

# DRAMET

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## The diamond band saw BS422 A – H600 FY is a unique sawing device

The diamond band saw BS422 A – H600 FY with traveling saw unit for the sawing of abrasive materials

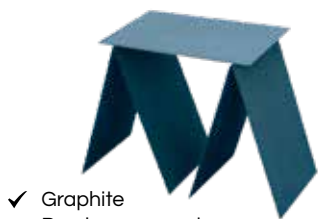
Passage (HxW) is 610 x 410 mm, cutting length (X axis) is 620 mm.

The diamond band saw BS422 A – H600 FY with moving column is composed of a band unit with two deflection rollers. The diamond saw band runs over two rollers in an endless loop with the top roller being height adjustable.

The cabin is protected by plexiglass. For safety reasons the machine cuts off automatically when the door is open. A variety of possibilities in cut transforms this machine into a high performance unit. Cutting can occur with water and with coolant.

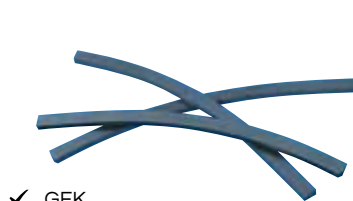


## The diamond band saw BS422 A – H600 FY cuts various substrates



✓ Graphite  
Precise, even cuts

Cooling: dry  
Speed: 35 mm/min



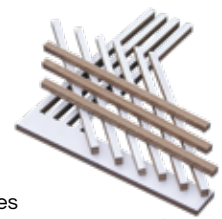
✓ GFK  
No delamination

Cooling: water  
Speed: 60 mm/min



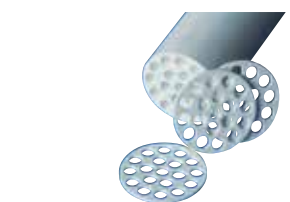
✓ Catalyser  
Torn bridges don't break out

Cooling: dry  
Speed: 900 mm/min



✓ Tiles  
The glaze does not flake off

Cooling: water  
Speed: 100 mm/min



✓ Aluminium oxide  
Clean cut, no breaking out

Cooling: dry  
Speed: 300 mm/min



✓ Glass  
No breaking off

Cooling: water  
Speed: 70 mm/min



✓ Stainless steel cooler  
No soldered plates tear off

Cooling: water  
Speed: 2 mm/min



✓ Plastinate  
Cutting surfaces on parallel planes

Cooling: water  
Speed: 30 mm/min



## Functioning

The BS422-H600 FY with moving column is composed of a band unit with two deflection rollers  $D = 420$  mm with a passage (H x W) of 610 x 410 mm. The diamond saw band runs over two rollers in an endless loop. It is driven and pneumatically tensioned by the height-adjustable upper roller. The band is driven by a 3 KW three-phase current motor controlled by a frequency transformer. The band tension is set by the adjustable air pressure on the pressure reducer. The speed of the band can be set between 200 and 3000 m/min.

The travel of the band unit is program-controlled with a ball screw and the servomotor (X axis). Travel and feed rates are programmable. The band unit can be positioned with the help of buttons. Control: Mitsubishi touch-screen PLC control.

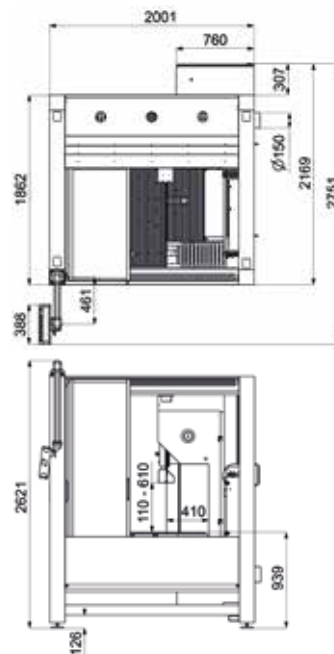
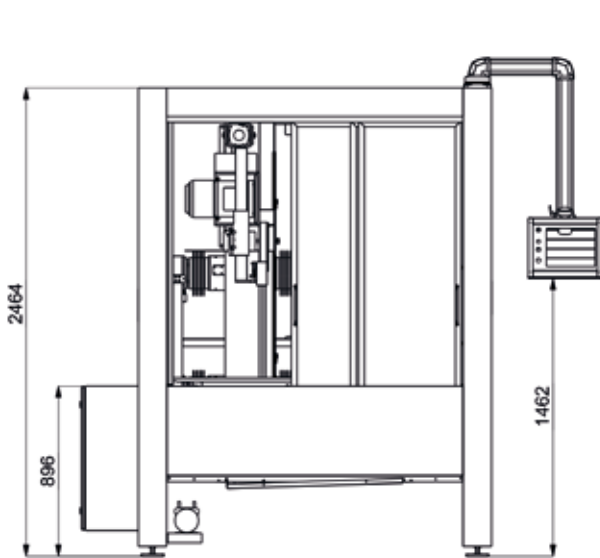
During cutting the feed force is displayed on the screen. The feed force and the feed speed can either be manually adjusted or regulated automatically according to the programmable nominal force.

The machine housing with Polycarbonat insert protect against spray, noises and dust. The Cabindoor-control ensures more security. The machine stops if door is opened

It can be operated with a dry cut or alternatively with cooling. For dry cutting, a suction unit is attached to the exhaust connector provided. For the stainless version, pure water can be used for cooling.

## Key features

- ✓ Cut width of 0.4 to 0.8 mm (depending on saw band used) means minimal waste.
- ✓ Low processing energy means minimal heating and low tension force is sufficient to clamp the workpiece. This virtually eliminates the risk of chipping when machining fragile or temperature-sensitive parts.
- ✓ The high band speed means high cutting performance.
- ✓ The quality of the cut surface is as if ground.
- ✓ The Y table with linear guiding, precisely adjusted by means of a spindle, allows slices to be cut from the workpiece with an accuracy of  $\pm 0.02$  mm.



Technical data	Description
Length:	2169 mm
Width:	2001 mm
Height:	2621 mm
Passage:	610 mm x 410 mm
Travel (X, Y):	620 mm x 420 mm
Deflection roller diameter $\varnothing$ :	420 mm
Guide roller diameter $\varnothing$ :	70 mm
Standard band:	0,7 mm x 16 mm, length 3800 mm
Band speed:	200 – 3000 m/min
Drive:	Three-phase current motor 3 KW
Weight:	550 kg

## Available options

### Measuring unit to measure feed force

During cutting, the feed force is displayed on the screen. This allows the feed and band speed to be optimally adjusted.

### Band cleaning

The band is cleaned by a set of high-pressure spray pipes. Because the saw band is cleaned under high pressure under the work area, the band returns to the cut completely clean.

### Coolant system with filter insert

Collecting tray with drain to coolant tank, coolant pump, coolant supply with shut-off valve and articulated pipe, automatic control of coolant system. A filter tissue of around 0.7 x 0.7 m can be inserted and replaced when necessary.

### Spray protection cabin

Machine housing with Polycarbonat® insert to protect against spray.

Specification is subject to change without notice.

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