

APHS

CNC Haydraulic Press Brake



Think Big, We Do.

PRESS BRAKE
technology



“ THINK BIG, WE DO. ”

**READY 4.0
CHANGE**

Baykal

APHS 31120





From Past to *Future*

With a foundation history going back to early 1950s, Baykal today is placed as a leading manufacturer and global supplier of sheet metal working machinery specialising in the production of press brakes, shears, notchers, punching machines, laser cutting systems, plasma cutting machines and Vertical Machining Center.

For its manufacturing operations Baykal utilises three factories which together combine a production area of 60,000 square meters, making it one of Europe's largest facility for sheet metal working and fabricating machinery. The total workforce at Baykal is currently numbered at 650 employees and is composed of highly trained and qualified machine operators and assembly technicians supported by a staff of 50 engineers. All the machines offered by Baykal are designed, manufactured, assembled and finished at Baykal's purpose-built plants in a CAD environment with extensive use of CNC machining and modern workshop equipment.

Baykal Company is accredited for the ISO 9001 Certification issued by the German TÜV institution. Also, since 1995, Baykal has been building machines in conformity with the European CE regulations for safety, being the first Turkish machine-tool manufacturer certified eligible to bear the CE Mark on its products. In addition, all Baykal products are manufactured with the TSE and TSEK quality certificates issued by the Turkish Standards Institution.

Since the last 40 years Baykal has progressed to become a major exporter of sheet metal working machines to the world markets with customers located in all the machine-tool consuming countries of the global geography from Americas to Australia. Baykal is currently represented in over 100 countries worldwide through appointed dealers. In the base market of Turkey, Baykal sheet metal working machines have traditionally commanded a leading market share thanks to the company's pioneering role in the development of Turkey's machine industry and its never-lessening emphasis on quality and service. Here, with a long engineering experience behind, Baykal wishes to present itself as a quality-conscious, professional machine-building company serving the industry.

APHS

01

ACCURATE

Because of design and hydraulic system. It's very fast, accurate and repeatable.

02

AFFORDABLE

One of the best price and quality ratio machine at the market.

03

FLEXIBLE

Large Range of Lengths and Tonnages available.





04

EFFICIENT

APHS Series Hydraulic Press Brakes are productive and cost efficient machines.

05

QUICK INSTALLATION

When it's in standby mode (all axis not moving), the hydraulics are not running.

06

SAFE

Most hybrid machines are incorporating a great deal of safety into their designs including lasers and other features to improve operator safety.

Hydraulic technology: Proven itself

Over the years, manufacturers have been developing different solutions to improve the performance of their products. Through tools, functionalities and technological innovations sheet metal press brakes have evolved starting from mechanical presses to hybrid and electric cnc press brakes. APHS Series have hydraulic system which is very precise, effective and proven itself.

Hydraulic system is used for a long time and benefits of this technology include such as;



User Friendly

Easy to install, use and maintain



Modular

Capable of meeting any production need, with a variety of possible configurations



Bending Complex Parts

Less energy required and lower environmental impact



Productive

High productivity due to reduced cycle times and higher process reliability



Flexible

Suitable for a wide range of different products

Headlines to enhance Your **Worklife**

Perfect solution for all bendings.

- **Precise**
- **Affordable**
- **Flexible**
- **Efficient**

APHS model CNC Press Brakes are fast, accurate and repeatable. It is one of the best price and quality ratio machine at the market. With affordable prices you can get the best product and compensate the investment in the shortest time. APHS models have wide variety of machine lengths and tonnages. APHS Series Hydraulic Press Brakes are productive and cost efficient machines which proves itself at the market.





BIU-022
200
WLA made
New
Standard
Premium
BP-R-1
30 P 9 g 16
Max 800 N/A

BIU-022
40
WLA made
New
Standard
Premium
BP-R-1
30 P 9 g 16
Max 800 N/A



EFFICIENCY

Efficient production with precise and fast bending.

Baykal

APHS 31120



AUTOMATION

Ready for robotic applications.



