

PCVD Lathe

Product Description

The PCVD process is a rod making technique that uses plasma activated reactive gases to produce uniform high-purity deposition materials such as germanium dioxide (GeO_2), phosphorus pentoxide (P_2O_5), silicon oxyfluoride (SiOF_2), etc. on the inner surface of the substrate, forming core and cladding layers with different refractive indices to achieve total reflection, low loss, and high capacity of optical signals propagating in the fiber core.



Product Characteristics

- The PCVD technology can produce a variety of products: communication optical fibers; Sensor fiber, amplifier fiber, or other special fiber, etc.
- All gases in the PCVD rod making system undergo local particle filtration ($0.003\mu\text{m}$) and pressure regulation control, with high precision in process line control.
- The PCVD rod making system uses a user-friendly human-machine interface, is easy to operate.
- The PCVD rod making system can provide lathes of different lengths: 2100~3000mm.

Product Specifications

Features	Unit	Index
Prefabricated parts specification	mm	$\leq \phi 50$
Diameter measurement	mm	$\phi 5 - \phi 40$
Diameter measurement accuracy	mm	± 0.05
Typical control accuracy during deposition	mm	0.15
Maximum end spacing of chuck	mm	2100
Chuck through hole size	mm	$\phi 110$
Hot zone operating range	mm	1600
Chuck clamping range	mm	$\phi 10 \sim \phi 125$
Maximum rotating speed of chuck	r/min	100
Moving speed of lamp holder	mm/min	3~3000
Working temperature range	$^{\circ}\text{C}$	1650~2100
Temperature measurement range	$^{\circ}\text{C}$	900~2500