



TOQUARTZ

Tech Specifications

TOQUARTZ®

Fused Quartz Rods

Product Catalog

Integrated Engineering & Agile Production
for Demanded Specifications



TOQUARTZ
Tech Specifications

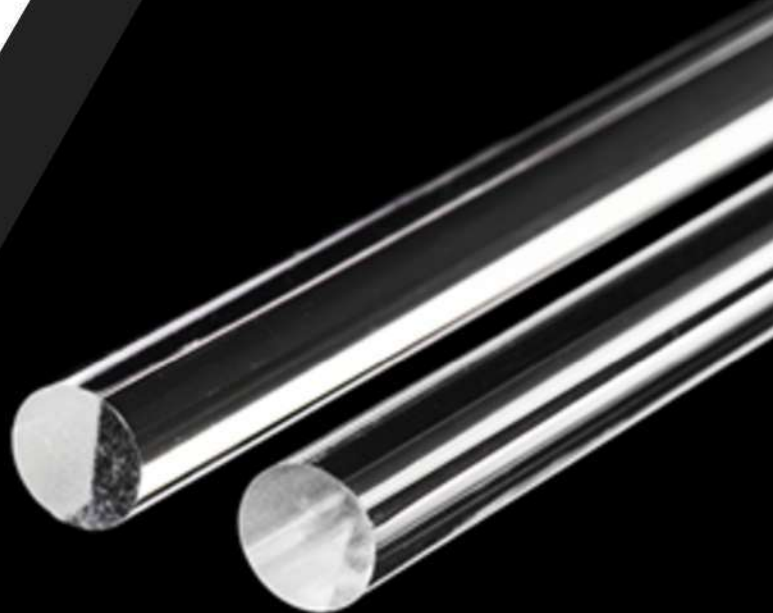
TOQUARTZ®

Clear Fused Quartz

Solid Cylinder Rod

Product Catalog

Integrated Engineering & Agile Production
for Demanded Specifications




TOQUARTZ® CLEAR FUSED QUARTZ SOLID CYLINDER ROD

TOQUARTZ® is a specialized manufacturer of high-purity quartz products based in China, serving global B2B clients in laboratory instrumentation, biomedical research, and environmental monitoring. With in-house engineering support and flexible production capabilities, we offer both standard and custom TOQUARTZ® Clear Fused Quartz Rod with fast delivery and consistent quality.



Product Overview



TOQUARTZ® cylindrical transparent fused quartz rods are high-purity silicon dioxide (SiO_2) products manufactured for applications requiring exceptional thermal stability, superior optical properties, and chemical resistance. With purity levels up to 99.98%+, these precision-engineered rods deliver consistent performance in demanding laboratory, optical, and industrial environments.

TOQUARTZ® CLEAR FUSED QUARTZ SOLID CYLINDER ROD



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Key Features & Benefits

- **High Temperature Resistance:** Softening point of approximately 1730°C, allowing sustained use at 1100°C and short-term operation up to 1450°C
- **Superior Light Transmission:** Excellent transmission across a wide spectral range from 120nm to 4500nm without absorption peaks
- **Chemical Resistance:** Exceptional resistance to acids, bases, and chemical reagents
- **Dimensional Precision:** Manufactured to tight tolerances with diameter precision up to $\pm 0.1\text{mm}$
- **Electrical Insulation:** Excellent electrical insulation properties even at high temperatures (specific resistance: $7 \times 10^7 \Omega \cdot \text{cm}$)
- **Low Thermal Expansion:** Thermal expansion coefficient of $5.5 \times 10^{-7}/^\circ\text{C}$ for dimensional stability across temperature variations

TOQUARTZ® CLEAR FUSED QUARTZ SOLID CYLINDER ROD



Applications

- **Laboratory Equipment:** High-temperature furnaces, reaction vessels, analytical instruments
- **UV Light Systems:** Water treatment, medical sterilization, UV curing applications
- **Optical Instruments:** Spectrometers, laser systems, analytical instruments
- **Industrial Heating:** Infrared heating elements, thermal processing equipment
- **Chemical Processing:** Catalyst supports, reaction vessels, flow monitoring





TECHNICAL SPECIFICATIONS

Physical & Thermal Properties

Property	Value	Unit
Density	2.2	g/cm ³
Flexure Strength	48	MPa
Elastic Modulus	72	GPa
Poisson's Ratio	0.14-0.17	-
Compressive Strength	1100	MPa
Bending Strength	67	MPa
Moh's Hardness	5.5-6.5	-