INNOVATIVE

Lead to Lean Manufacturing and Ready for Industry 4.0

Baykal

APHS 31120





Fessler Elektronik GmbH & Co.KG - Buchenteich 14 - D 73773 Aichwald - Tel.: ++49-711-9196970 - www.fessler.com - Made in Germany

E3 **Muting**

E1

E2

Adjustment
Ausrichtkontrollen

FIESSLER
ELEKTRONIK

AKAS@-LC II M

Receiver / Ricevitore / Empfänger

box-bending
Kastenbiegen

OSSD1 off

OSSD2

OSSD1 on

OSSD2

FUS

FUO

SP

SGA

SGO

SGS

Connections
Allacciamento
Steckerbelegung

14	1	PE / Erde
15	2	+ Ub 24V DC
16	3	- Ub 0V
17	4	RS 232 GND
18	5	- Ub Transm.
19	6	+ Ub Transm.
20	7	FUS
21	8	FUO
22	9	SGS
23	10	SGO
24	11	SP
25	12	SGA
26	13	---

Typ 4
EN 61496

Laser actuated AOPD EN 12622

Doku 1267 / BT 2923



INTEGRATED SAFETY

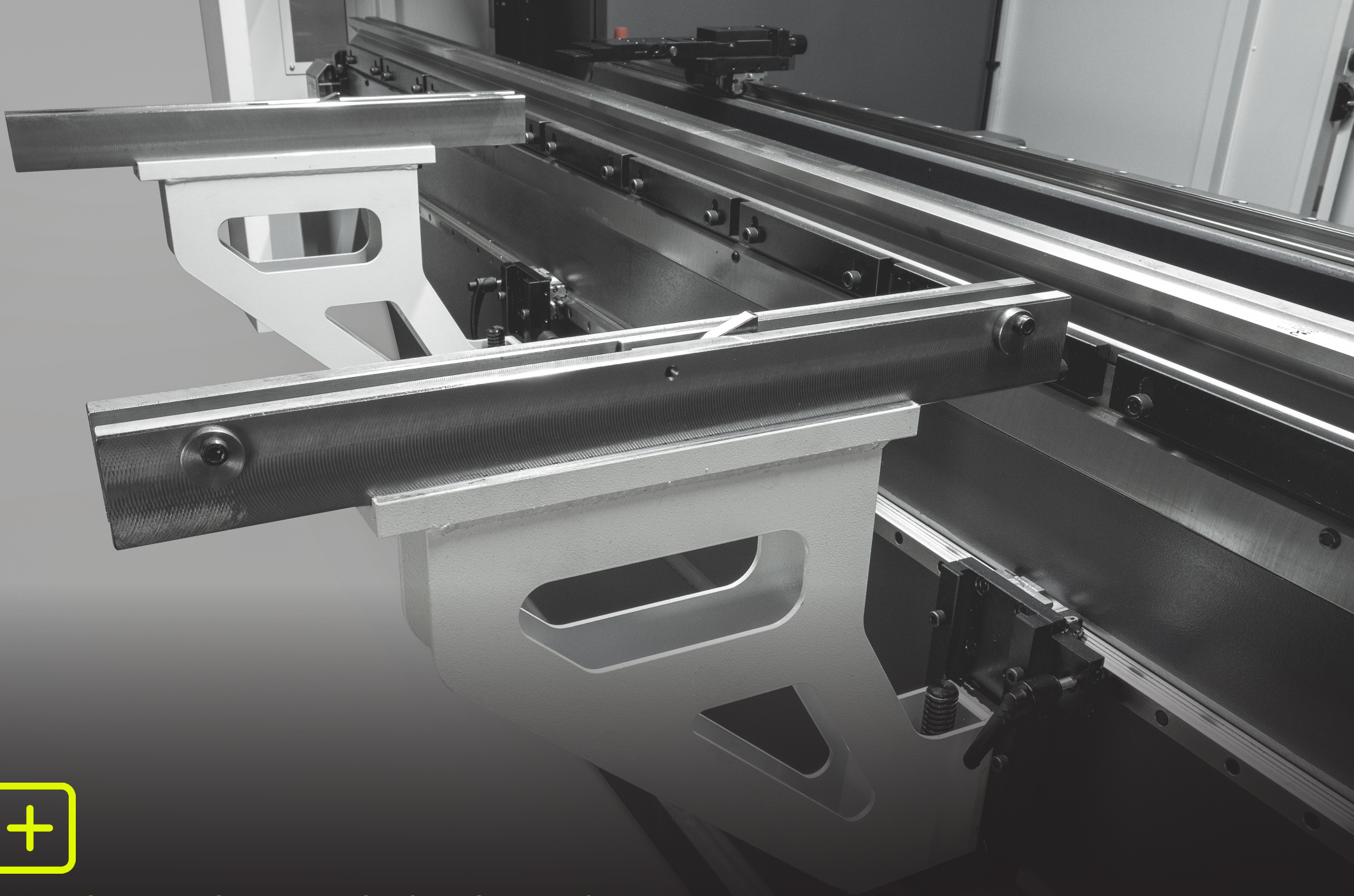
Front and Rear Safeguarding systems allow safe operation.

