



## DRESSING AND PROFILING MACHINES



**AP-750**

# SPECIFICATIONS

## MACHINE

Type of machine	FD 50	FD 150
Dressing process	dry dressing (optional wet dressing)	
Material of the machine body	ribbed welded steel construction	
Operating condition	manual, semi-automatic	
Oscillation	CNC-controlled	
Interfaces	USB, Ethernet (RJ45)	
System accuracy of the C-axis encoder	± 0,0003°	

## WORKPIECE SPINDLE

Spindle	Geiger Ø 120 mm	Geiger Ø 160 mm
Interface	SK 40 (HSK 40, HSK 50, HSK 63)	HSK 63 (HSK 80, HSK 100)
Weight	max. 50 kg	max. 150 kg
Diameter	max. Ø 500 mm	min. Ø300 mm   max. Ø800 mm
Crane loading	no	yes
Radial run-out	≤ 0,002 mm	
Speed range	adjustable from 0 to 1000 rpm	
Clamping system	hydraulic	

## TOOL SPINDLE

Spindle	Geiger Ø 120 mm
Interface	SK 40 (HSK 50, HSK 63)
Radial run-out	≤ 0,002 mm
Diameter	Ø 250 mm (another option available)
Width	max. 20 mm (another option available)
Flange diameter	Ø 51 (Ø 20, Ø 32, Ø 76, Ø 127 mm)
Speed range	adjustable from 0 to 3000 rpm
Clamping system	hydraulic

## TRAVEL PATH

X-Axis (CNC-controlled)	260 mm
Y-Axis (CNC-controlled)	250 mm
V-Axis (CNC-controlled)	150 mm
U-Axis (CNC-controlled)	120 mm
C-Axis (CNC-controlled)	+/- 92°

## CAMERA SYSTEM

Object field	Ø 30 mm (FD 50 optional Ø 45 mm)
Sensor type	CCD-Sensor
Resolution	512x512 (optional 1024x1024)
Zoom range (digital)	2-, 4-, 8-, 16-times (32-times only with 1024x1024)

## DIMENSIONS AND WEIGHT

Nominal voltage	3/N/PE ~ 400V 50Hz/60Hz	
Dimension (width x length x height)	appx. 2850* x 2000* x 2300 mm	
Weight	appx. 3750 kg **	appx. 4100 kg **

\* Dimensions without control panel;

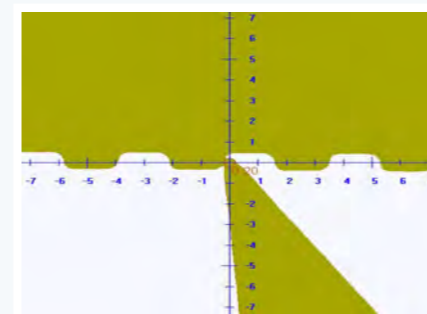
\*\* Weight without options

## GENERAL

The AP-750 FUSION D50 / D150 PLUS is a CNC controlled dressing and profiling machine for diamond and CBN grinding wheels. With nearly 100 machines in customer use, the **solide** construction has been tried and **tested** over many years and has **proven** its reliability in continuous operation.

During the dressing and profiling process, maximum precision and process reliability are essential. High rigidity of all mechanical assemblies, the direct drive of the C axis with high-resolution angle encoder, generously dimensioned drives and the camera system used permanently meet these requirements.

With the high-quality components and the innovative control system, the machine meets the highest possible safety standard, which is guaranteed by the safety control architecture .

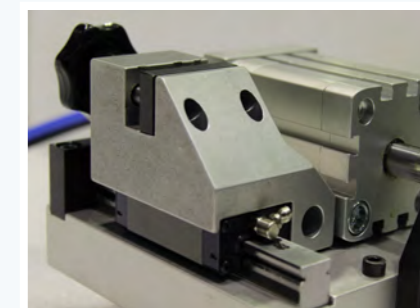


## SOFTWARE OPTIONS\*

- Radius interpolation for concave and convex radii up to 10 m
- Postprocessor for converting DXF to ISO code
- ISO programming for tracing contours with or without radius compensation
- Automatic "movement" of the tool and workpiece wheel with stop/start function (depends on the processing mode)
- Manage DXF drawing files
- Grinding wheel data output on a label printer with six adapter zero points
- Industry 4.0
- Machine documentation directly on the machine
- Machine dialog interface in foreign language

## MACHINE OPTIONS\*

- Optical mechanical vibration (only for tool spindle with HSK-50 or HSK-63)
- Swivelling camera arm
- Turning tool holder for freely-turning of the grinding wheel body
- Pneumatic grinding device (holder for grinding graphite stencils)
- Variety of mandrels for workpieces and tools
- Accessories for coolant preparation respectively extraction
- Extended workpiece spindle for dressing smaller wheel diameters (only for FD 50)
- External clamping system i.a. for Rollomatic- and Döbelispindle



\* Extract from the option list, further options on request. We welcome your requests and suggestions



# WHO WE ARE



*Convince yourself first hand and  
in person of our machines.  
Contact us for an appointment and a  
demonstration according to your requirements!*



The company Rudolf Geiger Maschinenbau GmbH was founded in 1967 and is an internationally recognized manufacturer of dressing and profiling machines as well as special grinding machines. Since then, **TRADITION, INNOVATION** and **PRECISION** has been a priority in our company.

Our plant is located in Rüssenbach, a district of Ebermannstadt in the beautiful Franconian Switzerland. On an area of approx. 3000 m<sup>2</sup>, the individual parts are manufactured and assembled to your machine with a high degree of care.

Our customers includes many well-known grinding wheel and tool manufacturers, medical technology as well as the automotive, aviation and aerospace industries.



**Rudolf Geiger Maschinenbau GmbH**

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