TECHNICAL SPECIFICATIONS

Physical & Thermal Properties

Property	Value	Unit
Maximum Working Temperature (long-term)	1100	°C
Maximum Working Temperature (short-term)	1350	°C
Thermal Conductivity	1.4	W/m·K
Thermal Expansion Coefficient	5.5×10^{-7}	/°C
Specific Resistance	7×10^7	$\Omega \cdot \text{cm}$



SIZE CHART

Model	Diameter (mm)	Length (mm)	Purity
AT-QTZ-G001	1.8	30	99%-99.98%
AT-QTZ-G002	2	50	99%-99.98%
AT-QTZ-G003	2.5	200	99%-99.98%
AT-QTZ-G004	3	300	99%-99.98%
AT-QTZ-G005	4.5	150	99%-99.98%
AT-QTZ-G006	5	600	99%-99.98%
AT-QTZ-G007	6	700	99%-99.98%
AT-QTZ-G008	7	400	99%-99.98%



SIZE CHART

Model	Diameter (mm)	Length (mm)	Purity
AT-QTZ-G009	8	635	99%-99.98%
AT-QTZ-G010	9	720	99%-99.98%
AT-QTZ-G011	10	55	99%-99.98%
AT-QTZ-G012	20	102	99%-99.98%
AT-QTZ-G013	30	50-1400	99%-99.98%
AT-QTZ-G014	40	50-1400	99%-99.98%
AT-QTZ-G015	50	50-1400	99%-99.98%
AT-QTZ-G016	60	50-1400	99%-99.98%
AT-QTZ-G017	1.8-350	20-2000	99%-99.98%



CUSTOMIZATION OPTIONS

TOQUARTZ® provides extensive customization capabilities for cylindrical transparent fused quartz rods:

- **Precision Dimensions:** Custom diameters from 1.8mm to 350mm with lengths up to 2000mm
- **Surface Finishing:** Fire-polished, mechanically polished, or ground finishes
- **Material Purity Selection:** Purity levels from 99% to 99.98%
- **End Processing:** Flat, beveled, rounded, or specially shaped ends



USAGE GUIDELINES

Handling & Storage

- Handle with clean gloves to prevent contamination
- Store in clean, dry conditions with protective packaging
- Avoid sudden mechanical shocks or impacts

Temperature Management

1. Implement gradual heating/cooling rates ($\leq 5^{\circ}\text{C}/\text{min}$)
2. Ensure appropriate clearance for thermal expansion
3. Do not exceed maximum operating temperatures

Chemical Compatibility

- Avoid prolonged exposure to hydrofluoric acid and hot concentrated phosphoric acid
- At high temperatures, prevent contact with alkali metals and alkaline earth oxides



ABOUT TOQUARTZ®

TOQUARTZ® is a specialized manufacturer of high-quality quartz glass products for industrial, laboratory, and optical applications. Our factory-direct approach eliminates intermediaries, providing cost-effective solutions with responsive technical support. We welcome small batch orders and offer 24-hour shipping for standard items.

Contact Information

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TOQUARTZ
Tech Specifications

TOQUARTZ® Half-Round Fused Quartz Rod Product Catalog

Integrated Engineering & Agile Production
for Demanded Specifications




TOQUARTZ® HALF-ROUND FUSED QUARTZ ROD

TOQUARTZ® is a specialized manufacturer of high-purity quartz products based in China, serving global B2B clients in laboratory instrumentation, biomedical research, and environmental monitoring. With in-house engineering support and flexible production capabilities, we offer both standard and custom TOQUARTZ® Fused Quartz Rod with fast delivery and consistent quality.



Product Overview



TOQUARTZ® half-round fused quartz rods combine the exceptional properties of high-purity quartz with a specialized semi-cylindrical form factor. These premium components feature a flat mounting surface paired with a curved optical/thermal surface, providing unique advantages for specialized applications in optical systems, thermal processing equipment, and precision instrumentation.

TOQUARTZ® HALF-ROUND FUSED QUARTZ ROD



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Advantages of Half-Round Design

- **Stable Mounting:** Flat surface provides secure positioning
- **Controlled Light Direction:** Curved surface offers predictable optical properties
- **Optimized Heat Transfer:** Improved thermal contact with mounting surfaces
- **Space Efficiency:** Compact form factor for space-constrained designs
- **Versatile Installation:** Simplifies integration into complex systems

TOQUARTZ® HALF-ROUND FUSED QUARTZ ROD



Applications

- **Optical Systems:** Beam shaping, light guides, laser systems
- **Thermal Applications:** IR reflectors, heating elements, thermal shields
- **Medical Equipment:** UV sterilization, analytical instruments
- **Laboratory Equipment:** Sample platforms, optical components
- **Industrial Processing:** High-temperature environments, corrosive settings





