THE NEW PRAKTIKANT GSD



Precision Engine Lathe

PRAKTIKANT GSD



PRAKTIKANT GSD: SETS NEW SAFETY STANDARDS

Movable chuck guard guarantees utmost safety



LED Machine light

placed to avoid dazzle

WEILER Design

clear focus on practical requirements

Simplified chip removal through chip tray

Maintenance friendly through easily accessible maintenance points

Quality

Toolmakers accuracy according to DIN 8605 is easily attained – a further proof for the quality of the machine.

Safety

- Pole-changing main spindle drive
- Automatic handwheel release
- Lead screw and feed rod cover
- Main spindle brake
- Reduction of hinch points
- Two-channel safety circuit

Cost-Effectiveness

The Praktikant GSD provides the ideal machining solution for countless applications in one-off and small-batch production, in craft workshops and industry, in apprenticeships and vocational training, as well as in tool and fixture manufacturing. This inherent flexibility can be significantly enhanced through a wide range of optional features.



- The GS safety mark awarded through the testing and certification body of the German Social Accident (DGUV Test) confirms that the lathe fully complies with the requirements of the German Product Safety Act (ProdSG)
- New chuck guard, proven through ballistic tests
- Extensive GS certified options



Headstock

The main spindle is made out of case-hardened alloy steel. The high precision tapered roller bearings of the main spindle guarantee high rigidity and a high surface quality on the workpiece.



Apron

The apron is fully enclosed and, at the same time, serves as the central lubrication reservoir for the carriage and half nuts. The feed transmission from the feed rod through the worm gear is interrupted for turning against the stop by an intermediate ball slip clutch. A pushbutton is provided to prevent half nuts from being unintentionally engaged.



Feed gearbox

The casing of the gearbox is fully enclosed and provided with oil-bath lubrication for the sets of gears. Depending on the demands of use, the gear wheels are case-hardened and ground or treated with nitride. Three rotary knobs enable 24 feed rates or 21 metric thread pitches, in particular standardized threads, to be selected without needing to change the gear wheels.

Options



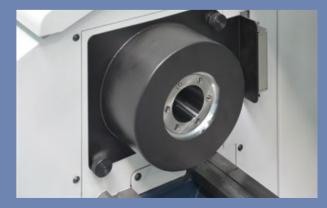
Movable sliding guard



Digital readout



Collet attachments



Electrical safety device for working with draw-in collets

TECHNICAL DATA

Standard equipment

- Magnetic brake for main drive
- LED machine light in rear chip dash panel
- Taper sleeve ME50/MT3
- Male center MT3
- Quick-change tool post Multi Suisse size A incl. 1 off turning tool holder AD 2090
- Chuck splash guard movable
- Chip deflector hinged on compound slide
- Single bed stop
- Set of change gears 21-33-63-120 T
- Central lubrication
- 5 off shear pins for lead screw
- Set of operating keys

Special options

- Quick-change tool post Multi Suisse size B
- Three and four-jaw chucks
- Independet 4-jaw chucks
- Various clamping devices for collets
- Hollow spindle stops
- Travelling steady rest with slide jaws
- Fixed steady rest with roller or slide jaws
- Rotating centre
- Lever drilling device for tailstock
- Tailstock inclined turret head
- Limit switch for thread cutting
- Coolant device
- Traversable chip splash guard with viewing window
- Additional LED machine lamps
- Numeric position display
- Electrical safety device for working with draw-in collets
- Further accessories upon request

Electrical equipment

- Operating voltage 3 x AC 400 V N/PE/50 Hz
- Control voltage 24 V
- All safety-relevant components are electrically locked
- Dual-channel safety technology
- Contactor control in the lockable control cabinet integrated in the subbase
- Restart protection in case of voltage loss or emergency stop
- Two-speed main motor IP54 with safety brake
- Safety switch for main spindle L.H. and R.H. rotation
- Emergency stop integrated at the subbase

Working Range		
Distance between centres	mm	650
Centre height	mm	160
Swing over bed	mm	320
Swing in bed recess	mm	190
Main spindle		
Spindle nose acc. to DIN 55027 (DIN ISO 702-3)	size	5
Spindle diameter in front bearing	mm	70
Spindle bore	mm	43
Inner taper of main spindle	metr.	50
Main Drive		
Drive power 100 % duty cycle	kW	2.6/3.1
Speed range	rpm	48-2,500
Number of gears		8
Number of speeds		16
Feed drive		
		24
Number of feeds		24
Number of feeds Feed range longitudinal	mm/ rev	0.02/0.63
Feed range longitudinal	rev mm/	0.02/0.63
Feed range longitudinal Feed range transverse	rev mm/	0.02/0.63
Feed range longitudinal Feed range transverse Thread Cutting Range	rev mm/ rev	0.02/0.63
Feed range longitudinal Feed range transverse Thread Cutting Range Metric threads*	rev mm/ rev mm	0.02/0.63 0.006/0.2 0.25-8
Feed range longitudinal Feed range transverse Thread Cutting Range Metric threads* Inch threads*	rev mm/ rev mm	0.02/0.63 0.006/0.2 0.25-8
Feed range longitudinal Feed range transverse Thread Cutting Range Metric threads* Inch threads* Tailstock	rev mm/ rev mm TPI	0.02/0.63 0.006/0.2 0.25-8 80-2
Feed range longitudinal Feed range transverse Thread Cutting Range Metric threads* Inch threads* Tailstock Quill diameter	rev mm/ rev mm TPI mm	0.02/0.63 0.006/0.2 0.25-8 80-2
Feed range longitudinal Feed range transverse Thread Cutting Range Metric threads* Inch threads* Tailstock Quill diameter Quill travel	mm/rev mm/rev mm TPI mm mm	0.02/0.63 0.006/0.2 0.25-8 80-2 40 85
Feed range longitudinal Feed range transverse Thread Cutting Range Metric threads* Inch threads* Tailstock Quill diameter Quill travel Inside taper of quill	mm/rev mm/rev mm TPI mm mm	0.02/0.63 0.006/0.2 0.25-8 80-2 40 85

^{*}Inch threads and metric thread pitches 0.45; 0.75; 4.5 and 5.5 are only possible with additional change gears.

User videos are available on the WEILER Channel at





We reserve the right to make technical changes | 10/2023 · 5.0915.01.05.03.02

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