 V
Input Power - Frequency	60 / 50 Hz	60 / 50 Hz	60 / 50 Hz	50 or 60 Hz	50 or 60 Hz
Condition of use - ambient air temperature	From -10° to +40°C	From -10° to +40°C	From -10° to +40°C	From -10° to +40°C	From -10° to +40°C
Welding current Standard(steps of 1 A) High precision (steps of 10/1 A	5 to 140 A - constant or pulsed (input power 230 V) 5 to 100 A - constant or pulsed (inputpower 115 V)	3 to 170 A - constant or pulsed (input power 230/220 V) 3 to 130 A - constant or pulsed (input power 115/110 V)	5 to 300 A - constant or pulsed	3 to 300 A	5 to 350 A
Welding current precision	± %1 when I > 100 A and ± 1 A when I ≤ 100 A	± %1 when I > 100 A and ± 1 A when I ≤ 100 A	± %1 when I > 100 A and ± 1 A when I ≤ 100 A	± %1 when I > 100 A and ± 1 A when I ≤ 100 A	± %1 when I > 100 A and ± 1 A when I ≤ 100 A
Duty cycle %40	100 A (input power 115 V)	130A(input power 115/110 V)	≥ 300 A	300 A	350 A (DC)/240 A (AC)(2)
Duty cycle %25	140 A (input power 230 V)	170A(input power 230/220 V)			
Welding procedure library	200 programs max	200 programs max			
Weight	17kg	29kg (with cooling water)	86 kg (without options)	330 kg	Source: 144 kg Control unit: 250 kg

Tube-to-tubesheet welding heads(TS Series)

Tube-to-tubesheet welding heads

- Nearly all weldable metals and alloys are used in the field of tube-to-tubesheet applications, whereas the range of tube dimensions is relatively restricted.
- Most of the tube diameters measure between 19.05 mm (4/3") and 50.8 mm (2") with wall thicknesses between 1.65 mm and 4.5 mm.
- Welding equipment featuring three, Four, five and six controlled axes
- Welding gas, welding current, torch rotation, wire, AVC, torch offset.



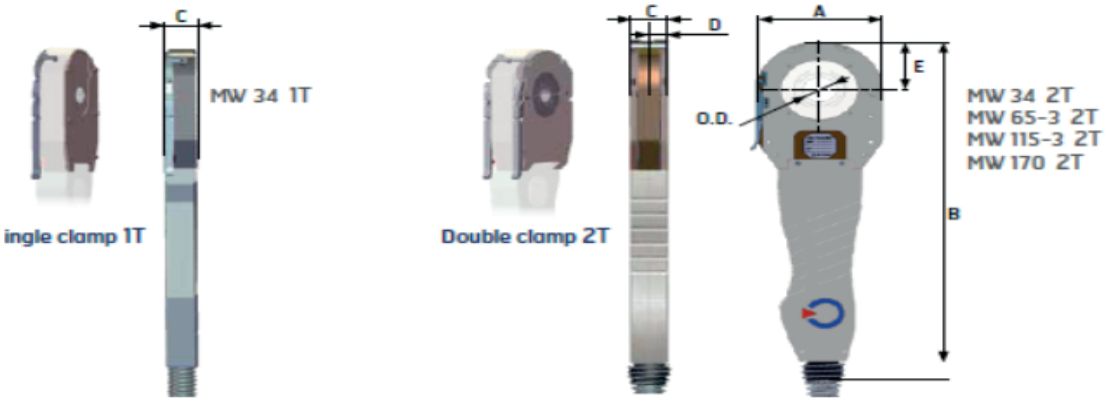
Technical Specification

process	TS 2-34	TS 3-75/8
Compatible with Smart Welding Stations	P4 - P6 - PC	P4 - P6 - PC
O.D. tube range	33.7 mm	75 mm (3)
Duty cycle	120 A	250 A
Torch cooling system	Closed water circuit	Closed water circuit
Positioning / Centering	Expansion mandrel	Expansion mandrel or 2 balls centring mandrel
Weight	3.8 kg	7 kg

Closed chamber welding head(UHP +MW Series)