TECHNICAL SPECIFICATIONS

I Physical Properties

Parameter	Value / Range	Notes
Diameter Range	5mm – 150mm	Customizable, tolerance $\pm 0.1\text{mm}$
Length Range	50mm – 1400mm	Customizable, tolerance $\pm 0.5\text{mm}$
Half-Round Cut Tolerance	$\pm 0.2\text{mm}$	Precision-controlled semi-cylindrical cut
Density	2.2 g/cm^3	Typical for fused silica
Fracture Modulus	$\geq 350 \text{ MPa}$	High mechanical strength



TECHNICAL SPECIFICATIONS

I Physical Properties

Parameter	Value / Range	Notes
Thermal Conductivity	120 – 160 W/m·K	High heat transfer efficiency
Softening Point	~1730°C	Material transition temperature
Working Temperature (Long-term)	1100°C	Stable for continuous use
Working Temperature (Short-term)	1450°C	For peak thermal loads
Thermal Expansion Coefficient	$5.5 \times 10^{-7} / ^\circ\text{C}$	Low expansion, high dimensional stability



TECHNICAL SPECIFICATIONS

II Chemical Properties

Parameter	Value / Range	Notes
SiO ₂ Purity	99% – 99.98%	High-purity fused quartz
Acid Resistance	Excellent (except HF)	Stable in most acidic environments
Alkali Resistance	Good (limited at high temp)	Avoid prolonged exposure to strong bases at high temp
Halogen Resistance	Excellent	Suitable for fluorinated gas environments



TECHNICAL SPECIFICATIONS

III Optical Properties

Parameter	Value / Range	Notes
UV Transmission (200nm)	$\geq 85\%$	High UV transparency
Visible Light Transmission (400–700nm)	$\geq 92\%$	Clear fused quartz
IR Transmission (2.5–4.5 μm)	$\geq 80\%$	Suitable for IR heating and sensing
Refractive Index (at 589nm)	~1.458	Stable optical performance
Surface Finish Options	Polished / Ground / As-cut	Based on application requirements

TECHNICAL SPECIFICATIONS

- High Temperature Stability: Long-term use at 1100°C, short-term up to 1450°C
- Excellent Light Transmission: 120nm-4500nm spectrum coverage
- Superior Chemical Resistance: Stable against acids, bases, and corrosive environments
- Low Thermal Expansion: $5.5 \times 10^{-7}/^{\circ}\text{C}$ coefficient for dimensional stability
- High Mechanical Strength: Fracture modulus up to 350MPa+
- High Purity: SiO₂ content from 99% to 99.98%



SIZE CHART

Model	Diameter (mm)	Length (mm)	Material Purity
AT-QTZ-G037	5	50-1400	99%-99.98%
AT-QTZ-G038	10	50-1400	99%-99.98%
AT-QTZ-G039	15	50-1400	99%-99.98%
AT-QTZ-G040	18	50-1400	99%-99.98%
AT-QTZ-G041	20	50-1400	99%-99.98%
AT-QTZ-G042	24	50-1400	99%-99.98%
AT-QTZ-G043	28	50-1400	99%-99.98%
AT-QTZ-G044	30	50-1400	99%-99.98%
AT-QTZ-G045	5-150	50-1400	99%-99.98%



CUSTOMIZATION OPTIONS

TOQUARTZ® provides extensive customization capabilities for half-round quartz rod:

- **Custom Dimensions:** Diameters from 5mm to 150mm, lengths up to 1400mm
- **Surface Treatments:** Fire-polished, mechanically polished, ground, or as-cut
- **End Face Finishing:** Flat, angled, or special cuts
- **Special Requirements:** Proprietary specifications accommodated



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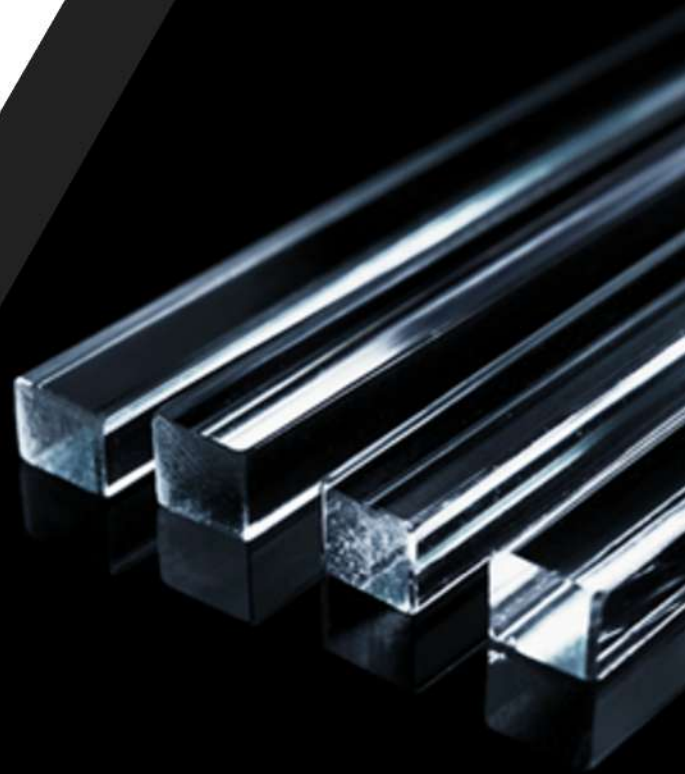
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TOQUARTZ
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TOQUARTZ® Square Clear Fused Silica Rod Product Catalog