Important Steps for Perfect Bending.



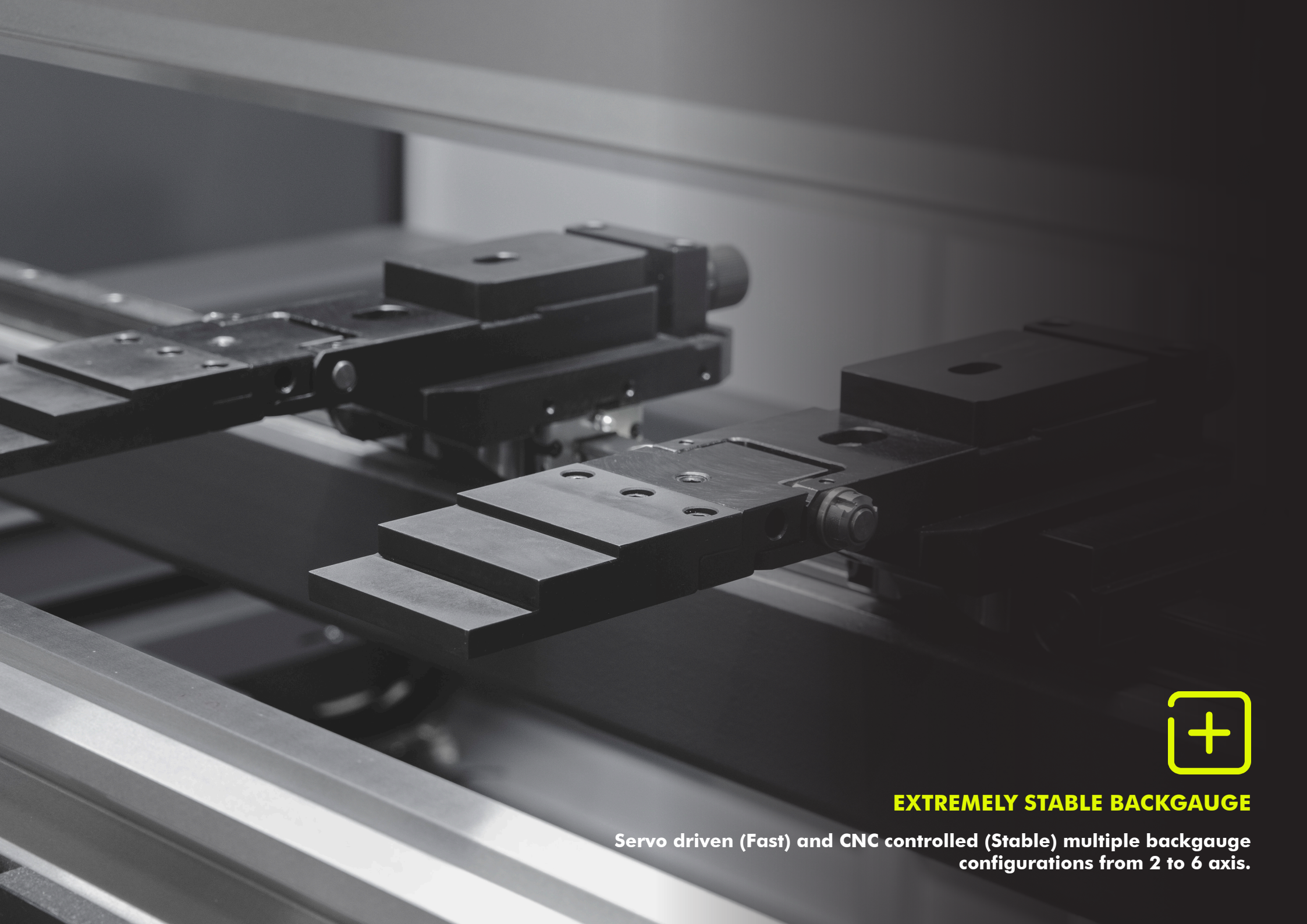
ACCURATE

Because of perfect hydraulic system, machine is faster accurate and efficient.



