

DRAMET

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### The diamond band saw BS270 F is also available in the version FY

The diamond band saw BS270 F/FY is a saw with a driven column

Passage(HxW)  $180 \times 255$  mm, cutting length (X-axis) is 600 mm.

The diamond band saw BS270 in its standard version 270F is a machine which is X-direction driven.

When equipped with an NC-driven 2-axis machine, it is available in the version BS270 FY.

Optionally the sawing forces can be used for feed regulation and shown on the display. The feed force occurring during sawing is shown on the display and feed as well as cutting speed can be manually tuned or regulated automatically in accordance with the programmable nominal force.

Both dry cutting and cutting with coolant are possible.

# The diamond band saw BS270 F and FY are cutting various substrates

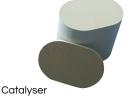


Cooling: dry Speed: 35 mm/min



No delamination

Cooling: water Speed: 60 mm/min



Torn bridges don't break out

Cooling: dry Speed: 900 mm/min



Cooling: water Speed: 100 mm/min



✓ Aluminium oxide Clean cut, no breaking out

> Cooling: dry Speed: 300 mm/min



GlassNo breaking off

Cooling: water Speed: 70 mm/min



Stainless steel coole
 No soldered plates tear off

Cooling: water Speed: 2 mm/min



Plastinate
 Cutting surfaces on parallel planes

Cooling: water Speed: 30 mm/min



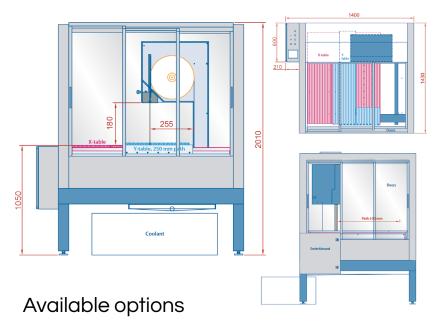
#### Key features

- ✓ 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 temperaturesensitive 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 ± 0.02 mm.

The basic version of the BS270 F with moving column is composed of a band unit with two deflection rollers D = 266 mm with a passage (H x W) of 195 x 255 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 0.75 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 2200 m/min using the control dial.

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. The BS270 F is upgraded to the CNC-controlled 2-axis BS270 FY by fitting it with a servomotor-driven Y table.

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.



Technical data	BS270 F with machine housing	BS270 F without machine housing
Length:	1430 mm	1230 mm
Width:	1400 mm	1200 mm
Hight:	2100 mm	1620 mm
Passage (H x W):	180 mm x 255 mm	180 mm x 255 mm
Travel (X, Y):	600 mm, 250 mm	600 mm, 250 mm
Deflection roller diameter Ø:	266 mm	266 mm
Guide roller diameter Ø:	47 mm	47 mm
Standard band:	0,7 mm x 8 mm, length 1870 mm	0,7 mm x 8 mm, length 1870 mm
Band speed:	200 – 2200 m/min	200 – 2200 m/min
Drive:	Three-phase cur- rent motor 750 W	Three-phase cur- rent motor 750 W
Weight:	310 kg	220 kg

### 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  $0.7 \times 0.7$  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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