Integrated Engineering & Agile Production
for Demanded Specifications



TOQUARTZ® SQUARE CLEAR FUSED SILICA ROD

TOQUARTZ® is a specialized manufacturer of high-purity quartz products based in China, serving global B2B clients in laboratory instrumentation, biomedical research, and environmental monitoring. With in-house engineering support and flexible production capabilities, we offer both standard and custom TOQUARTZ® Fused Quartz Rod with fast delivery and consistent quality.



Product Overview

TOQUARTZ® High-precision Square Clear Fused Silica Rods manufactured with 99-99.98% purity for optical instruments, UV/IR light sources, and high-temperature applications. Our square quartz rods feature excellent thermal stability, superior corrosion resistance, and exceptional optical transmission properties.

TOQUARTZ® SQUARE CLEAR FUSED SILICA ROD



Key Features

- High Purity: 99-99.98% SiO₂ content
- Superior Optical Properties: Transmission range from 120nm to 4500nm with no absorption peaks
- Exceptional Thermal Stability: Long-term use at 1100°C, short-term up to 1450°C
- High Chemical Resistance: Resistant to acids, bases, molten salts, and fluorinated gases
- Precision Dimensional Control: Standard tolerance of $\pm 0.1\text{mm}$
- Customization Available: Custom dimensions, surface treatments, and edge profiles

TOQUARTZ® SQUARE CLEAR FUSED SILICA ROD



Applications

- Optical instruments for beam shaping and collimation
- UV/IR light source components and encapsulation
- High-temperature structural components in industrial furnaces
- Laboratory equipment and experimental setups
- Raw material for custom quartz component fabrication



TECHNICAL SPECIFICATIONS

I Physical Properties

Parameter	Value / Range	Notes
Density	2.20 g/cm ³	ISO 1183
Fracture Modulus	≥ 350 MPa	ASTM C1161
Thermal Conductivity	120–160 W/m·K	At 20°C
Thermal Expansion Coefficient	5.5×10^{-7} /°C	20–1000°C
Softening Point	~1730°C	ISO 7884
Working Temperature (Continuous)	≤1100°C	Long-term
Working Temperature (Short-term)	≤1450°C	≤1 hour
Surface Finish	Polished / Ground / Chamfered	Customizable
Dimensional Tolerance	±0.1 mm (standard)	±0.05 mm on request



TECHNICAL SPECIFICATIONS

II Chemical Properties

Parameter	Value / Range	Notes
SiO ₂ Purity	99.00% – 99.98%	Synthetic fused silica
Acid Resistance	Excellent	HF excluded
Alkali Resistance	Excellent	NaOH, KOH
Fluoride Gas Resistance	Stable	Up to 1000°C
Moisture Absorption	None	Hydrophobic surface



TECHNICAL SPECIFICATIONS

III Optical Properties

Parameter	Value / Range	Notes
Transmission Range	120 nm – 4500 nm	UV to IR
UV Transmission (at 254 nm)	$\geq 85\%$	10 mm thickness
Refractive Index (at 589 nm)	1.4585	ISO 489
Absorption Peaks	None	Smooth spectrum
Birefringence	None	Isotropic material



SIZE CHART

Model	Side 1 (mm)	Side 2 (mm)	Length (mm)	Purity
AT-QTZ-G018	3	3	50-1400	99%-99.98%
AT-QTZ-G019	3	5	50-1400	99%-99.98%
AT-QTZ-G020	6	6	50-1400	99%-99.98%
AT-QTZ-G021	6	4	50-1400	99%-99.98%
AT-QTZ-G022	7	3	50-1400	99%-99.98%
AT-QTZ-G023	7	7	50-1400	99%-99.98%
AT-QTZ-G024	8	6	50-1400	99%-99.98%
AT-QTZ-G025	8.7	6.3	50-1400	99%-99.98%
AT-QTZ-G026	9.5	9.5	50-1400	99%-99.98%
AT-QTZ-G027	10	10	50-1400	99%-99.98%
AT-QTZ-G028	11	8	50-1400	99%-99.98%