LINEAR GUIDED MOVEABLE FROM SUPPORT ARMS

A Range of Support Arms for Light and Heavy-Duty Sheet Metal Work

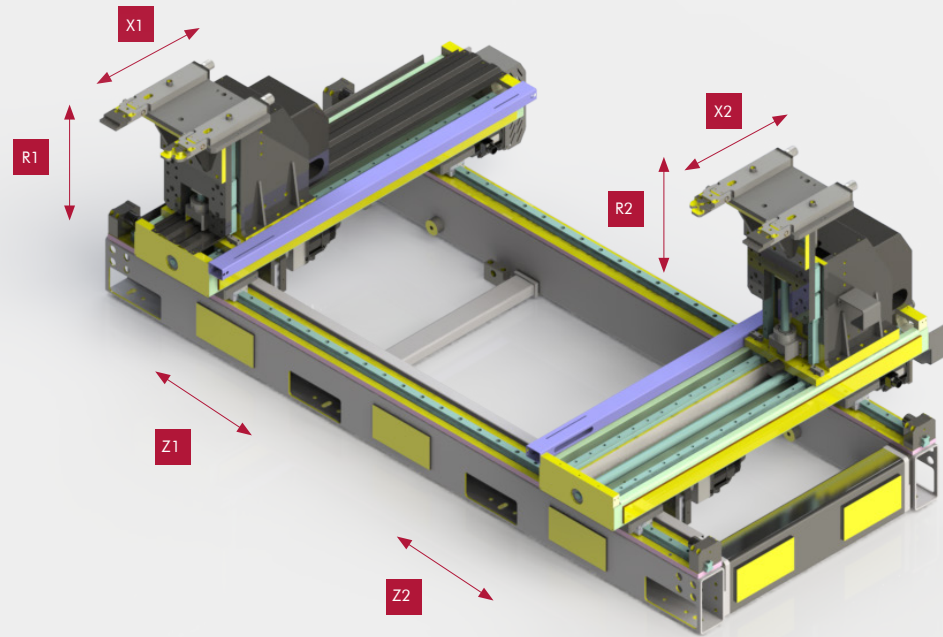


EXTREMELY STABLE BACKGAUGE

Servo driven (Fast) and CNC controlled (Stable) multiple backgauge configurations from 2 to 6 axis.

Backgauge Solutions According to Your Needs

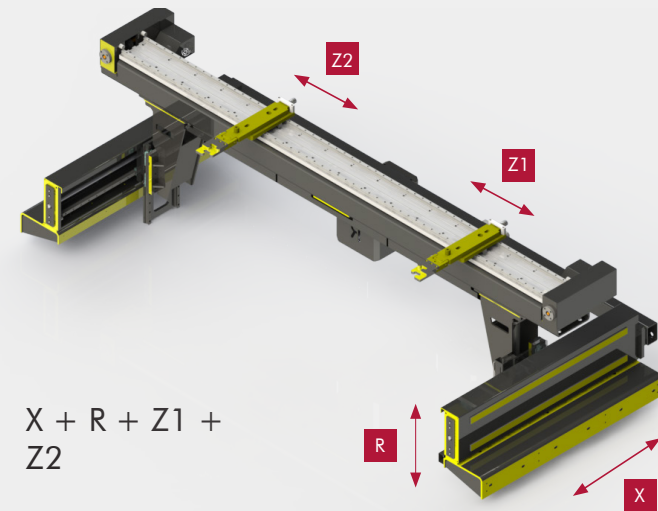
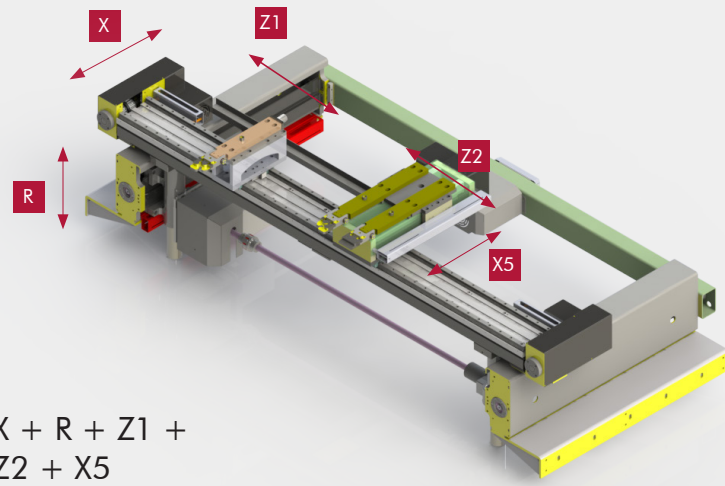
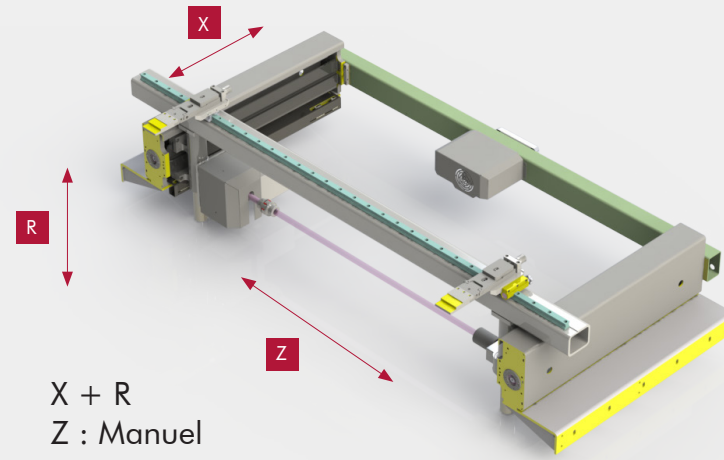
- Fast adjustment feature
- Precision at high speed
- Best quality components
- Minimum maintenance

