TITAN 500

CENTERLESS CYLINDRICAL GRINDING IN FINISHING QUALITY

JUNKER
partner for precision

THROUGHFEED GRINDING IN FINISHING QUALITY

GRINDING IN FINAL PART QUALITY

The TITAN 500 produces workpieces to a superb standard of finishing quality using the throughfeed grinding technique. To allow this high standard of quality to be achieved, the TITAN features a wide range of machine attachments such as wheelhead, regulating wheelhead, work blade and infeed/outfeed which are aligned and calibrated to an extreme degree of precision. Another key factor in the achievement of final quality workpieces is a high degree of machine rigidity using a vibration-damping, highly torsion-resistant cast mineral machine base designed specifically for CBN grinding.

THE GRINDING PROCESS

Using the throughfeed process with a wide CBN grinding wheel, the workpieces pass in seamless sequence through the machine, provided all workpieces have only a single diameter requiring a uniform grinding operation. The axial force of the regulating wheel, which is generally inclined at an angle of 1.5 – 3.5°, „pulls" the flow of workpieces through the wheels towards the end of the grinding cell. Used in conjunction with an automated loading and unloading system, the workpieces pass through the machine without interruption.

HIGHLIGHTS

- **Rough and finish grinding** to final product quality take place in a single grinding operation (no intermediate handling)
- **High level of concentricity** due to market-leading machine rigidity and the use of CBN grinding wheels
- **High output through short cycle times** due to centerless throughfeed grinding
- **High stock removal rate** due to patented automatic adjustment of the work blade

TECHNICAL DATA	
Workpiece diameter	3 – 220 mm
CBN grinding wheel (120 m/sec)	500 x 500 x 305 mm
Spindle drive	51 – 100 kW
Regulating wheel dimensions	350 x 500 x 203 mm
Spindle drive regulating wheel	11,5 kW
W x D x H mm (without peripherals)	4.465 x 2.770 x 2.340
Weight	18.000 kg