CNC BENDING SOLUTION
Servo Press Brakes
The APHS C Series

BAYKAL
FAB-LINE

APHS-C 31160

The COMPACT Series
your bending solution

Advanced forming in an affordable Value added package with...

simple set-up,
easy operation,
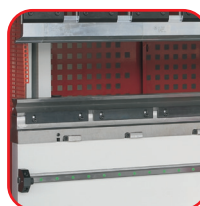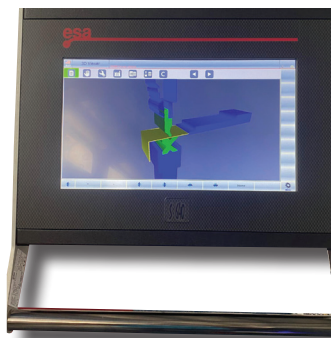# and yet maximum accuracy

Full featured:

- Easy-to-use CNC system with complete bending computations and large tool library

- Ideal for multi-bending of complex forms, as well as for volume production which require constant repeatability

- Bend accuracy and repeatability at least five-fold higher than a conventional press brake

- Fully synchronised Y1-Y2 axes to ± 0.0004" via proportional valves and bed referenced precision linear scales

- Very fast AC servo backgauge system controlled by CNC

- American/Euro-style top clamps with intermediaries and (available) quick-release clamping

- Baykal Mechanical Crown System

- Top tool : sectionalised gooseneck punch

- Bottom tool : multi-vee die block

- High stroke and daylight values

- Extra deep 16-20" throat gap

- Wide or Narrow bed available

- Two front arms on linear rail with vertical adjustment

- Dual footswitch console with emergency stop

- Swiveling pendant arm

- Side and rear safety gates (electrically interlocked)

- Compactly-wired PLC electrics in ventilated cabinet

- Rigidly welded, monoblock machine frame for minimum deflection under load

- Ram travel fully supported in low friction slideways

- Options for tooling and crowning

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CNC OPERATING FEATURES

■ Controller type : Baykal ESA 640 Touchscreen, 4-axis color graphic 2D numerical CNC 3D visualization

■ Controllable machine axes : Y1 - Y2 cylinder axes, 2 backgauge axes, Crowning axis

■ Automatic identification of the best bend sequence numerically with collision detection on off line software

■ 2D graphic editor for tool data entry

■ Programming of the axis positions with automatic checks; automatic calculation of the R-axis position, bending tonnage and crowning

■ High memory capacity for program steps and tooling data, capacity for 7000 programs and 80-steps in each program, high product number and 99 repeats of each program step

■ FREE 2D graphical programming software to work off-line to create graphical bending files which can be transferred to the controller by USB flash disk

■ Product programming with direct angle input or in absolute dimensions. For each CNC program, 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 repositioning, decompression speed, tilt adjustment, correction on Y and X axes

■ Manual operation of backgauge axes

■ 16 selectable languages

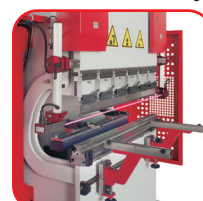■ Memory storage on USB flash disk: information for tooling and programs

AVAILABLE OPTIONS

Quick release clamps for Euro clamps only

CNC crowning

Manual crowning

Front laser protection
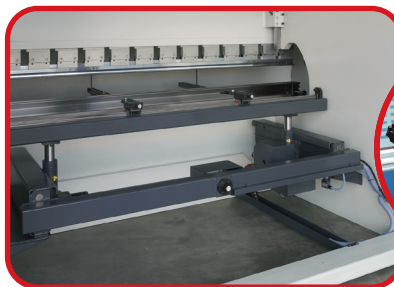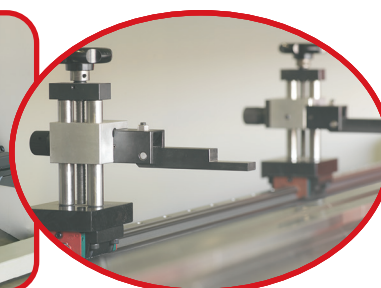
Mechanical crowning - Standard

BACKGAUGES

■ **X-axis backgauge:**
- travelling on dual precision ballscrews
- AC-servo driven
- with 2 micrometric finger-stops which have height and lateral adjustment
- Range : 39.3"
  Speed : 780"/min
  Positioning accuracy : ± .001"

