STUDER easyLoad
for external and universal cylindrical grinding machines

For machine types S21, S31, S33, S22 and S41 a loader solution is offered on the basis of a portal loader system with V-gripper. The loader system is suitable for shaft components up to a part length of 300 mm and a grip diameter of 4 to 30 mm (max. interfering contour - dia. 50 mm); it therefore covers the majority of the spectrum of parts produced on these machines.

The parts are supplied via a standardized, adjustable synchronized conveyor. The housing for the base module, which has been adapted to suit the machine design, enables safe and clean operation of the system.

Machine types: S21, S31, S33, S22, S41
Spectrum of parts: Shaft components, clamping between centers
Autonomy: 50 workpieces with max. diameter 30 mm (1.2”)
Workpiece dimensions:
  max. part length 300 mm (11.8”) / min. part length 20 mm (0.8”)
  max. grip - dia. 30 mm (1.2”) / min. grip - dia. 4 mm (0.16”)
  max. interfering contour - dia. 50 mm (2”)
  max. part weight 5 kg (11 lbs)
Workpiece change time: 6 - 8 seconds (excluding synchronous tailstock)
Workpiece supply time: 14 - 16 seconds
Control unit: Operation and control via Studer CNC
Interface: Studer CNC integrated
Structure and equipment:
Base frame with casing and set-up door, portal module with 1 carriage, NC-axis, two gripper units in V-arrangement with two pneumatic parallel grippers.
Peripheral equipment including synchronized chain conveyor with V-block for rough parts, adjustable to different part sizes, forward and reverse indexing and a synchronized conveyor for finished parts.
SPC rack on finished parts conveyor
NIO in reject flap (at rear of handling system)
Installation space: approx. 1200 x 2500 mm (47” x 98”)

Part geometry:
Part’s center of gravity G should be close to the gripper
Gripper module in V-arrangement with two parallel grippers (standard / basic equipment)