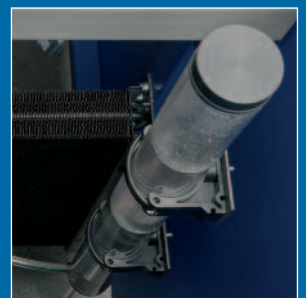
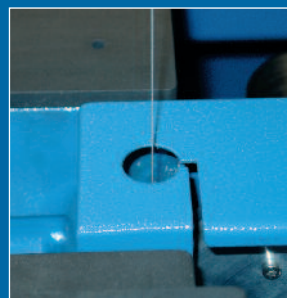
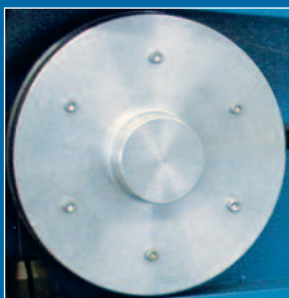


Precision Diamond Wire Saw

DS750 NC

for use in industrial production



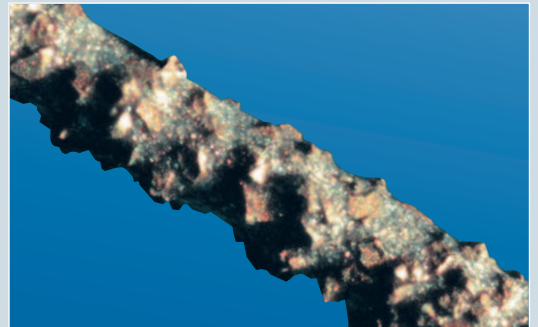
Precision Diamond Wire Saw **DS750 NC**

The DS750 NC is superbly suited for sawing contours. It is possible to follow the pre-programmed contour with absolute precision because of the ball transfer shafts used for moving the saw.

Key features

- The sawing wire is diamond-covered on all sides, allowing it to cut in any direction.
- Low processing energy means minimal heating and low tension force is sufficient to clamp the workpiece.
- Narrow cut minimises waste and dust.
- Wire never jams but cuts itself free.
- The multiple bending of the wire means that the chip space is cleaned more effectively during each cycle than is the case with rigid tools.
- Tightly guided saw wire for cutting precision | No chipping, so suitable for fragile materials.
- Saw contour can be easily programmed with any CAD system and the conversion software TwinView developed by Cad2Cad.

Cutting wire

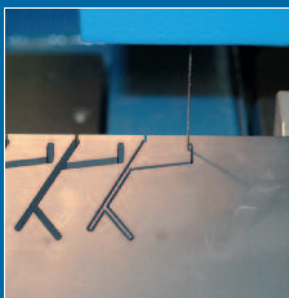


The cutting wire is 1870 mm long and 0.7 to 1.2 mm thick. It is formed as an endless, secure loop with diamonds of grain-sizes 76 – 181 μm . Precise movement of the wire is ensured because the flexible wire permits the use of small guiding rollers directly at the point to be worked.

The choice of wire depends on the material to be cut and the required quality of the cut. Consequently, it is possible to take into account the requirements for the best possible surface quality, a narrow cut gap or fast movement.

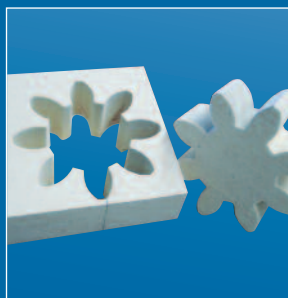
Graphite electrode

Technical advantage:
Thin sides without breaks



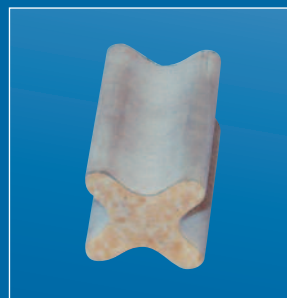
Felt

Technical advantage:
No threading



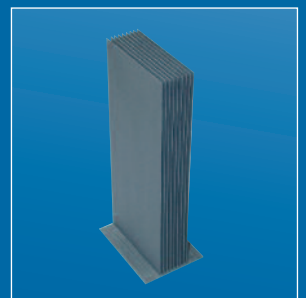
GFK

Technical advantage:
No delamination



Graphite

Technical advantage:
Surface in ground quality



DS750 NC functional characteristics

The workpiece can be processed on two axes with any interpolation. The wire is driven by a three-phase current motor controlled by a frequency transformer. The speed of the wire can be set at any point between 100 and 3000 m/min. To insert and tension the wire, the drive motor and the drive roller are moved with a pneumatic cylinder. The wire tension is set by the adjustable air pressure on the pressure reducer.

The process of programming the workpiece contour with external CAD programs is supported by such features as automatic tool radius correction, automatic closure of the contour and the graphic display and process simulation. Precision in following the contour is ensured by ball screws, which achieve an optimum result in combination with the automatic delay in movement when radii are being processed.

The dust is extracted directly under the work area. The sawdust is pulled down by the wire and then directly extracted.



Option

Dust removal

Suction unit with 2.2 kW lateral channel compressor, 2 m² M filter with manual cleaning, and a final filter that removes any residual dust from the air.

