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New developments at JUNKER

JUNKER offers ideal solutions for almost all fields of precision grinding. Automotive manufacturers and suppliers together with large-scale producers represent a core area of JUNKER's business. In this segment, JUNKER already offers many productive or flexible grinding concepts in line with specific customer requirements.

In time for METAV 2008, JUNKER is pleased to announce further new developments which underline the company's reputation as a technology leader.

Platform 4

Platform 4 was unveiled at last year's EMO show in Hanover. It replaces the previous 3000 series. Platform 4 is offered in two variants: 4S (one carriage) and 4L (one carriage and two carriages) with a maximum grinding length of 750 mm. The advantages of the new platforms are clear to see:

Identical guide system, a large number of identical parts and a uniform, round cover shape with the EJ-OP operator panel. The technical concept helps to increase output by reducing cycle times, which it achieves by means of shorter and superimposed travel within the machine. Even the machines' footprints are reduced thanks to the compact design.

In addition to new machines, JUNKER continues to offer its customers innovative grinding concepts for particular workpieces.

Grinding internal threads on steering nuts

JUNKER provides a solution for grinding internal threads on steering nuts in one clamping on the JUMAT 6S/40 CBN cylindrical grinding machine with a CBN grinding wheel. The wheel is mounted on a swivelling wheelhead, which can be swivelled into the inclination angle using the CNC axis. For dressing the grinding wheel, the spindle is swivelled into the zero position.

The benefits of this machine concept are clear: High machining performance, surface quality and contour accuracy, avoidance of grind overheating and high availability as a result of using CBN grinding wheels. Maximum process reliability is ensured thanks to effective high-pressure cooling with grinding oil and X- and Z-axis guidance that is free of play and low on wear.

Grinding HSK, SK and Capto tool holders

These workpieces are customarily machined with corundum grinding wheels. Here JUNKER offers an HSK and SK concept featuring two grinding spindles and an automatic loading/unloading system in the shape of the JUMAT 3000/50S.

Machining is performed with CBN grinding wheels in two operations:

Operation 1: External cylindrical and shoulder grinding of the SK50 steep taper, for example.

Operation 2: Grinding of outside diameter and ring groove with V-profile.

In the shape of the JUCAM 3000/50S, JUNKER also offers grinding of Capto holders, including the end face, in one clamping.

JUNKER offers complete flexibility because it is not necessary to change the grinding wheel when grinding different types of tool holder (HSK and SK). Other benefits are high reliability and possible savings on tool costs due to the use of CBN.

JUNKER can furnish comprehensive references for the conceptual design and realisation of production lines (line competence) in the automotive sector, e.g. crankshafts, camshafts and gearshafts and in the Tooltec division, e.g. producing taps and thread formers.

Platform 4



JUMAT 6S/40



JUMAT 3000/50 S



Erwin Junker
Maschinenfabrik GmbH
Junkerstraße 2
77787 Nordrach
Germany

Phone: +49 (0)7838 84-0
Fax: +49 (0)7838 84-302
E-Mail: info@junker.de
www.junker-group.com