

The New Praktikant **GS<sup>D</sup>**



# Precision Engine Lathe Praktikant **GS<sup>D</sup>**

**WEILER**

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Service

Radial Drilling Machines

CNC Lathes

Cycle-Controlled Lathes

Tool Room Lathes / Semi-Cycle Controlled Lathes

# Praktikant GSD: Sets New Safety Standards



**New chuck guard**  
guarantees utmost safety

**Optimized headstock lubrication**

**Maintenance friendly**  
through easily accessible  
maintenance points

**Machine light**  
placed to avoid dazzle

**WEILER Design**  
clear focus on  
practical requirements

**Simplified chip removal**  
through chip tray

## 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

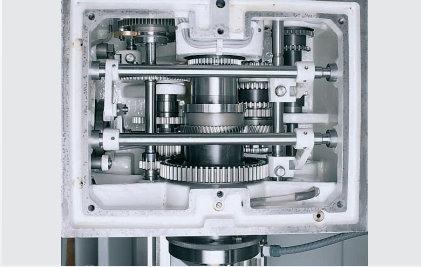
## Cost-Effectiveness

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.



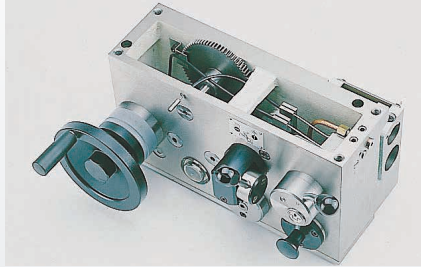
The GS safety mark awarded through the testing and certification body of the German Social Accident (DGUV Test) confirms that the lathe fully complies with the requirements of the German Product Safety Act (ProdSG)  
New chuck guard, proven through ballistic tests  
Extensive GS certified options

### Headstock



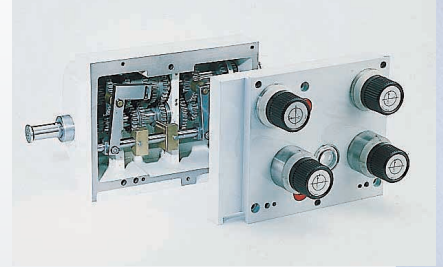
The main spindle is made out of case-hardened alloy steel. The high precision tapered roller bearings of the main spindle guarantee high rigidity and a high surface quality on the workpiece.

### 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.

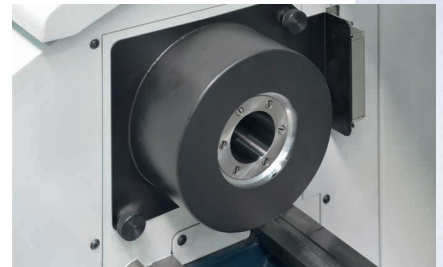
### Options



Chip and splash guard



Collet attachments



Electrical safety device for working with draw-in collets



LED machine light



Digital readout



Digital readout for tailstock quill



# Technical Data

## Standard equipment

- Braking device for the main spindle
- Tube lamp for 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
- Movable chuck guard
- Change gear box door monitored through a limit switch
- Rear splash guard
- Chip deflector hinged on compound slide
- Single bed stop
- Set of change gears 21-33-63-120 T
- Central lubrication
- 5 off reserve shear pins for the lead screw
- Set of operating keys

## Options

- Quick-change tool post Multi Suisse size B
- Three and four jaw chucks
- Independent four jaw chucks
- Clamping devices for draw-in and stationary collets
- I.D. back stops
- Follower rests with sliding jaws
- Steady rests with sliding or roller jaws
- Rotating centers
- Lever-operated drilling attachment for tailstock
- Tailstock turret head
- Limit switch device for thread cutting
- Coolant attachment
- Additional machine lamps
- Digital readout
- Digital readout for tailstock quill
- Movable hood
- Safety device for draw-in collets
- Other accessories on request

## Electrical equipment

- Operating voltage 3 x AC 400 Volt N / PE / 50 Hz
- Control voltage 24 V DC
- All safety-relevant components are electrically interlocked
- Two channel safety circuit technology
- Contactor control in lockable electrical cabinet in subbase
- Mechanical brake and restart protection in case of power cut or EMERGENCY STOP
- Pole-changing brake motor IP54 with safety brake, overload protection and temperature monitor
- Safety monitoring device for cw/ccw main spindle rotation
- EMERGENCY STOP button on subbase (left and right)

## Working Range

Distance between centres	mm	650
Centre height	mm	160
Swing over bed	mm	320
Swing over cross slide	mm	190

## Main Spindle

Spindle nose DIN 55027 (DIN ISO 702-3)	size	5
Spindle diameter in front bearing	mm	70
Spindle bore	mm	43
Inner taper	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 Range

Number of feeds		24
Longitudinal	mm/rev	0.02 – 0.63
Transverse	mm/rev	0.006 – 0.2

## Thread Cutting Range

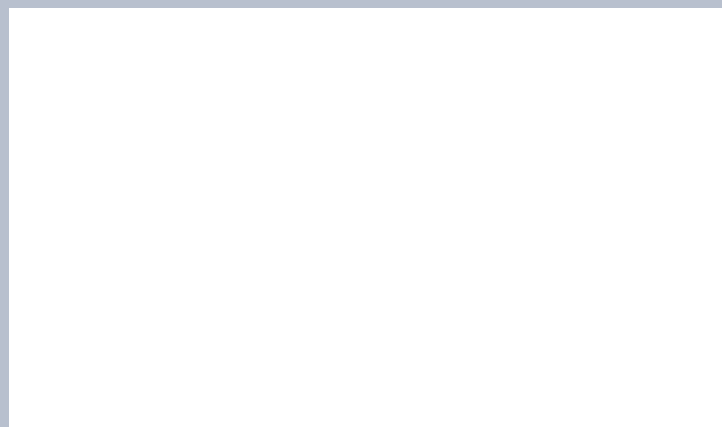
Metric threads	mm	0.25 – 8
Inch threads	TPI	80 – 2

## Tailstock

Quill diameter	mm	40
Quill travel	mm	85
Quill taper	MT	3

## Dimensions

Length / Width / Height	mm	1,770 / 900 / 1,570
Weight	kg	1,050



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