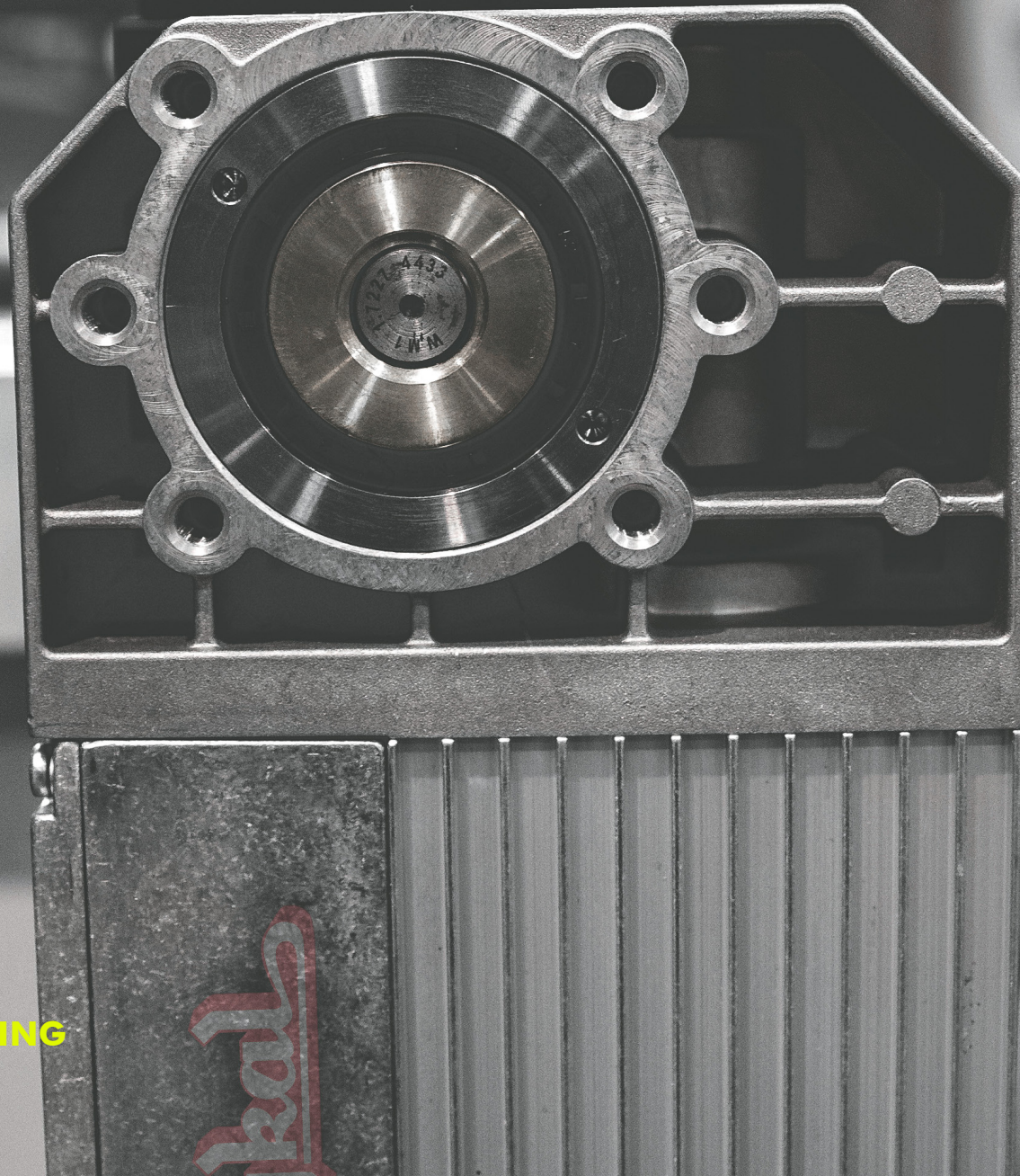


X1 + X1 + R1 + R2 + Z1 + Z2



**Baykal backgauges are up to 6 axis with high precision accuracy.
High speed movement at all axis with Servo motor**





