

Nordrach, September 2009

JUNKER is pushing its GRINDOR brand and presenting two new machine concepts for EMO 2009 in Milan

With the expansion of the GRINDOR product range by the **GRINDOR® allround** and die **GRINDOR® speed**, JUNKER, as strong partner behind the GRINDOR brand, is now providing two further cylindrical grinding machines in its machine portfolio with an outstanding price/performance ratio.

The special feature of both the new machines is the successful combination of technically mature technology, quality and maximum precision for a low investment and thus maximum cost-effectiveness in operation. Another plus point is the easy operation.

GRINDOR® allround: Universal, high precision, flexible. The machine opens up a very wide range of applications and provides absolute universality due to the automatic, CNC-controlled, infinitely variable B-axis (0.0001°).

Thus corresponding profiling of the grinding wheel, associated secondary processing times and reduced grinding wheel service lives when grinding tapers with an angle smaller than 0.5° are prevented. The swivel range of the B-axis is 210°.

Plunge-cut grinding, multiple plunge-cut grinding, oscillation grinding (also with swivelled-in B-axis) – the GRINDOR® allround provides practically all possibilities for external and internal cylindrical grinding. With a centre distance and grinding length of 800 mm, the GRINDOR® allround covers a wide part range. It must be emphasised here that as well as corundum, CBN and diamond grinding wheels can also be used for their machining.

Fast, manual regrinding of a diameter using the electronic handwheels without great programming complexity is also possible.

The base version of the GRINDOR® allround is fitted with belt-driven internal grinding spindles for the internal grinding; these can also be regulated using a frequency converter. HF grinding spindles can also be used for the smallest part internal diameters.

The GRINDOR® allround is designed both for the manufacture of single parts and small series as well as for the production of larger series for which there is a comprehensive range of options and accessories available.

The control is performed using the Fanuc 21i. Even simpler programming and operation of the machine is made possible using pictograms, dialogue programming and a clear, easily understandable design of the software.

As well as the external / internal (with one spindle each) version, the machine is also available as a pure external or internal cylindrical grinding machine with up to 2 spindles.



GRINDOR® allround

Technical data

GRINDOR	allround
Workpiece data	
Centre height:	150 mm, optional 180 mm
Workpiece diameter:	290 mm, optional approx. 360 mm
Grinding length:	800 mm
Clamping length:	800 mm
Diameter of grinding wheels:	400 mm
Workpiece weight between centres:	80 kg
Machine data	
Abrasive:	Corundum / CBN and diamond also possible
Circumferential speed:	45 m/s
Machine data (without coolant system)	
Dimensions (W x D x H):	3,340 x 2,000 x 2,250 mm
Weight	5,000 kg

As a pioneer of high speed grinding with CBN technology based on more than 30 years of experience, the JUNKER Group with the **GRINDOR® speed** is now also presenting a corresponding machine concept based on GRINDOR.

GRINDOR® speed: High speed grinding – precise and productive. The machine provides absolute cost-effectiveness for small and medium series. Maximum productivity using CBN or diamond abrasives with a circumferential speed up to 140 m/s is guaranteed for this external cylindrical grinding machine. Up to two grinding spindles are used; the maximum grinding length between centres for the GRINDOR® speed is 600 mm.

Classic machining processes such as plunge-cut and oscillation grinding as well as the JUNKER peel grinding are possible. The machine is thus interesting both for the manufacturers of shaft-like, rotationally symmetric parts as well as for the cutting tool manufacturers - particularly for the production of the outer diameters on tools there.

Due to the use of up to two grinding spindles, the GRINDOR® speed provides a high degree of flexibility as separate grinding operations (e.g. machining of diameters and grooves) and also pre-grinding and finish grinding operations on one machine are possible. In doing so, the JUNKER 3-point mounting system ensures the shortest possible retooling times for changing grinding wheels or centres (on the workhead) with maximum precision at the same time (concentricity less than or equal to 2/1000 mm).

Due to the use of proven JUNKER technology, the work drive is only performed between the centres of the driven workpiece spindle (up to 12,000 rpm) and revolving tailstock spindle.

The machine is operated or controlled using the Fanuc 21i or optionally using the JUNKER JUWOP R/P software in combination with an external programming station.

JUWOP R/P provides the best conditions, e.g. for the machining of tool blanks or other rotationally symmetric (shaft-like) parts:

- by the programming of dimensions and profiles
- definition of the grinding operations and
- calculation of the CNC grinding program



GRINDOR® speed

Technical data

GRINDOR	speed
Workpiece data	
Centre height:	150 mm
Workpiece diameter:	150 mm
Grinding length:	600 mm
Clamping length:	800 mm
Diameter of grinding wheels:	350 mm / 400 mm
Workpiece weight between centres:	50 kg
Machine data	
Abrasive:	CBN / diamond
Circumferential speed:	max. 140 m/s
Machine data (without coolant system)	
Dimensions (W x D x H):	3,340 x 2,000 x 2,250 mm
Weight	5,000 kg

The GRINDOR service package is rounded off by a global service network: our specialists provide short response times, repair times in line with market requirements, customer proximity with low travel costs and high availability of spare parts.

GRINDOR – EINE  JUNKER. MARKE

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