Cut parameter

Processed material	Height of workpiece in mm	Feed speed in mm/min	Cutting speed in m/min
Graphite	70	10 - 50	1800
Hard metal green compact	25	10 - 80	2000
CFK	3,5	30 - 300	1600
GFK	32	10 - 80	1600
Aluminium-oxide green compact	70	20 - 500	2200
Plasterboard	12	300 - 1200	2400
Foam	60	200 - 2000	2000
Compressed glass wool	90	200 - 2000	2500
Polystyrene	60	500 - 4000	2200

Hard metal green compact

Technical advantage:
thin bridges do not break out



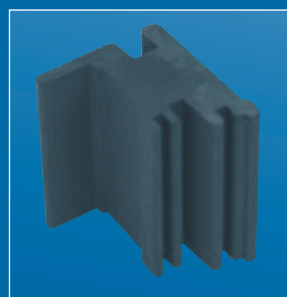
Green ceramics

Technical advantage:
Complicated contours without breaks



Graphite electrodes

Technical advantage:
Small interior radii

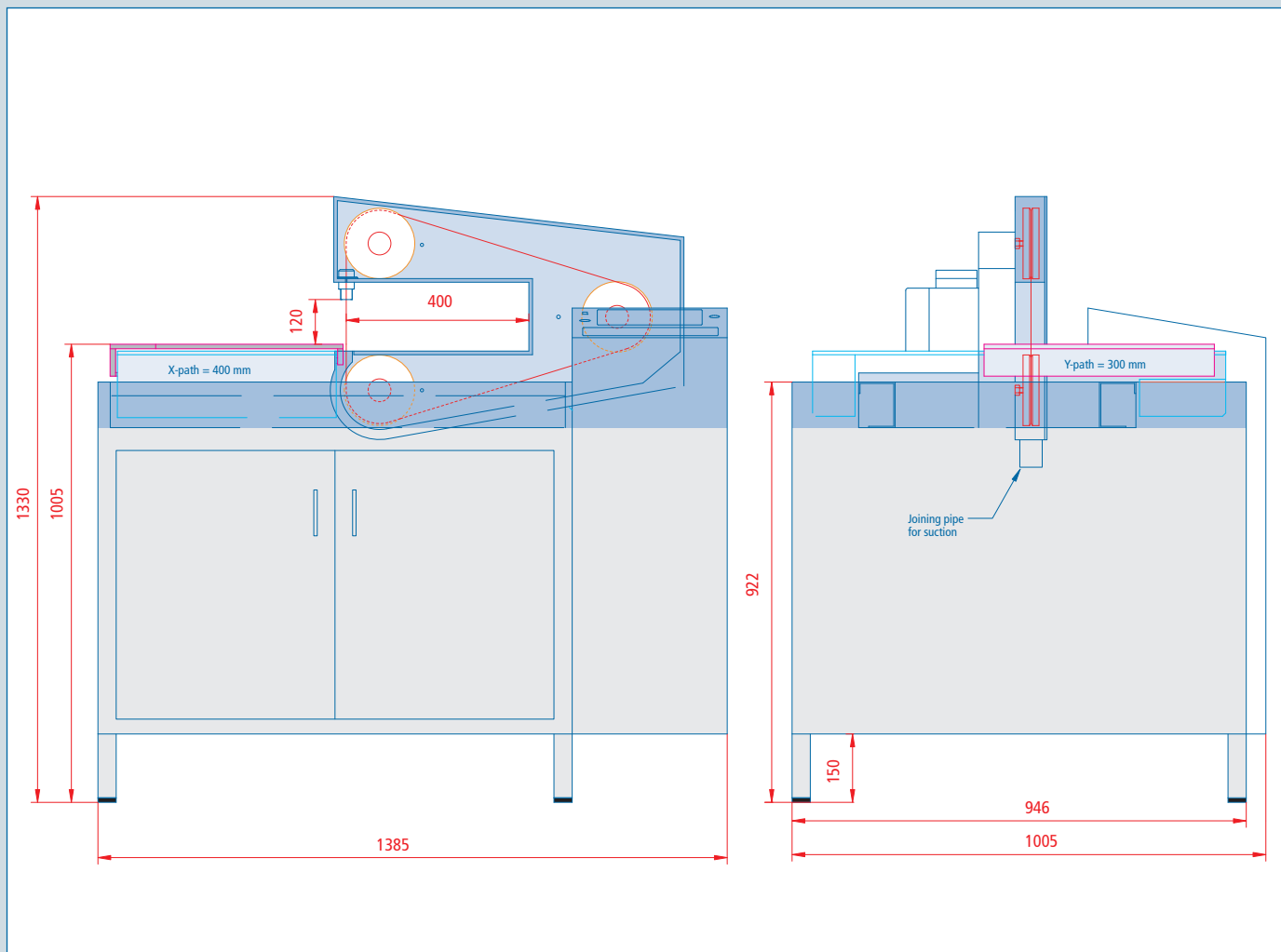


PP with foam

Technical advantage:
Clean cut in compound materials



Precision Diamond Wire Saw **DS750 NC**



Technical data DS750 NC

Length:	1385 mm
Width:	1005 mm
Height:	1330 mm
Passage:	120 mm x 400 mm
Workpiece range (X, Y axis):	400 mm, 300 mm
Roller diameter:	150 mm
Cutting wire:	Ø 0.7 – 1.2 mm, length 1870 mm
Speed of wire:	100 – 3000 m/min
Drive:	three-phase current motor 750 W
Weight:	200 kg

Specification is subject to change without notice. Status August 2013.

DRAMET

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