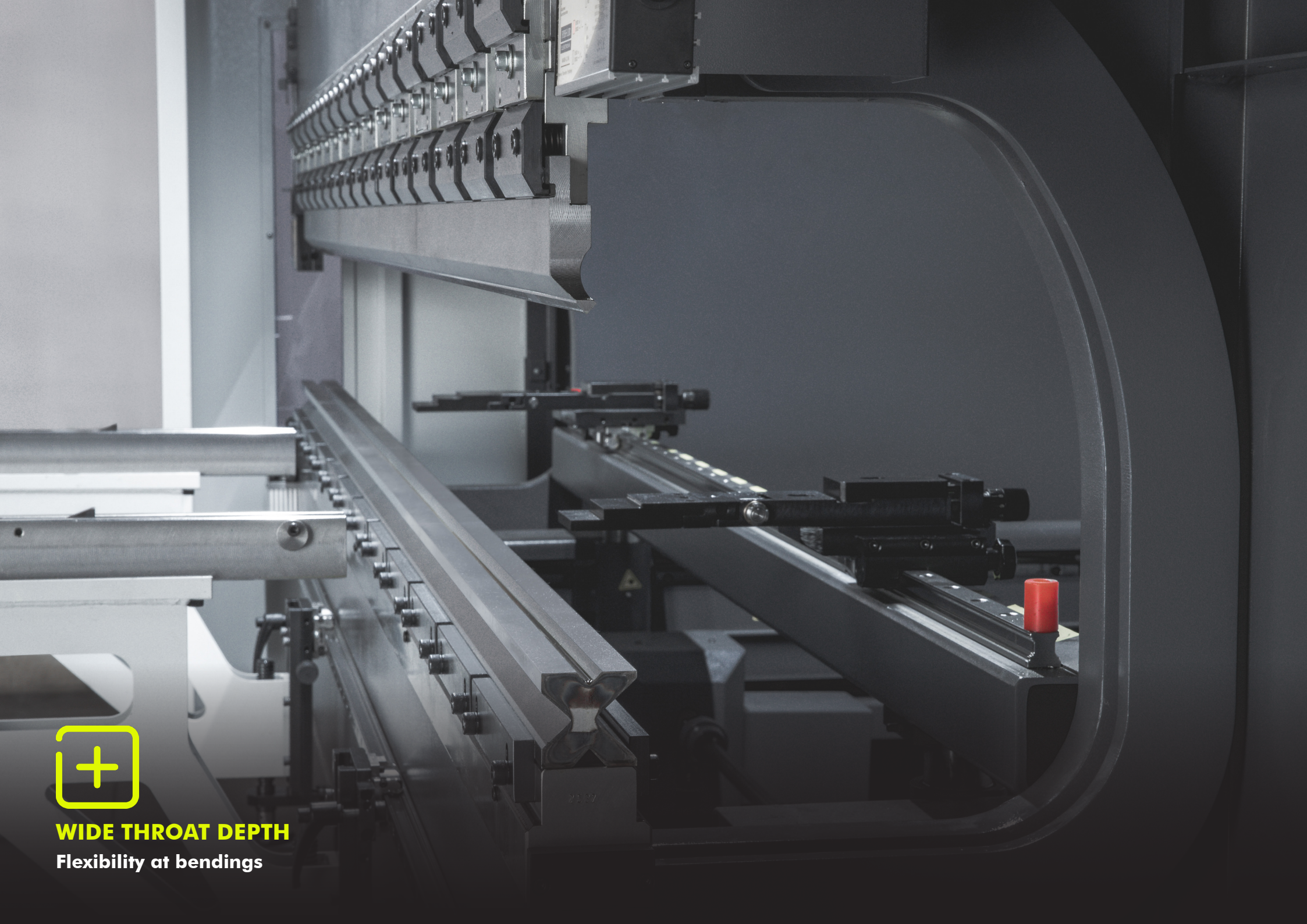
CNC MOTORIZED CROWNING

Full Length Prices Bending



FRONT SHEET FOLLOWER

Thin Long Bendings are more precise with Baykal
Front Sheet Follower with Sliding Arm



