

**Machine Name : Internal and external circular grinding machine**

**Brand : STUDER**

**Machine Model : S41**

**Stock No. : 10222**

**Ex-factory Date :**



**Main Technical Parameters:**

-Centers spacing: 1600 [mm]

-Center height: 225 [mm]

-Maximum workpiece weight supported by two centers: 250 [kg]

-Travel (Z/X): 1.750 X 350 [mm]

-Maximum feed rate (Z/X): 20.000 [mm/min]

grinding wheel:

-Model: 2 OD grinding wheels (left/right), 2 ID spindles

-B-axis travel: - 45/+225deg

-B axis indexing accuracy: 0.001deg

-Grinding wheel size (Ø x width x hole dia.) T1: 500 x 80 x 203 [mm]

-Grinding wheel size (Ø x width x hole dia.) T2: 500 x 80 x 203 [mm]

-Motor power: 15 [kW]

-Wheel speed: 750-4.500 [rpm]

Workhead:

-Type: direct drive

-Taper hole type: ISO 50

-Speed: 1-1.500 [rpm]

-Power: 10 [kW]

Tailstock:

-Taper hole type: MT4

-Sleeve shaft stroke: 80 [mm]

Size:

-Floor area: 5.200 x 3.800 [mm]

-Height: 2.107 [mm]

-Weight: 10.200 [kg]

Electrical data:

-Voltage: 400 [V]

-Frequency: 50 [Hz]

-Installed power: 30 [kVA]

Machine Hours:

-Power hours: 25.438 [h]

-Machining hours: 4.818 [h]

Equipment:

-CNC: FANUC 31i-A, with 15 inches flat touch screen

-Interface: RJ45, USB

-Software options: version F, program check, quick setting, touch dressing, Student technology, Student trimming

-Remote jog handle: STUDER PCU Terminal II

-Linear motor on X/Z

-Linear scale on X/Z axis, accuracy: 0.00001 [mm]

-Automatic calibration device with length probe near T1: MOVOMATIC C25

-Standard C-axis with brake and encoder: 0,0001 [deg]

-2 Electric spindles FISCHER MFM 1224/42 : 24.000-42.000 [rpm]

-Tailstock:

\*With adjustable hydraulic clamp and pedal

\*Concentricity fine adjustment

\*Air rising

\*Parking position out of worktable

-Electronic contacted detection device DITTEL AE6000 upon: T1, T2, grinding wheel head, worktable dresser

-Worktable with 1 retractable dressing unit

-1 dressing device fixed on the worktable

-1 dressing device fixed on the workhead

-2 V supports

-Dynamic balancing device of outer grinding wheel: DITTEL P6002

-Coolant tank with pump: STREULI SPB6

\*With paper filter, width: 1000 [mm]

\*With magnetic filter

\*With cooling device: TECHNOTHERM TTK 5000

-Grinding wheel motor cooling device: HYDAC FLKS-5L

-Defogger: Air Fresh Service FMN-V12

-Cabinet air conditioner: RITTAL SK 3304 140

-6 outer sand supports

-2 external grinding wheels

-1 fixed center

-1 magnetic chuck

-1 Reduction: ISO 50-CM4

-3 three-jaw stabilizers with fine adjustment





