

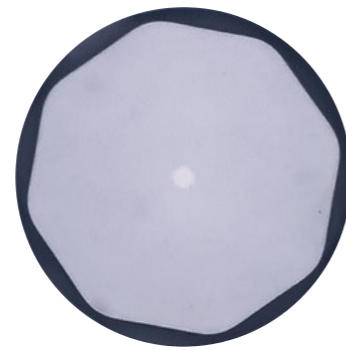
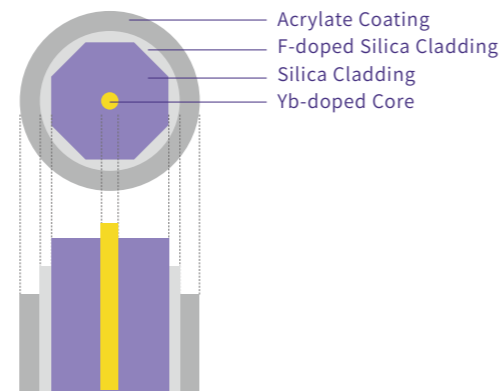
## 34/460/530 掺镱三包层光纤

### 34/460/530 Yb-doped Triple Cladding Fiber

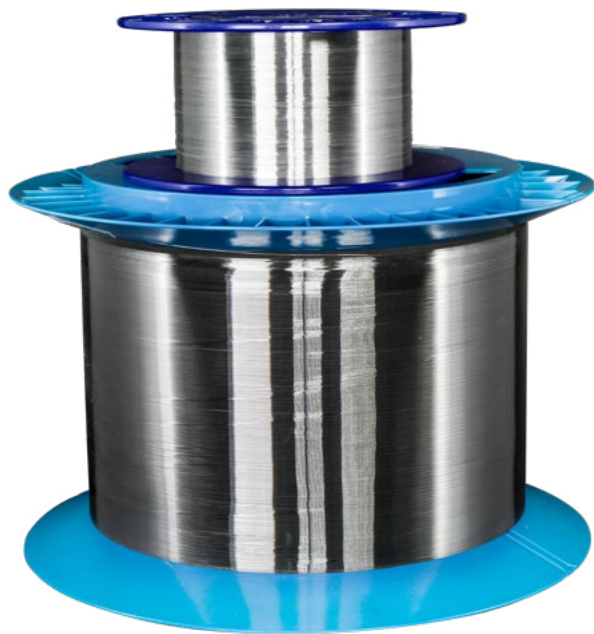
#### 产品描述 Product description

上海光机所掺镱三包层光纤采用优化的磷铝硅三元体系纤芯成分和液相、气相多步掺杂工艺，广泛应用于1m高功率光纤激光器、光纤放大器，可用于材料加工、军事、医疗和科研等领域。

Ytterbium-doped triple cladding fibers made in SIOM are fabricated by optimized core glass composition with phosphorus aluminum silica ternary system based on liquid/gas multi steps doping process. It can be widely used in 1m high power fiber lasers, fiber amplifiers, for materials processing, military, medical and scientific research fields.



光纤端面  
fiber crosssection



#### 产品特性 Product characteristics

- 高功率长时工作稳定性 High power long-term working stability
- 高激光效率 High laser efficiency
- 低光子暗化效应 Low photo-darkening effect
- 低非线性 Low nonlinearity
- 几何尺寸的高精度控制 High precision geometric
- 可靠的高温、高湿环境稳定性 Reliable environmental stability

#### 产品应用 Product application

- 军事、工业、科研等领域 Military, industrial, scientific research, etc.
- 连续光纤激光器和放大器 CW fiber laser and amplifier system

Fiber Specifications	YTDF-34/460/530
<b>Optical Properties</b>	
Working wavelength (nm)	1040-1100
NAcore	0.09±0.01
NAinner cladding	≥ 0.22
NAcladding	≥ 0.46
Inner cladding absorption (dB/m)	1.2±0.2 (915nm)
Cladding absorption (dB/m)	0.9±0.2 (915nm)
Inner cladding attenuation (dB/km)	≤ 15.0 (1200 nm)
Cladding light loss (dB/km)	≤ 30.0 (1300 nm)
	≤ 15.0 (1095 nm)
<b>Geometric and Mechanical Properties</b>	
Core diameter (μm)	34.0±2.0
Inner cladding diameter (μm)	460.0 ± 10.0 (face-face)
Cladding diameter (μm)	530.0 ± 10.0
Coating diameter (μm)	640.0 ± 15.0
Concentricity (μm)	≤ 2.0
Cladding material	F-doped silica
Coating material	Acrylate
Tension Screening	≥ 65 kpsi