WIDE THROAT DEPTH

Flexibility at bendings



LONGER OPEN HEIGHT AND STROKE

Complex bending availability



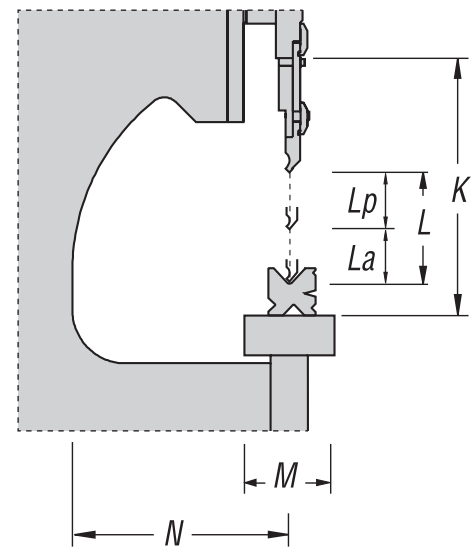
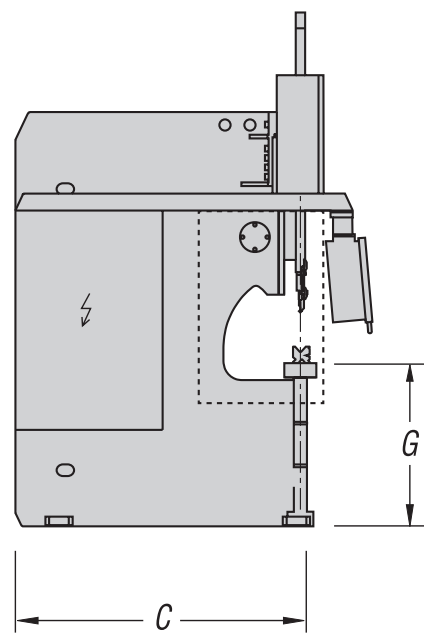
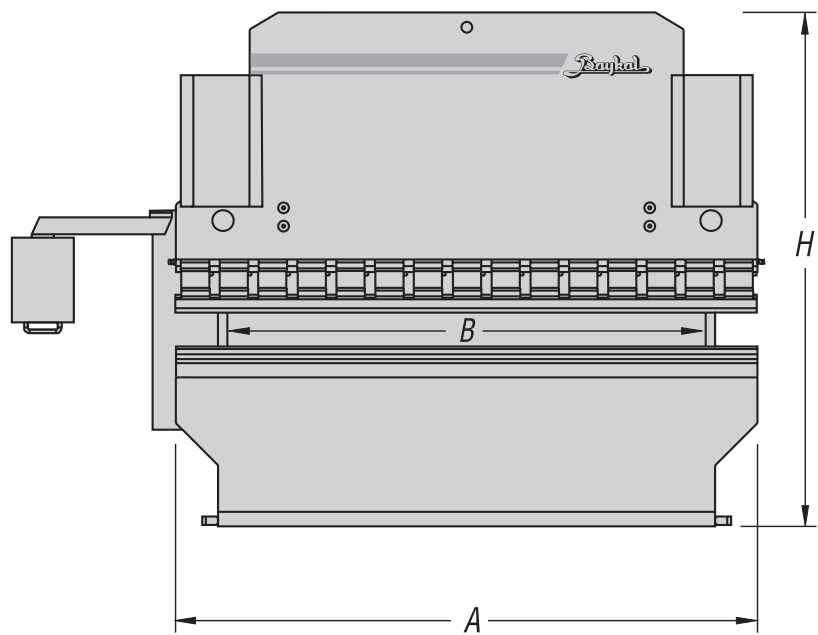
ERGONOMICS

Full Control of Operations with one finger.