SIZE CHART

Model	Side 1 (mm)	Side 2 (mm)	Length (mm)	Purity
AT-QTZ-G029	13	10	50-1400	99%-99.98%
AT-QTZ-G030	15	15	50-1400	99%-99.98%
AT-QTZ-G031	16.5	16.5	50-1400	99%-99.98%
AT-QTZ-G032	23	16	50-1400	99%-99.98%
AT-QTZ-G033	25	25	50-1400	99%-99.98%
AT-QTZ-G034	32	27	50-1400	99%-99.98%
AT-QTZ-G035	36	30	50-1400	99%-99.98%
AT-QTZ-G036	40	30	50-1400	99%-99.98%



CUSTOMIZATION OPTIONS

TOQUARTZ® provides extensive customization capabilities for Square Clear Fused Silica Rods:

- **Custom Dimensions:** Side lengths from 3mm to 40mm
- **Non-square Cross-sections:** Rectangular profiles available
- **Surface Treatments:** Fire-polished, precision ground, acid-etched
- **Edge Treatments:** Chamfered, rounded, or square edges
- **Special Purity Grades:** Available upon request



ABOUT TOQUARTZ®

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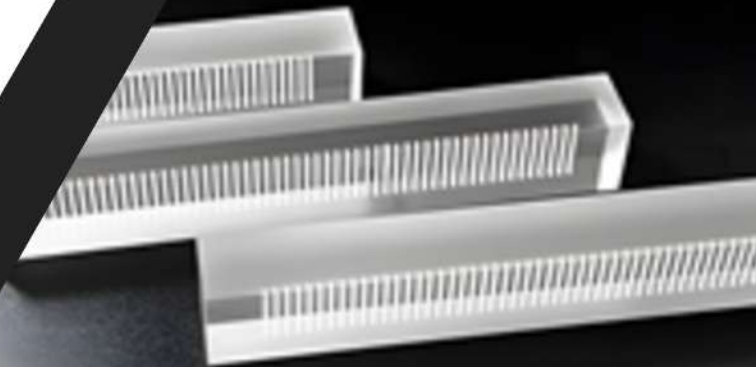
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TOQUARTZ
Tech Specifications

TOQUARTZ® Fused Quartz Groove Rod Product Catalog

Integrated Engineering & Agile Production
for Demanded Specifications



TOQUARTZ® FUSED QUARTZ GROOVE ROD

TOQUARTZ® is a specialized manufacturer of high-purity quartz products based in China, serving global B2B clients in laboratory instrumentation, biomedical research, and environmental monitoring. With in-house engineering support and flexible production capabilities, we offer both standard and custom TOQUARTZ® Fused Quartz Rod with fast delivery and consistent quality.



Product Overview



TOQUARTZ® Custom fused quartz groove bars with 99.99% SiO₂ purity, designed for optical fiber support, laser equipment components, and high-temperature applications. These precision-engineered quartz components feature customizable groove dimensions with tolerances down to $\pm 0.05\text{mm}$, delivering exceptional thermal stability, optical transparency, and corrosion resistance.

