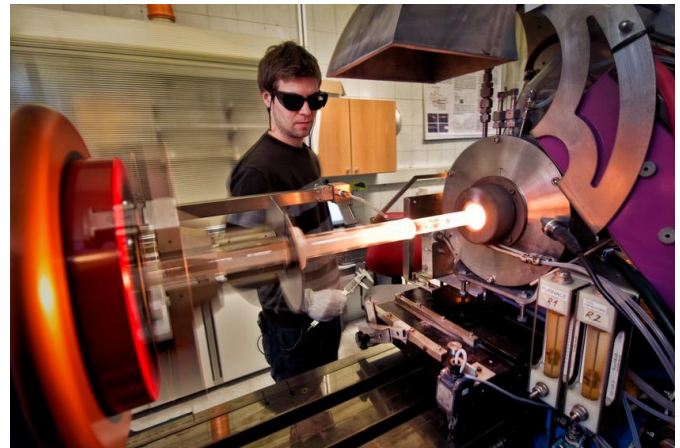


Introduction & Application

GWL-10 glass working lathes in different configurations and sizes are used in substrate tube preparation, welding, stubbing, preform polishing, jacketing and stretching of quartz glass. They are often used for rounding asymmetrically shaped preforms and in preparation of micro-structured preforms for drawing.

Description

GWL-10 horizontal glass working lathe is based on standard preform and glass working lathes from well-known suppliers. Lathes are equipped with a number of options, required by customers in procedures related to preparation of substrate tubes and preforms, in jacketing, stretching and general glass working operations.



The options include: different main oxyhydrogen burners, auxiliary and hand burners, pyrometers, camera vision system, motorized tailstock and/or headstock, different models of scroll chucks, rotary joints, vacuum pumps and gas panels for jacketing, lathe and burner hoods, graphite tools, graphite tube steadies and other additional equipment. GWL-10 lathes are customized for every customer and equipped with control systems, electrical cabinets, safety devices and other required equipment (gas purifiers, gas panels).



Control system

GWL-10 lathes can be controlled by a full-fledged WinMCVD control system, operating from a PC computer with distributed microprocessor-controlled I/O units over EtherCAT bus, or by small manual panel, mounted directly on the lathe carriage.

Specifications (standard lathe)

Total lathe length	2810 mm
Axis height above floor	1250 mm
Axis height above carriage	300 mm
Distance between chuck tips	max 1600 mm
Bore size	80 (option up to 125 mm)
Preform diameter	10 - 80 mm standard
Burner H ₂ /O ₂ flow	Standard 200/100 slm
Vacuum pump	Option
Preform gases, MFC controlled	O ₂ , N ₂ , option: SF ₆ , He
Temperature control	IR Pyrometer, PID closed loop

