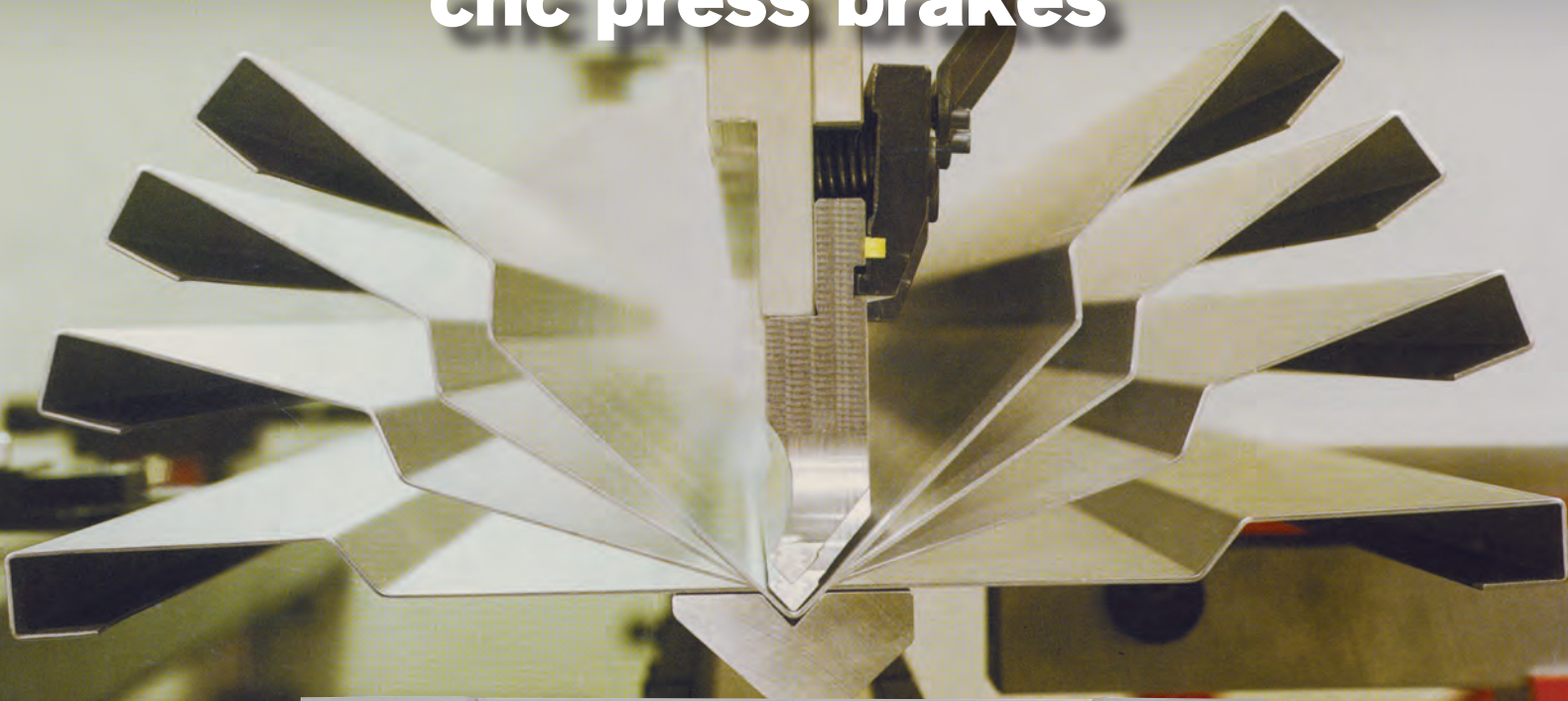
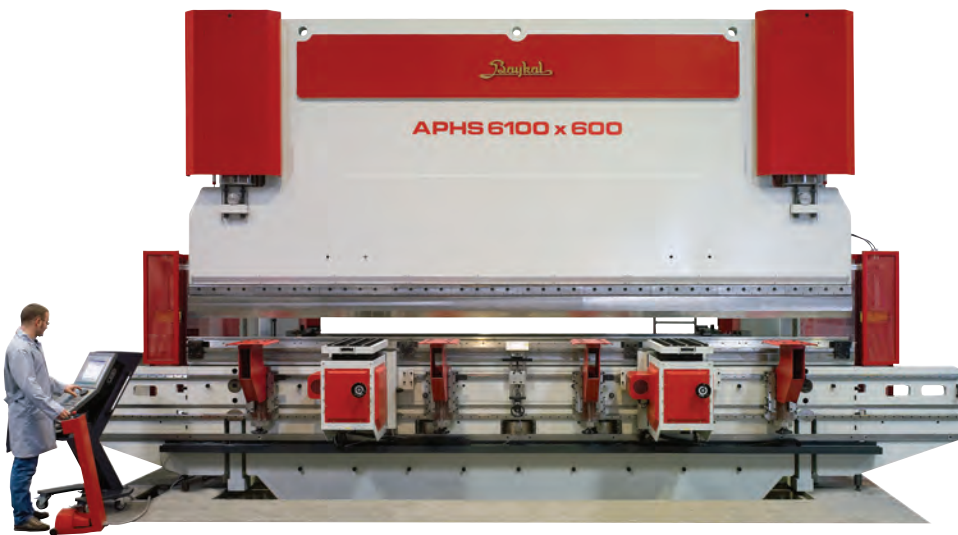


