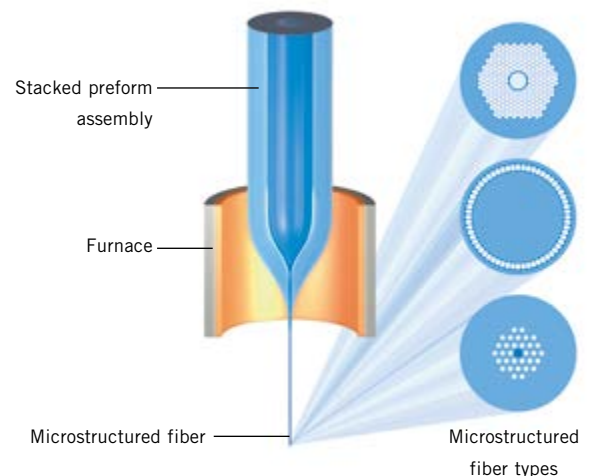


High Purity Synthetic Fused Silica for Photonic Crystal Fibers

As a key supplier of synthetic fused silica to the fiber optics industry, Heraeus is committed to innovative and up-and-coming technologies such as microstructured or photonic crystal fibers (PCF). Heraeus offers rods and tubes as semi-finished products for redraw. In addition Heraeus can manufacture capillaries and small rods for the direct assembly of these preforms. We are able to service customers dedicated needs by supplying specialized solutions e.g., rods and tubes with hexagonal or rectangular inner and/or outer shape.

What can we do for you?



Rods

Precision finished rods in a wide range of diameters, manufactured with tight tolerances, are available for stack and draw directly. Heraeus can also provide larger semi-finished rods which can be redrawn to your final dimensions. These rods can be used as wave guiding parts or to fill undesirable voids in the PCF structure.

Outer diameter: 1 ... 90 mm
Tolerance: 50 µm
Length: 500 ... 1,500 mm



Capillary tubing

Our high precision capillaries are drawn to meet your exacting dimensional needs. We can also supply tubes which can be used to redraw precision capillaries to your final required dimensions.

Outer diameter (OD): 1 ... 5 mm
OD/ID ratio: 1.05 ... 15
OD tolerance: 50 µm
Wall thickness tolerance: 50 µm
Length: 500 ... 1,500 mm



Germany

**Heraeus Quarzglas
GmbH & Co. KG**

Quarzstraße 8
63450 Hanau
Phone +49 (0) 6181.35-6324
Fax +49 (0) 6181.35-6261
fiber-optic-sales-de@heraeus.com
www.heraeus-quarzglas.com

USA

**Heraeus Quartz
North America LLC**

100 Heraeus Blvd.
Buford, GA 30518
Phone +1 678.804-1021
Fax +1 678.804-1023
fiber-optic-sales-us@
heraeus.com
www.heraeus-quarzglas.com

Overcladding tubes

We offer a wide range of tubes as overcladding materials for photonic crystal and microstructured fibers. For conventional stacks, we can provide thin and heavy walled jacket tubes.

Materials

Tubing and rod products can be made from a spectrum of different material grades. These include F300, reduced OH content F500, UV resistant high OH F100 or F110, and highly fluorine doped material made using our proprietary plasma technology.

Physical Material Characteristics

	F300	F320-08	TNU*
Refractive index @ 633 nm	1.4571	1.456	1.440
Transformation temperature	1,050 °C	950 °C	750 °C
Fluorine content	0 wt%	0.3 wt%	5 wt%

* Capillary with Dn 17.7x10⁻³ respectively un-doped fused silica

Heraeus' in-house services

With Heraeus' extensive expertise in fused silica materials we can supply machining, assembly, and draw services for microstructured and PCF preforms. Our capabilities allow quick turn around time for both large and small quantities based on our customer's requirements. Our services allow you to save time, money, and precious in-house resources.

About us

Heraeus is the key global supplier of high purity synthetic fused silica products for optical fiber manufacturing. We have been a reliable partner in the world telecommunications industry since 1976.