

# Horizontal Mitre Cutting Bandsaws

## ABS 325 S NC

**SKU : 423503**

### CUSTOM MODEL

The ABS S NC is a high-performance production band saw with a dual column design. The material is fed via a controlled servo motor with ball screw drive and measuring system with a positioning and repeat accuracy of +/- 0.2 mm. The Omron touchscreen controller can store up to 30 programs with 50 steps each. For additional flexibility, this series also offers hydraulic bundle clamping as an option. The manually set miter angle can be read on a digital display. The workpiece is clamped hydraulically.

- Double column design with linear guide for max. cutting precision
- Miter cutting with hydraulic angle clamping and digital display
- Omron touchscreen NC controller for fast program set-up
- Material servo-feeding for high precision
- 0.1 mm (0.0039 in.)
- automatic stroke height adjustment with optical sensor
- hydraulic top vise for bundle cutting



### TECHNICAL SPECS

#### WORKING AREA

Minimum cut length	1 mm - 2 mm
Remaining length	190 mm

#### CUTTING CAPACITIES

Feed per single stroke (max.)	700 mm
Cutting speed	20 m/min - 100 m/min
Cutting capacity 0° (round)	325 mm
Cutting capacity 0° (flat) (length x width)	400 mm x 315 mm
Cutting capacity 0° (square)	315 mm
Cutting capacity 30° (round)	325 mm
Cutting capacity 30° (flat) (length x width)	380 mm x 315 mm
Cutting capacity 30° (square)	315 mm
Cutting capacity 45° (round)	300 mm
Cutting capacity 45° (flat) (length x width)	300 mm x 315 mm
Cutting capacity 45° (square)	300 mm
Max. feed length (multiple strokes)	9999 mm

#### ACCURACIES

Positioning accuracy (multiple strokes)	0.1 mm - 0.2 mm
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#### CUTTING CAPACITY IN SEMI-AUTOMATIC MODE

Cutting capacity 60° (round)	200 mm
Cutting capacity 60° (flat) (length x width)	200 mm x 315 mm
Cutting capacity 60° (square)	200 mm

#### DRIVE CAPACITY

Motor rating main drive	2.2 kW
Motor rating hydraulic pump	1.1 kW
Motor rating coolant pump	0.12 kW

#### MEASURES AND WEIGHTS

Blade dimensions	4380 mm x 34 mm x 1.1 mm
Overall dimensions (length x width x height)	2.13 m x 2.15 m x 1.65 m
Weight	1860 kg



## PRODUCT DETAILS

- The ABS S NC is a fully automated horizontal band saw series with parallel guiding system, which is ideally suited for series production with miter cuts in solid materials, tubes, and profiles
- The workpiece feed with servo motor drive and preloaded ball screws delivers maximum positioning accuracy / repeatability within 0.1 mm
- The combination of linear guides and box ways result in low maintenance, long tool life and extreme ruggedness under heavy production conditions
- The saw frame, including guide frame, can be rotated manually up to 60° and fixed in the selected position via a hydraulic clamping device
- The fully automated mode allows miter cut angles up to 45°, and the semi-automatic mode up to 60°
- The exact saw frame angle can easily be checked by the operator on a digital display
- A slight 3° inclination of the saw frame on the cutting axis increases cutting capacity and saw blade life
- Rigid saw blade guides ensure vertical angular accuracy
- The reliable hydraulic unit provides the controlled clamping force for workpiece clamping
- Hydraulically controlled saw frame micro-feed
- The reliable Omron control with touchscreen 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

### This machine is equipped with helpful accessories for cutting pipes:

- Roller Conveyor 3m
- Minimum quantity cooling
- Chip conveyor
- Hydraulic saw blade tensioning
- Laser pointer
- Clamping force controlled at operator panel
- Hydraulic bundle clamping

## STANDARD EQUIPMENT

Omron control with touchscreen  
 Automatic workpiece feed (servo)  
 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

- Micro spray cooling system, SKU : 253851



## KNUTH on YouTube

### Information to the point

On our YouTube channel you can find videos for nearly all machines from our program. We show the machines from current deliveries and you get an impression of the handling, the processing quality and the machining performance.

**Are you interested in a machine for which you cannot find a current video?  
Please feel free to contact us!**