BAYKAL

APHS cnc press brakes





CNC SYSTEM

DELEM 66T graphical 17" control with full programming and machine control facilitates in a user-friendly environment.

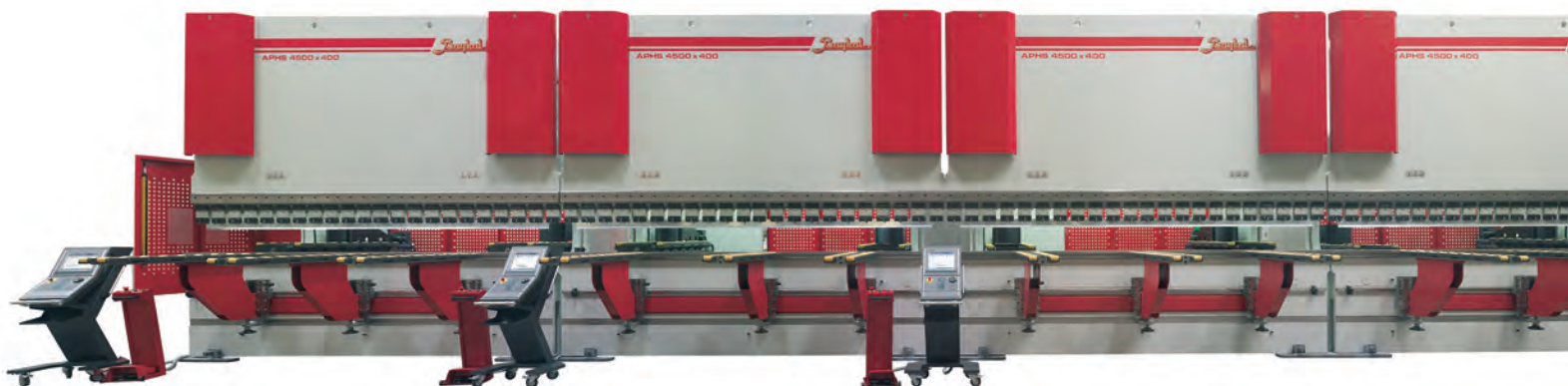
Main features include:

- Programmable multi-axis control.
 - Y1-Y2 cylinder axes
 - X1-X2-R1-R2-Z1-Z2 backgauge axes
 - CNC crowning axis
 - Modular expansion for additional axes
- High-memory capacity for program steps and tooling data
- High number of product and bend repeat possibility
- Direct graphical programming with automatic computation of all axis positions and bend sequence in full graphic simulation
- Product programming with direct angle input or in absolute dimensions. For each CNC program and bend sequence, the programmable and/or computed functions include:
 - bending length/thickness, material selection, tooling selection, bend method, mute position, pinching point, press force/speed, incremental travel and retraction of backgauge, dwell time, delay time for axes re-positioning, decompression stroke/speed, tilt adjustment, corrections on Y and backgauge axes*
- Manual operation of all axes
- Teach-in on all axes
- Operator selectable languages
- Integrated diagnostic software
- Memory storage on USB flashdisk
- Real-time Windows system for multi-tasking and file management

DESIGN AND OPERATING FEATURES

- Welded, monoblock steel frame for minimum deflection under load up to 480 tons (Models above 480 tons are bolted)
- Downstroking bending beam with two cylinders made from high-quality certified forged steel, precisely honed and chrome plated
- Ram travel fully supported in double low friction fiber slideways and a roller gib
- Full electronic synchronization with proportional valve technology assuring maximum bend accuracy and repeatability through constant monitoring and correction of beam parallelism by a CNC system +/- .0004 parallelism and repeatability
- Stroke-depth measurement through high-precision linear scales which are bed referenced for the best bending repeatability
- CNC-controlled backgauge on ballscrew spindles with DC drive and AC servo motor for the best accuracy and speed
- Block-type European hydraulics
- Compact-wired electrical box with ventilation
- Full conformity with EC Machinery Directive for safety and certified CE marking
- ST44-2 or ST52-3 Certified steel used for components