TOQUARTZ® FUSED QUARTZ GROOVE ROD



Key Features

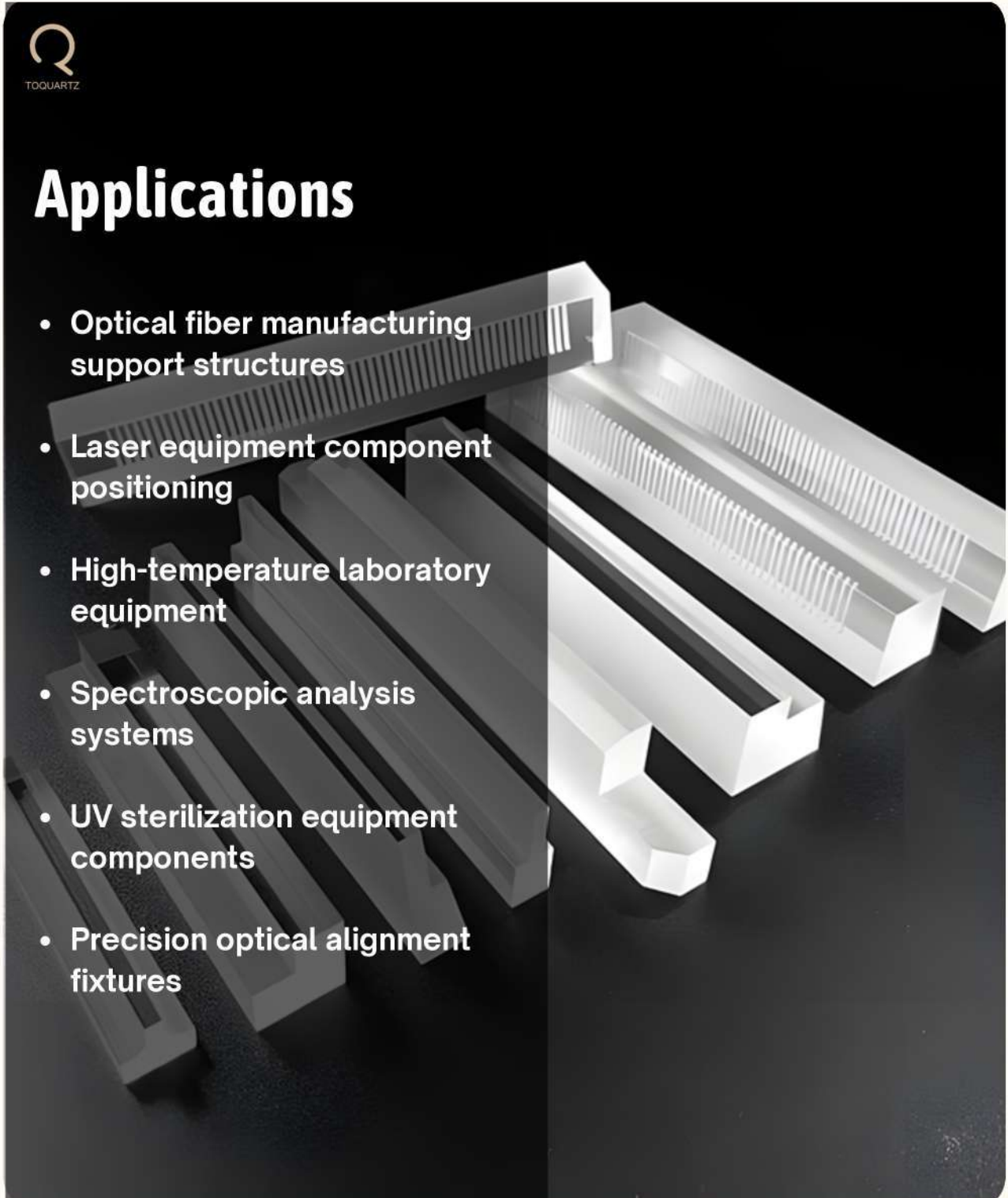
- 99.99% High Purity Material: Superior grade fused quartz with minimal impurities
- Exceptional Thermal Properties: Operating temperature up to 1100°C continuous, 1450°C short-term
- Precision Machined Grooves: Dimensional tolerances as precise as $\pm 0.05\text{mm}$
- Superior Optical Clarity: Transmission $>90\%$ across 200-2500nm spectrum
- Excellent Chemical Resistance: Stable against acids, bases, salts, and fluorinated gases
- Custom Manufacturing: Produced to your exact specifications

TOQUARTZ® FUSED QUARTZ GROOVE ROD



Applications

- Optical fiber manufacturing support structures
- Laser equipment component positioning
- High-temperature laboratory equipment
- Spectroscopic analysis systems
- UV sterilization equipment components
- Precision optical alignment fixtures





TECHNICAL SPECIFICATIONS

I Physical Properties

Material	99.99% Pure Fused Quartz (SiO ₂)
Density	2.2×10 ³ kg/m ³
Hardness	5.5 - 6.5 Mohs' Scale (570 KHN 100)
Tensile Strength	4.8×10 ⁷ Pa (7,000 psi)
Compressive Strength	Greater than 1.1×10 ⁹ Pa (160,000 psi)
Bulk Modulus	3.7×10 ¹⁰ Pa (5.3×10 ⁶ psi)
Rigidity Modulus	3.1×10 ¹⁰ Pa (4.5×10 ⁶ psi)



TECHNICAL SPECIFICATIONS

II Thermal Properties

Softening Point	1730°C
Annealing Point	1215°C
Continuous Working Temperature	1100°C
Short-term Maximum Temperature	1450°C
Thermal Expansion Coefficient	$5.5 \times 10^{-7} / ^\circ\text{C}$ (20-1000°C)
Thermal Conductivity	1.4 W/m·K (20°C)