Easy to use, highest quality and productivity

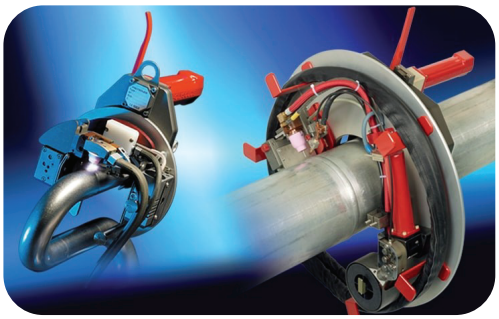
- Oxidation-free welds
- Optimised ergonomics, easy to use
- High duty cycle
- Respecting international standards and norms (EHEDG, ASME, FDA...)
- Compatible with all Polysoude™ Power Sources



Welding process	UHP 2-250	UHP 3-500	UHP 625	MW 2-34	MW 3-65	MW 3-115	MW 2-170
Compatible with Smart Welding Stations	P3 UHP - P4 - P6 CW - PC CW	P3 UHP - P4 - P6 CW - PC CW	P3 UHP - P4	P3 UHP - P4 - P6 CW - PC CW	P3 UHP - P4 - P6 CW - PC CW	P3 UHP - P4 - P6 CW - PC CW	P3 UHP - P4 - P6 CW - PC CW
O.D. tube range	1.60 to 6.35 mm	3.00 to 12.70 mm	6 to 170 mm	6 to 170 mm	6 to 170 mm	6 to 170 mm	6 to 170 mm
Duty cycle	18 A	32 A	70 A	60 A	120 A	120 A	120 A
Torch cooling system	air-cooled	air-cooled	air-cooled	Closed loop water cooling	Closed loop water cooling	Closed loop water cooling	Closed loop water cooling
Welding speed range	70 to 1140 mm/min	55 to 800 mm/min	50 to 200 mm/min	50 to 1015 mm/min	50 to 1085 mm/min	45 to 910 mm/min	45 to 950 mm/min
Weight	3.6 kg	3.8 kg	4.5 kg	6 kg	7 kg	9 kg	18 kg

Open Welding Head(MU IV Series)

- **More compact:** Reduced space and weight
- **More ergonomic:** double handle with integrated remote control for clamping and welding
- **More productive:** simultaneous use of multiple welding heads with pneumatic clamping by one operator
- **More automatic:** Standard version with AVC (Arc Voltage Control)
- **More simple:** simplified mechanical adjustments, in particular, filler wire positioning
- **More precise:** on board filler wire for constant wire feeding and accurate wire impact position



Technical Specification

MU IV CW	Range (mm)	MU IV CW AVC/OSC	Range (mm)
MU IV 38	8-38	MU IV 38	8-38
MU IV 80	19-80	MU IV 80	19-80
MU IV 115	25-115	MU IV 115	42-115
MU IV 128	25-128	MU IV 128	42-128
MU IV 219	76-219	MU IV 219	76-219
MU IV 275	114-275	MU IV 275	114-275

M1100/1- M2100/2

- Mobile Small Fume Extractor
- Single Acrobat Arm
- Disposable Cassette Filter
- Low energy consumption, high performance
- Minimizing the risk of fire related to the
- sparks thanks to its washable aluminium mesh pre filter
- Possible to add alternative filter options without changing the current body
- Suitable for filtering fume occurred during welding process, laser marking and processing machines ,processing unalloyed, low-alloy steel and filtering low level of fume

Mobile Units	M1/1100	M2/2100
General Information		
Filter Method	2 stages filtration	3 stages filtration
Filter Type	Disposable Cassette Filter	Disposable Cassette Filter
Filtration Surface Area	9 m^2	16m^2
1st stage	Mesh Spark Arrestor	Mesh Spark Arrestor
2nd stage	ePM1 80% (F9)	Coarse 70% (G4 pre-filter)
Technical Information		
Dimensions (W x D x H)	480 x 480 x 820 mm	650 x 750 x 1125 mm
Weight (without arm	49 kg	96 kg
Arm Diameter	Ø152mm	Ø152mm
Motor Power	575 watt	1,1 kW
Supply Voltage	1x230V/50Hz	3x400V/50Hz
Noise Level	65 dB	72 dB
Maximum Pressure	1200 Pa	2000 Pa
Extraction Capacity	850 m^3/h	1300m^3/h

M2200/2

- Mobile Unit
- Double Acrobat Arm
- Disposable Cassette Filter
- Possible to use at 2 different welding sources at the same time thanks to the flexible arm structure
- Designed for filtering fume and fine dust Occurred during welding process
- Suitable for processing unalloyed and low-alloy steel
- Suitable for filtering low and medium level of fume and dust

