

LGT-S II

Modern functional design

The LGT-S II is a special high-precision milling machine for the engraving of 2D- and 3D-data on tire sidewall molds in nearly every size. The machine body is a heavy duty, torsion free, tubular steel construction filled with a vibration reducing compound for an extremely high stability. The machine enclosure with the collecting tray allows the wet processing of the molds. Sidewall molds for car tires and truck tires can

be produced with best quality. The Xand Z-axis are located on the crosswise frame, the C-axis turns the rotation symmetrical work piece, the Baxis needs to be selected (depends on milling spindle). The LGT-S II wins with its modern, functional design and integrated control cabinet.

Hereafter some highlights of the machine are described.

Z Axis with weight compensation

- Rotation axis (B-Axis)
- Working with milling spindle up to

10kW

 Working with tools up to a diameter of 13mm, HSK E32

Machine body with additional options

- Disk type tool changer with 30 stations
- Optional chain-type tool changer with 50 stations
- Optional closing of the roof, exhaust system can be used
- Optional Blum-Laser for tool measuring

Technical data

Largest clampable work piece diameter 1.530 mm

Largest engraveable work piece diameter by vertical spindle 1.530 mm

Size of rotary table faceplate 1.200 mm

Max. load bearing capacity of rotary table 3.000 kg

C-axis working range (rotary table) 360°

X-axis working range 100 - 765 mm
Z-axis working range 400 mm
B-axis working range +/- 90°

High-frequency spindle L80

Driving power S1 2,6 kW/ S6 3kW/ Pmax 5,16kW

Speed range 5.000 - 50.000 min -1

Toolholder JAEGER change cone WK19
Tool shank diameter 3 - 8 mm, optional 1/4" - 3/8"

High-frequency spindle Z100

Driving power S1 6 kW/ S6 10kW/ Pmax 14kW

Speed range 5.000 - 42.000 min -1

Toolholder HSK 32 ER 16

Tool shank diameter 3 - 13 mm, optional 1/4" - 1/8"

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

Resolution 1,2 nm
Max. rapid feed 15 m/min
Measuring system Glass scale

Z-axis

Resolution 0,61 nm

Max. rapid feed 15 m/min

Measuring system Glass scale

B-axis

Resolution 0,000000698°

Position uncertainty (VDI / DGQ 3441P) 0,012°

Max. rapid speed 18,8 m/min at R=150mm

Min. / Max. distance spindle nose to faceplate surface 55/455 mm

Machine enclosure for wet processing on request (incl. oil bin),

oil mist exhaust system upon request

Extended safety features Tool measuring point with Emergency-Off-function

Tool breakage detection

Max. space requirement (width*height*depth) by open doors 3.800 x 3.050 x 3.550 mm

Weight of machine 5.500 kg