

LGR-S

Optimum handling characteristics!

The LGR-S is an ultraprecision machine for engraving 2D and 3D data on tire sidewall molds. The machine body is a heavy duty, torsion free, tubular steel construction filled with a vibration reducing compound - for an extremely high stability. Tire sidewall molds for tires for motorbikes, cars, trucks, and even oversized special vehicles, as well as agrar tires and OTR, can be produced at the highest quality on the LGR-S.

The machine will be driven by high dynamic AC servo drives. Even finest structures can be realized easily with this special milling machine from the

the market leader LANG.

Machine loading by crane

The loading and unloading of the tire sidewall milling machine LGR-S can be realized by crane. The rotary table can be moved 1m out of the machining room, which makes the work piece handling very easy.

Technical data

Weight of machine

Largest clampable work piece diameter 2.300 mm Largest engraveable work piece diameter by vertical spindle 2.300 mm Size of rotary table faceplate 1.200 mm Max. load bearing capacity of rotary table 3.000 kg 360° C-axis working range (rotary table) X-axis working range 0 - 1150 mm Z-axis working range 500 mm B-axis working range +/- 90° High-frequency spindle L62 1.6 kW Driving power Speed range 5.000 - 60.000 min -1 Toolholder JAEGER change cone WK16 Tool shank diameter 3 - 6 mm, optional 1/4" - 1/8" High-frequency spindle L80 Driving power S1 2,6 kW/ S6 3kW/ Pmax 5,16kW 5,000 - 50,000 min -1 Speed range JAEGER change cone WK19 Toolholder Tool shank diameter 3 - 8 mm, optional 1/4" - 3/8" Machine control High-End AC Servo control, PC based; 15" TFT C-axis Resolution 0,000000477° Max. rapid feed 15,7m/min (R=600mm) X-axis 1,2 nm Resolution 6,5 m/min Max. rapid feed Glass scale Measuring system **Z-axis** Resolution 0.61 nm Max. rapid feed 12 m/min Glass scale Measuring system **B-axis** Resolution 0,000000954° Position uncertainty (VDI / DGQ 3441P) 0.023° Max. rapid speed 7,5 m/min at R=150mm Min. / Max. distance spindle nose to faceplate surface 100 - 600 mm 100 - 600 mm Min. / Max. distance spindle nose to faceplate surface Machine enclosure Extended safety features Tool measuring point with Emergency-Off-function Tool breakage detection 4.175 x 3.650 x 3.400 mm Max. space requirement (width*height*depth) by open doors

9.000 kg