QUAD TANDEM APHS 59' x 1760 ton





Delem DA-52 controller



ACCESSORIES

STANDARD:

- Baykal Mechanical crowning
- American/European-style top tool holders (American clamps on high tonnages)
- Starter tool package consisting of gooseneck punch and multi-vee die block
- Two-hand operation console with double foot-switch
- Front-arms on linear guides
- Electrically-interlocked side and rear guards
- 39" Backgauge range

OPTIONAL:

- Power-driven (CNC) crowning tables
- Top tool manual quick-release clamps
- Hydraulic tool clamping systems
- Programmable sheet following arms
- Special tooling for customer applications:
 - Special-profile top and bottom tools
 - Single-vee dies with table adapters
- Front light guards or front laser protection for enhanced safety
- Wide bed tops
- Open height, stroke or throat depth changes

BACKGAUGE OPTIONS

- (A) Backgauge system with X-axis:
 - Travel on ballscrew spindles
 - DC-motor driven
 - Two mirometric stop-fingers with height and lateral adjustment
 - Range : 39.3"
 - Travel speed (max) : 780"/min
 - Positioning precision : $\pm .001$ "
- (B) Backgauge system with X-R axes:
 - Travel on ballscrew spindles
 - DC-motor driven
 - Two mirometric stop-fingers with lateral adjustment
 - Range X-axis : 39.3"
R-axis : 6.3"
 - Travel speed X-axis : 826"/min
(max) R-axis : 567"/min
 - Positioning X-axis : $\pm .001$ "
precision R-axis : $\pm .002$ "
- (C) Additional backgauge axes for special applications:
 - X1 - X2 • X1 - X2 • X
 - R1 - R2 OR • R OR • R
 - Z1 - Z2 • Z1 - Z2 • Z1 - Z2