TECHNICAL SPECIFICATIONS

III Optical Properties

Transmission Range	200-2500 nm
UV Transmission (10mm thickness)	>80% at 200nm, >90% at 220nm
Visible Light Transmission	>93% (400-700nm)
Refractive Index	1.458 (589.3nm at 20°C)
Surface Quality	60/40 scratch-dig standard (higher available)



TECHNICAL SPECIFICATIONS

IV Optical Properties

Thickness Range	0.2-100mm
Length Range	10-300mm (longer available upon request)
Groove Width Range	0.5-10mm
Groove Depth Range	0.5-20mm
Dimensional Tolerance	$\pm 0.05\text{mm}$ standard ($\pm 0.1\text{mm}$ for larger dimensions)
Surface Treatment Options	Polished, ground, fire-polished, custom textured
Processing Services	Cutting, drilling, grinding, polishing, beveling, slotting



CUSTOMIZATION OPTIONS

TOQUARTZ® provides extensive customization capabilities for fused quartz groove rod:

- **Multiple groove patterns**
- **Surface treatments (polished, ground, fire-polished)**
- **Complex shapes and angles**
- **Special material grades for enhanced UV transmission**
- **Custom packaging for sensitive applications**



ABOUT TOQUARTZ®

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TOQUARTZ® Quartz Optical Fiber Preform Rods Product Catalog

Integrated Engineering & Agile Production
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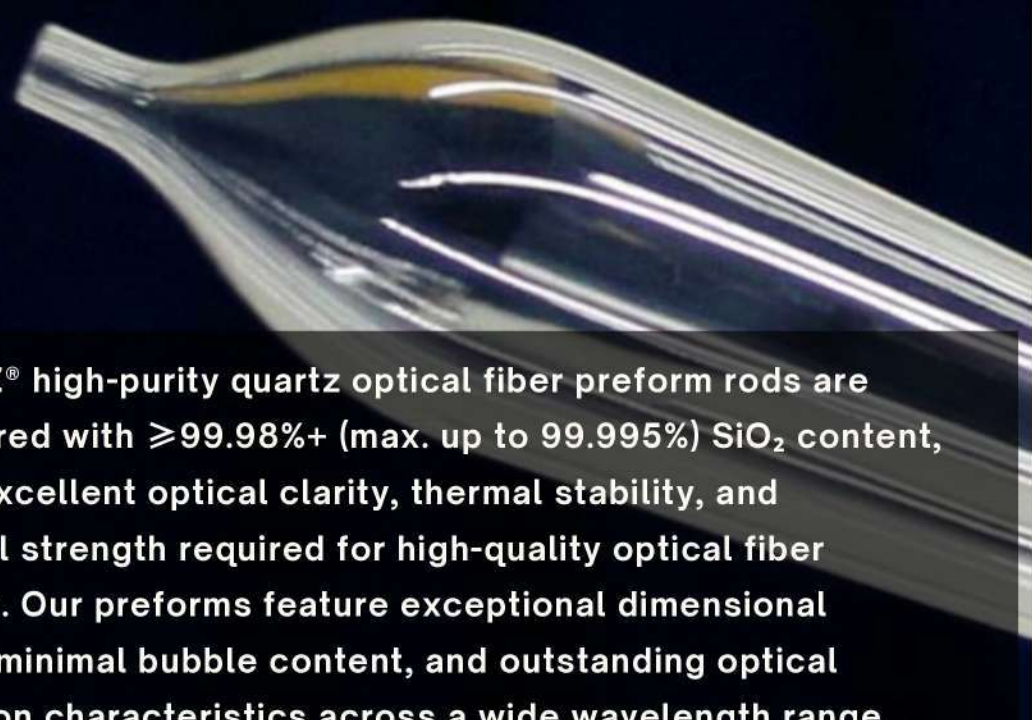


TOQUARTZ® QUARTZ OPTICAL FIBER PREFORM RODS

TOQUARTZ® is a specialized manufacturer of high-purity quartz products based in China, serving global B2B clients in laboratory instrumentation, biomedical research, and environmental monitoring. With in-house engineering support and flexible production capabilities, we offer both standard and custom TOQUARTZ® Quartz Optical Fiber Preform Rods with fast delivery and consistent quality.



Product Overview



TOQUARTZ® high-purity quartz optical fiber preform rods are manufactured with $\geq 99.98\%$ (max. up to 99.995%) SiO_2 content, ensuring excellent optical clarity, thermal stability, and mechanical strength required for high-quality optical fiber production. Our preforms feature exceptional dimensional precision, minimal bubble content, and outstanding optical transmission characteristics across a wide wavelength range.