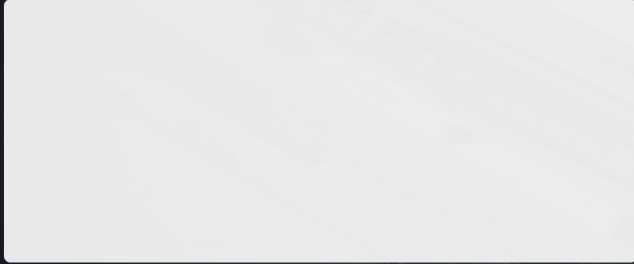
FRIENDLY CONTROLLER

Hybrid press brakes with height adjustable control arm system; operator comfort and easy to use the control unit achieved.



TİPLER TYPES	Kapasite Capacity	Motor Gücü Motor Output	Yağ Depo Hacmi Oil Tank Volume	Hızlar Speeds (mm/s)			Takribi Ağırlık Approx. Weight	Bükme Uzunluğu Bending Length	Ayaklar Arası Inside Frames	Ayak Geniřlięi Side Frame Width	Alt Çene Yükseklięi Bed Height	Temel Derinlięi Pit Depth		Makinemin Yükseklięi Machine Height	Çene Açıklığı Droplight Opening	Strok Stroke	Tabla Geniřlięi Table Width	Boęaz Derinlięi Throat Gap										
				İniř Approach	Basma Working	Kalkıř Return						Ton	A						B	C	G	E ₁	E ₂	H	K	L	M	N
													mm						mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
				APHS 1254x40	400	4						80	160						10	130	3.3	1250	1070	1470	800	-	-	2250
APHS 2104x60	600	5,5	140	150	10	130	5.4	2100	1600	1580	880	-	-	2542	475	210	60	410										
APHS 2606x90	900	7.5	140	150	10	130	7.1	2600	2050	1580	880	-	-	2605	540	260	60	410										
APHS 3104x90	900	7.5	140	160	10	130	7.9	3100	2550	1590	880	-	-	2605	530	260	60	410										
APHS 3106x120	1200	11	140	160	10	130	8.4	3100	2550	1590	880	-	-	2905	540	260	60	410										
APHS 3108x160	1600	15	210	160	10	130	9.7	3100	2550	1600	880	-	-	2905	540	260	60	410										
APHS 3110x200	2000	18,5	210	150	10	130	10	3100	2550	1600	880	-	-	2905	530	260	90	410										
APHS 3112x240	2400	22	210	130	10	120	11	3100	2550	1610	880	-	-	2905	530	260	90	410										
APHS 3116x300	3000	22	280	110	8	100	15	3100	2550	1815	905	-	-	3150	660	320	380	500										
APHS 3120x440	4400	30	450	80	8	70	22	3100	2550	2060	1005	-	-	3400	575	320	450	500										
APHS 4106x160	1600	15	210	170	10	120	12	4100	3550	1600	880	-	-	2905	530	260	60	410										
APHS 4108x200	2000	18,5	210	160	10	110	12.5	4100	3550	1600	880	-	-	2905	530	260	90	410										
APHS 4110x240	2400	22	210	150	10	100	14	4100	3550	1610	880	-	-	2905	530	260	90	410										
APHS 4112x300	3000	22	280	120	8	90	18.5	4100	3550	1820	980	-	-	3200	635	320	280	500										
APHS 4116x440	4400	30	450	80	8	70	26	4100	3550	2235	955	-	-	3350	590	320	380	500										
APHS 6106x240	2400	22	300	140	10	100	25	6100	5100	1960	1100	-	-	3000	500	260	90	500										
APHS 6108x300	3000	22	300	120	8	70	30	6100	5100	2060	1115	-	-	3280	560	320	200	500										
APHS 6110x380	3800	30	450	90	8	70	35	6100	5100	2210	1100	-	-	3255	570	320	240	500										
APHS 6112x440	4400	30	450	90	8	70	39	6100	5100	2250	1100	-	-	3700	570	320	280	500										
APHS 6114x500	5000	37	450	80	8	70	48	6100	5100	2350	815	250	800	3500	530	340	380	500										
APHS 6116x600	6000	37	500	80	7	70	55	6100	5100	2400	1050	370	1150	4100	620	360	380	500										
APHS 6100x800	8000	45	700	70	6	60	70	6100	5100	2800	1050	600	1200	4750	750	500	500	750										
APHS 6100x1000	10000	55	860	70	6	60	80	6100	5100	2900	800	700	1500	4900	750	500	500	750										
APHS 8100x1000	10000	55	860	70	5	60	95	8100	6050	3000	800	700	1900	5000	750	500	500	750										

Dizayn ve teknik özellikler önceden haber vermeden deęiřtirilebilir • Design and specifications are subject to change without notice



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