■ **X-R axis backgauge:**
- travelling on ballscrews
- AC-servo driven
- with 2 micrometric finger-stops which have lateral adjustment
- Range X-axis : 39.3"
         R-axis : 6.3"
  Speed X-axis : 826"/min
         R-axis : 567"/min
  Positioning accuracy
         X-axis : ± .001"
         R-axis : ± .002"
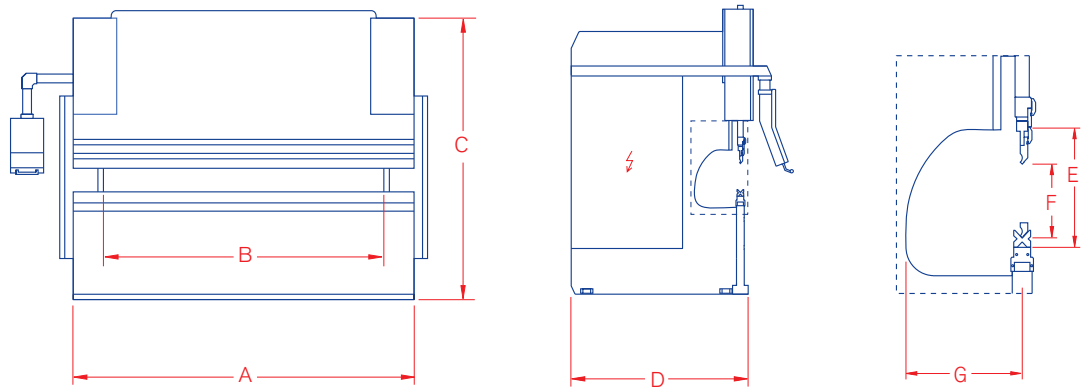
X Axis

XR Axis

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MODELS and SPECIFICATIONS

MODELS	Tons	(A) Bend Length	(B) Distance between housings	(E) Open Height	(F) Stroke	Advance Speed	Pressing Speed	Return Speed	(G) Throat Gap	Motor HP	(D) Side Frame Width	(C) Height	Weight
APHSC 1250 X 40	44	49"	3'6"	17.9"	8.4"	378"/min	24"/min	307"/min	16"	5	58"	89"	7,260
APHSC 2104 X 60	66	6'10"	5'3"	18.7"	8.2"	354"/min	24"/min	307"/min	16"	7	62"	100"	11,880
APHSC 2604 X 60	66	8'6"	6'8"	18.7"	8.2"	378"/min	24"/min	307"/min	16"	7	62"	100"	13,640
APHSC 2606 X 90	100	8'6"	6'8"	20.8"	10.2"	354"/min	24"/min	307"/min	16"	10	62"	103"	15,620
APHSC 3104 X 90	100	10'2"	8'4"	20.8"	10.2"	378"/min	24"/min	307"/min	16"	10	63"	103"	17,380
APHSC 3106 X 120	132	10'2"	8'4"	20.8"	10.2"	378"/min	24"/min	307"/min	16"	15	63"	114"	18,480
APHSC 3108 X 160	175	10'2"	8'4"	20.8"	10.2"	378"/min	24"/min	307"/min	16"	20	63"	114"	21,340
APHSC 3110 X 200	220	10'2"	8'4"	20.8"	10.2"	354"/min	24"/min	307"/min	16"	25	63"	114"	22,000
APHSC 3112 X 240	265	10'2"	8'4"	20.8"	10.2"	307"/min	24"/min	283"/min	16"	30	63"	114"	24,200
APHSC 3116 X 300	330	10'2"	8'4"	25.9"	12.5"	260"/min	19"/min	236"/min	19.6"	30	71"	124"	33,000
APHSC 4106 X 160	175	13'5"	11'7"	20.8"	10.2"	401"/min	24"/min	283"/min	16"	20	63"	114"	26,400
APHSC 4107 X 200	220	13'5"	11'7"	20.8"	10.2"	378"/min	24"/min	260"/min	16"	25	63"	114"	27,500
APHSC 4109 X 240	265	13'5"	11'7"	20.8"	10.2"	354"/min	24"/min	236"/min	16"	30	63"	114"	30,800
APHSC 4112 X 300	330	13'5"	11'7"	25"	12.5"	283"/min	19"/min	215"/min	19.6"	30	72"	126"	40,700

Design and specifications are subject to change without notice.

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