TOQUARTZ® QUARTZ OPTICAL FIBER PREFORM RODS



Key Features

- High Purity: $\geq 99.995\%$ SiO₂ content for superior optical performance
- Excellent Optical Transparency: $>90\%$ transmission (200-2500nm)
- Superior Thermal Stability: Softening point $\sim 1730^{\circ}\text{C}$, usable up to 1450°C short-term
- Low Thermal Expansion: $5.5 \times 10^{-7} / ^{\circ}\text{C}$ coefficient for dimensional stability
- High Mechanical Strength: Fracture modulus exceeding 350MPa
- Precise Dimensional Control: Standard tolerance of $\pm 0.1\text{mm}$
- Customizable Specifications: Available in various diameters, lengths, and specialized geometries
- Low OH Content: <20 ppm for reduced absorption in drawn fibers

TOQUARTZ® QUARTZ OPTICAL FIBER PREFORM RODS



Applications

- **Telecommunications Fiber:**
Single-mode and multi-mode fibers for data transmission
- **Specialty Optical Fibers:** For sensing, medical, and industrial applications
- **Fiber Optic Sensors:**
Temperature, pressure, and strain monitoring
- **Fiber Lasers and Amplifiers:**
High-power laser systems and optical amplifiers
- **Research & Development:**
Novel fiber designs and optical materials testing



TECHNICAL SPECIFICATIONS

I Geometric Properties

Property	Specification
Preform Outer Diameter (O.D.)	130-150 (±5) [mm]
Tolerance of O.D.	≤5 [mm]
Effective Length	≥1600 [mm]
Effective Weight	≥45 [Kg]
Non-circularity	≤1%
Core/Cladding Concentricity Error	≤0.5 [mm]
Bow	≤1.0 [mm/m]



TECHNICAL SPECIFICATIONS

II Physical Properties

Property	Value
Density	2.2 g/cm ³
Thermal Expansion Coefficient	$5.5 \times 10^{-7} / ^\circ\text{C}$
Thermal Conductivity	1.4 W/(m·K)
Softening Point	~1730°C
Annealing Point	~1215°C
Working Temperature (long-term)	≤1100°C
Working Temperature (short-term)	≤1450°C
Mechanical Strength (Fracture Modulus)	≥350 MPa



TECHNICAL SPECIFICATIONS

III Optical Properties of Drawn Fiber (G.652.D Standard)

Property	Specification
1310nm Attenuation	≤ 0.344 [dB/km]
1383nm Attenuation	≤ 0.344 [dB/km]
1550nm Attenuation	≤ 0.204 [dB/km]
1625nm Attenuation	≤ 0.244 [dB/km]
1285-1339nm Dispersion	≤ 3.5 [ps/(nm·km)]
Zero Dispersion Wavelength	1312 ± 12.4 [nm]
1310nm Mode Field Diameter (MFD)	9.2 ± 0.44 [μm]
1550nm Mode Field Diameter (MFD)	10.4 ± 0.8 [μm]



TECHNICAL SPECIFICATIONS

IV Chemical Properties

Property	Specification
SiO ₂ Content	≥99.995%
OH Content	<20 ppm
Chlorine Content	<100 ppm
Metallic Impurities (Total)	<5 ppm
Chemical Resistance	Excellent resistance to acids, alkalis, and fluorinated gases



SIZE CHART

Model	Diameter (mm)	Length (mm)	Notes
AT-SIO-OF001	130	1500~3000	Typical value
AT-SIO-OF002	150	1500~3000	Typical value
AT-SIO-OF003	180	1500~3000	Typical value
AT-SIO-OF004	200	1500~3000	Typical value
AT-SIO-OF005	80~190	1000~3000	Custom sizes



CUSTOMIZATION OPTIONS

TOQUARTZ® provides extensive customization capabilities for fused quartz optical fiber preform rod:

- Numerical aperture (NA)
- Core-cladding diameter ratio (CCDR)
- Outer diameter (80-190mm)
- Preform length (1000-3000mm)
- Refractive index profile (step or graded)
- Core doping components (GeO_2 , P_2O_5 , rare earth elements)



HANDLING & STORAGE RECOMMENDATIONS

- Store in original packaging in a clean, dry environment
- Maintain controlled temperature (20-25°C) and humidity (<50%)
- Handle with powder-free gloves to avoid contamination
- Clean with high-purity isopropyl alcohol before use
- Avoid exposure to chemicals, dust, and direct sunlight



QUALITY ASSURANCE

Each TOQUARTZ® optical fiber preform rod undergoes rigorous quality control testing to ensure consistent performance and reliability:

- Dimensional measurement and verification
- Optical inspection for defects and inclusions
- Material composition analysis
- Surface quality inspection
- Refractive index profile measurement (for specialty preform)



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