

MCVD Preform Production Equipment

■ Product Description

MCVD is the abbreviation of Modified Chemical Vapor Deposition, which is translated as improved chemical vapor deposition. MCVD method can deposit higher purity silicon dioxide (SiO_2) on the inner wall of quartz tube (commonly called liner) with high quality (high purity, low moisture and low impurities), Other high-purity substances that can change the refractive index or vitreous viscosity, such as germanium dioxide (GeO_2), phosphorus pentoxide (P_2O_5), silicon oxide fluoride ($\text{SiO}_{1.5}\text{F}$), etc., are doped to form cores and cladding with different refractive indices, so as to achieve total reflection, low loss and high capacity when optical signals propagate in the fiber core.

■ Product Features

- MCVD rod making system has precise parametric process setting
- MCVD rod making system has simple equipment, low investment cost and wide application range
- High-precision lead screw, equipped with heavy-duty guide rails and forced lubrication to ensure high accuracy and long service life of the machine tool
- MCVD rod making system can provide precise heating bubbling chamber and process line for preform production
- The MCVD rod making system uses humanized man-machine operation interface, which is simple and friendly to operate and can be customized according to customer requirements



■ Product Specifications

Project	Unit	Index
Prefabricated rod diameter	mm	15~20
Sedimentation length	mm	600~750
Effective length of prefabricated rod	mm	400~600
Difference in refractive index of sedimentary envelope	/	0.0005 ± 0.0001
Working length between the spindle of the lathe	mm	2000~2200
Full travel of tail seat	mm	≥ 1500
Lathe spindle aperture	mm	about 100
Lathe spindle speed	rpm	5~100
Chuck holding range	mm	10~60
Main burner - lamp holder moving speed:	mm/min	1~1500 (accuracy 0.1)
Tail seat moving speed range	mm/min	0.2 ~100 (accuracy 0.1)
Working temperature range	$^{\circ}\text{C}$	+1650~+2100