

# STUDER *roboLoad*

FOR RADIUS INTERNAL CYLINDRICAL GRINDING MACHINES



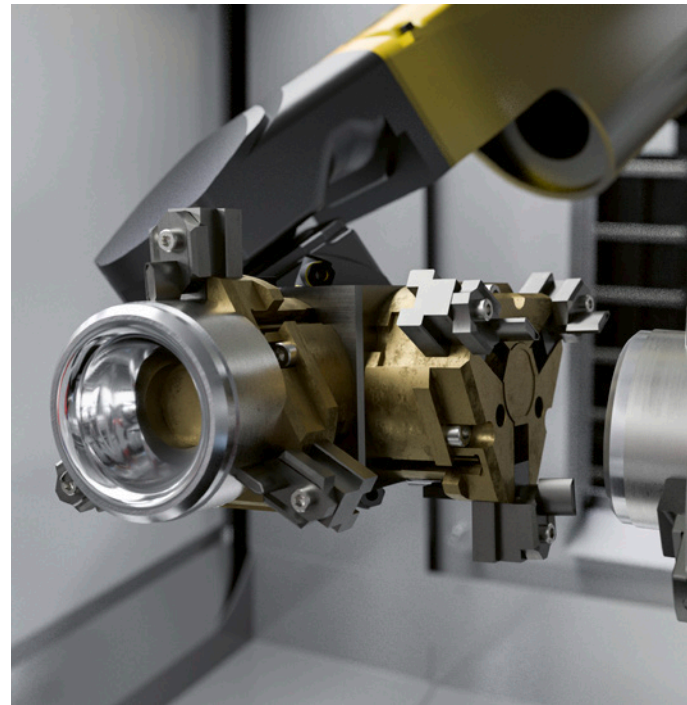
- Standard automation for a large range of parts
- Cutting-edge set-up wizard for quick and easy set-up
- Quick set-up and resetting in under 15 minutes
- Very simple workpiece supply
- No robot programming knowledge required
- Short delivery time thanks to standardization
- Expandable for your future requirements



For the radius internal cylindrical grinding machines, STUDER has developed a specific loader solution for this market segment based on a robot cell. The loader system is suitable for chuck components up to a part length of 100 mm (3.93") and a part diameter of max. 260 mm (10.24"), and thus covers a large portion of the component ranges produced on these machines.

The parts are supplied via a standardized, adjustable grid rack system. The housing for the base module, which is provided with a loading hatch as standard, has been adapted to suit the machine design and enables safe and clean operation of the system.

Machine types	S121 Radius, S131 Radius, S141 Radius
Spectrum of parts	Chuck components (condition: parts must be able to stand on their end face, if this condition is not met pallets are optionally available)
Autonomy	Max. 600 parts, depending on part size
Workpiece dimensions	Part length: 10–100 mm (0.39–3.93") Part diameter: max. 260 mm (10.24") Part weight: max. 2.8 kg (6.2 lbs) for dual chuck gripper Part weight: max. 7 kg (15.4 lbs) for single chuck gripper
Workpiece change time	12 seconds (with dual chuck gripper) 20 seconds (with single chuck gripper) Redeployment time 7 seconds
Control system	Operation via Siemens 19" screen and intuitive user interface
Interface	STUDER B3 Profibus loader interface
Structure and equipment	Base frame with casing and set-up door, Fanuc robot type M10-iD 10L with two pneumatic chuck grippers. Workpiece storage with 6 shelves and 6 grid racks of medium size. SPC and NIO storage incl.
Installation space approx.	Width: 1500 mm (59"), length 4000 mm (157")
Standard dual chuck gripper	Adjustable jaws
Adjustment range	Dia. 6–168 mm (0.23–6.61") if workpiece is gripped externally Dia. 34–212 mm (1.34–8.34") if workpiece is gripped internally
Single chuck gripper	Optionally available

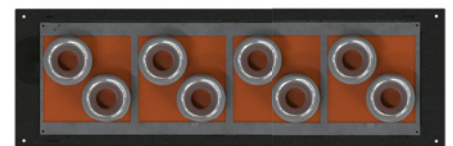
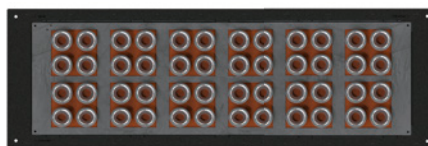
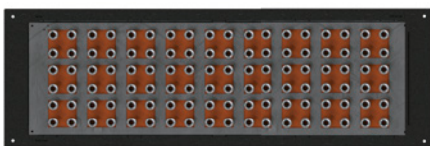


### Grid racks

Small spacing

Medium spacing

Large spacing\*



Number of parts  $3 \times 9 \times 4 = 108$  pieces

Number of parts  $2 \times 6 \times 4 = 48$  pieces

Number of parts  $1 \times 4 \times 2 = 8$  pieces

\*Quadruple placement not possible. Due to the narrow dividers, the gripping finger does not fit between the parts. Pallets can be optionally ordered for parts that cannot stand on their own.