Details of these special backgauge systems are available on request



Sheet following arms



Baykal CNC crowning



Front laser protection



Quick release clamps for European tooling only



Manual crowning



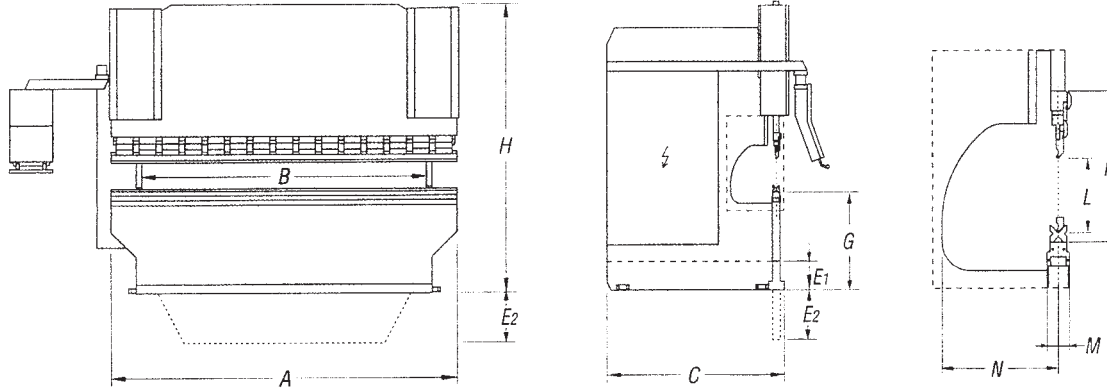
Standard controller Delem DA-66T



Optional DA-69T graphical 3D Windows based colour controller



APHS cnc press brakes



TYPES	Capacity	Working Length	Motor Output	Speeds			Approx. Weight	Bending Length	Inside Frames	Side Frame Width	Bed Height	Pit Depth		Machine Height	Daylight Opening	Stroke	Table Width	Throat Gap
				Inch/Min Approach	Inch/Min Working	Inch/Min Return						E1	E2					
	TON	INCH	HP				LBS	INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH
APHS 1250 x 40	44	3'6"	5	378	24	307	5,500	49"	3'6"	58"	31"	-	-	89"	17.9"	8.4"	2.3"	16"
APHS 2104 x 60	66	5'3"	7	354	24	307	11,880	6'10"	5'3"	62"	35"	-	-	100"	18.7"	8.2"	2.3"	16"
APHS 2604 x 60	66	6'8"	7	378	24	307	13,640	8'6"	6'8"	62"	35"	-	-	100"	18.7"	8.2"	2.3"	16"
APHS 2606 x 90	100	6'8"	10	354	24	307	15,620	8'6"	8'4"	63"	35"	-	-	103"	20.8"	10.2"	2.3"	16"
APHS 3104 x 90	100	8'4"	10	378	24	307	17,380	10'2"	8'4"	63"	35"	-	-	103"	20.8"	10.2"	2.3"	16"
APHS 3106 x 120	132	8'4"	15	378	24	307	18,480	10'2"	8'4"	63"	35"	-	-	114"	20.8"	10.2"	2.3"	16"
APHS 3108 x 160	175	8'4"	20	378	24	307	21,340	10'2"	8'4"	63"	35"	-	-	114"	20.8"	10.2"	2.3"	16"
APHS 3110 x 200	220	8'4"	25	354	24	307	22,000	10'2"	8'4"	63"	35"	-	-	114"	20.8"	10.2"	3.5"	16"
APHS 3112 x 240	265	8'4"	30	307	24	283	24,200	10'2"	8'4"	63"	35"	-	-	114"	20.8"	10.2"	3.5"	16"
APHS 3116 x 300	330	8'4"	30	260	18	236	33,000	10'2"	8'4"	71"	36"	-	-	124"	25.9"	12.5"	15"	19.6"
APHS 3705 x 120	132	10'8"	15	401	24	307	24,200	12'1"	10'8"	64"	34"	-	-	114"	20.8"	10.2"	2.3"	16"
APHS 3706 x 160	175	10'8"	20	401	24	307	23,540	12'1"	10'8"	63"	35"	-	-	114"	20.8"	10.2"	2.3"	16"
APHS 3708 x 200	220	10'8"	25	354	24	283	24,640	12'1"	10'8"	63"	35"	-	-	114"	20.8"	10.2"	3.5"	16"
APHS 3710 x 240	265	10'8"	30	330	24	260	29,700	12'1"	10'8"	63"	35"	-	-	114"	20.8"	10.2"	3.5"	16"
APHS 3712 x 300	330	10'8"	30	283	18	236	37,400	12'1"	10'8"	72"	38"	-	-	126"	25"	12.5"	11"	19.6"
APHS 4106 x 160	175	11'7"	20	401	24	283	26,400	13'5"	11'7"	63"	35"	-	-	114"	20.8"	10.2"	2.3"	16"
APHS 4107 x 200	220	11'7"	25	378	24	260	27,500	13'5"	11'7"	63"	35"	-	-	114"	20.8"	10.2"	3.5"	16"
APHS 4109 x 240	265	11'7"	30	354	24	236	30,800	13'5"	11'7"	63"	35"	-	-	114"	20.8"	10.2"	3.5"	16"
APHS 4112 x 300	330	11'7"	30	283	18	212	40,700	13'5"	11'7"	72"	38"	-	-	126"	25"	12.5"	11"	19.6"
APHS 4116 x 440	480	11'7"	40	189	18	165	57,200	13'5"	11'7"	88"	43"	-	-	137"	23.2"	12.5"	15"	19.6"
APHS 6104 x 160	175	16'8"	20	330	24	236	44,000	20'	16'8"	77"	39"	-	-	112"	20"	10.2"	3.5"	19.6"
APHS 6106 x 240	265	16'8"	30	330	24	236	55,000	20'	16'8"	77"	43"	-	-	118"	19.6"	10.2"	3.5"	19.6"
APHS 6108 x 300	330	16'8"	30	283	18	165	66,000	20'	16'8"	81"	44"	-	-	129"	22"	12.5"	8"	19.6"
APHS 6110 x 380	420	16'8"	40	212	18	165	74,800	20'	16'8"	87"	43"	-	-	128"	22.4"	12.5"	9.4"	19.6"
APHS 6112 x 440	440	16'8"	40	212	18	165	85,800	20'	16'8"	88"	43"	-	-	146"	20.8"	12.5"	11"	19.6"
APHS 6114 x 500	550	16'8"	40	189	18	165	105,600	20'	16'8"	93"	32"	10"	31"	138"	20.8"	13.3"	15"	19.6"
APHS 6116 x 600	665	16'8"	50	189	16	165	121,000	20'	16'8"	94"	43"	15"	45"	161"	21"	14.1"	15"	19.6"

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Design and specifications are subject to change without notice.

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