

Horizontal Mitre Cutting Bandsaws

ABS 440 H NC

SKU : 152835

The ABS-H NC series is characterized by a swiveling and stable dual column frame. In the fully automatic mode, manual cutting angles of up to 45 degrees can be set, semi-automatically up to 60 degrees are possible. The saw blade speed is infinitely variable. Workpiece clamping and the automatic material feed are controlled hydraulically. The Siemens control unit KP 400 S offers simple programming with a large memory capacity. Components from well-known suppliers and first-class workmanship guarantee high availability.

- Double column design with precise linear guide
- Miter band saw with hydraulic workpiece clamping
- Siemens Simatic KP 400
- High-precision hydraulic workpiece feed
- Automated stroke height control with optical sensor



TECHNICAL SPECS

WORKING AREA

Minimum cut length	25 mm
Remaining length	295 mm

CUTTING CAPACITIES

Feed per single stroke (max.)	500 mm
Cutting speed	20 m/min - 100 m/min
Cutting capacity 0° (round)	450 mm
Cutting capacity 0° (flat) (length x width)	610 mm x 425 mm
Cutting capacity 0° (square)	425 mm
Cutting capacity 30° (round)	450 mm
Cutting capacity 30° (flat) (length x width)	560 mm x 425 mm
Cutting capacity 30° (square)	425 mm
Cutting capacity 45° (round)	430 mm
Cutting capacity 45° (flat) (length x width)	430 mm x 425 mm
Cutting capacity 45° (square)	425 mm
Max. feed length (multiple strokes)	6000 mm

ACCURACIES

Positioning accuracy (multiple strokes)	0.3 mm - 0.5 mm
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CUTTING CAPACITY IN SEMI-AUTOMATIC MODE

Cutting capacity 60° (round)	320 mm
Cutting capacity 60° (flat) (length x width)	260 mm x 425 mm
Cutting capacity 60° (square)	290 mm

DRIVE CAPACITY

Motor rating main drive	4 kW
Motor rating hydraulic pump	2.2 kW
Motor rating coolant pump	0.12 kW

MEASURES AND WEIGHTS

Blade dimensions	5400 mm x 41 mm x 1.3 mm
Overall dimensions (length x width x height)	2.85 m x 2.1 m x 1.95 m
Weight	2480 kg



All switches and controls are clearly arranged on a separate control Panel



PRODUCT DETAILS

- The ABS H NC is a fully automated horizontal band saw series with parallel guiding system, which is ideally suited for series productions with miter cuts in solid materials, tubes, and profiles
- The torsionally rigid guideway frame provides excellent stability and vibration-damping characteristics
- The combination of linear guides and box ways result in low maintenance, long tool life and extreme ruggedness under heavy production conditions
- The fully automated mode allows miter cut angles up to 45°, and the semi-automatic mode up to 60°
- A slight 3° inclination of the saw frame on the cutting axis increases cutting capacity and saw blade life
- Rigid high-precision carbide saw blade guides ensure high vertical angular accuracy
- The reliable hydraulic unit provides the drive power for the automatic workpiece feed, and also the controlled clamping force for workpiece clamping
- Hydraulically controlled saw frame micro-feed
- All switches and controls are conveniently arranged on a stand-alone control panel
- The reliable Siemens Simatic KP 400 PLC allows for easy and convenient programming for a fully automated operation
- Unnecessary downtime is reduced by an optically controlled change-over from rapid feed to work feed
- A motor with infinitely variable speeds transmits power via a continuous-operation idler gear to the machine drive wheel
- The correct saw blade tension can be verified directly at the pressure gauge display
- An automatic band breakage control, a high-performance coolant system, and a chip brush complement the standard equipment package
- Available options for this series include Minimal Quantity Lubrication (MQL) and hydraulic bundle clamping

CONTROLS & SOFTWARE

Siemens Simatic KP 400 SPS-control

Siemens Simatic KP400

- Number of programs: 1
- Working steps in the program: 10

STANDARD EQUIPMENT

Siemens Simatic KP 400 SPS-control
Automatic workpiece feed (hydraulic)
Hydraulic part clamping
hydraulic cutting angle clamping
Digital angle display
Optical height adjustment
Saw-band
Mechanical saw blade tensioning with hydraulic pressure gauge
Saw blade cleaner brush
Coolant system
Operating tools
Operator manual

OPTIONAL EQUIPMENT

- Hydraulic saw blade tensioning, SKU : 253823
- Clamping force controlled at operator panel, SKU : 253808
- 3 meter roller table, SKU : 251873
- Chip conveyor, SKU : 253821
- Hydraulic bundle clamping, SKU : 253898
- Minimum quantity cooling, SKU : 253719
- Laser pointer, SKU : 253753