Mobile Units	M2/2200		
General Information		**Technical Information**	
Filter Method	3 stages filtration	Dimensions (W x D x H)	650 x 750 x 1125 mm
Filter Type	Disposable Cassette Filter	Weight (without arm	99 kg
Filtration Surface Area	16m²	Arm Diameter	Ø152mm
1st stage	Mesh Spark Arrestor	Motor Power	1,5 kW
2nd stage	Coarse 70% (G4 pre-filter)	Supply Voltage	3x400V/50Hz
3rd stage	ePM1 65% (F8)	Noise Level	72 dB
		Maximum Pressure	2200 Pa
		Extraction Capacity	2 x 850m³/h

M2200/3

- Mobile Fume Extractor with Activated Carbon Filter
- Single Acrobat Arm
- Activated Carbon Filter
- HEPA Filter: High Efficiency Filtration
- Jet-Pulse: Automatic Filter Cleaning
- If the phase sequence is wrong or there is a missing phase, the device will not work and the motor will be protected from burning
- Designed for filtering fume and fine dust Occurred during welding process
- Suitable for processing unalloyed and low-alloy steel
- Suitable for filtering low, medium or high level of fume and d

M2200/3

- Mobile Fume Extractor with Activated Carbon Filter
- Double Acrobat Arm
- Activated Carbon Filter
- HEPA Filter: High Efficiency Filtration
- Jet-Pulse: Automatic Filter Cleaning
- If the phase sequence is wrong or there is a missing phase, the device will not work and the motor will be protected from burning
- Designed for filtering fume and fine dust Occurred during welding process
- Suitable for processing unalloyed and low-alloy steel
- Suitable for filtering low, medium or high level of fume and dust

Mobile Units	M3/2100	M3/2200	Mobile Units	M3/2100	M3/2200
General Information			Technical Information		
Filter Method	4 stages filtration	4 stages filtration	Dimensions (W x D x H)	650 x 750 x 1125 mm	650 x 750 x 1125 mm
Filter Type	Disposable Cassette Filter	Disposable Cassette Filter	Weight (without arm)	115 kg	118 kg
Filtration Surface Area	16m²	16m²	Arm Diameter	Ø152mm	Ø152mm
1st stage	Mesh Spark Arrestor	Mesh Spark Arrestor	Motor Power	1,5 kW	1,5 kW
2nd stage	Coarse 70% G4 pre filter)	Coarse 70% (G4 pre filter)	Supply Voltage	3x400V/50Hz	3x400V/50Hz
3rd stage	ePM1 65% (F8)	ePM1 65% (F8)	Noise Level	72 dB	72 dB
4rd stage	Activated Carbon Filter	Activated Carbon Filter	Maximum Pressure	2200 Pa	2200 Pa


ETROJET


PETROMAINT


شركة الإسكندرية للبترول
Alexandria Petroleum Co.


PMS


شركة ترسانة الإسكندرية
ALEXANDRIA SHIPYARD


هيئة قناة السويس


سكة حديد مصر
EGYPTIAN RAILWAYS


AOI
الهيئة العربية للتصنيع


mapso


GHABBOUR AUTO


MCV


Metal Industries Salheya
الصالحية للصناعات المعدنية


جيوشي
GEYUSHI


ALTAWAKOL NTT
ALTAWAKOL FOR ELECTRICAL INDUSTRIES


الأمل الشريف للبلاستيك
alamal alsharif
plastics


ASFOUR
CRYSTAL


ELARABY


ELSEWEDY
ELECTRIC


ezzsteel
The Middle East Steel Professionals


SSC
شركة السويس للصلب
SUEZ STEEL CO.


MKS


إيجيتالوم


Marina


HASSAN ALLAM
CONSTRUCTION


المقاولون العرب
The Arab Contractors
OSMAN AHMED OSMAN & CO


NSF
National Steel Fabrication


mobica.


SYSTEL


EGYTRAFO


DCS
DEVASH Control Systems


GRAND
INDUSTRIES


EGY
LUX


Lectrobar
OPTIMUN DESIGN


unionaire


ALPHA MATAR
ELEVATORS & ESCALATORS


NASSERA
GROUP

THANK YOU

CONTACT US

Head Office
4, AL Horya St., Aghakhan
Building Alsahel Cairo

Service Center
26 Altokhy St , Alex-Cairo Road ,
Shoubra Elkhima , Qalubia

Call: +202 22029979
Fax: +202 22029979

Email: info@steeltecheg.com

www.steeltecheg.com

STEEL TECH