TOQUARTZ

TOQUARTZ

Tech Specifications

Quartz Plate & Disc

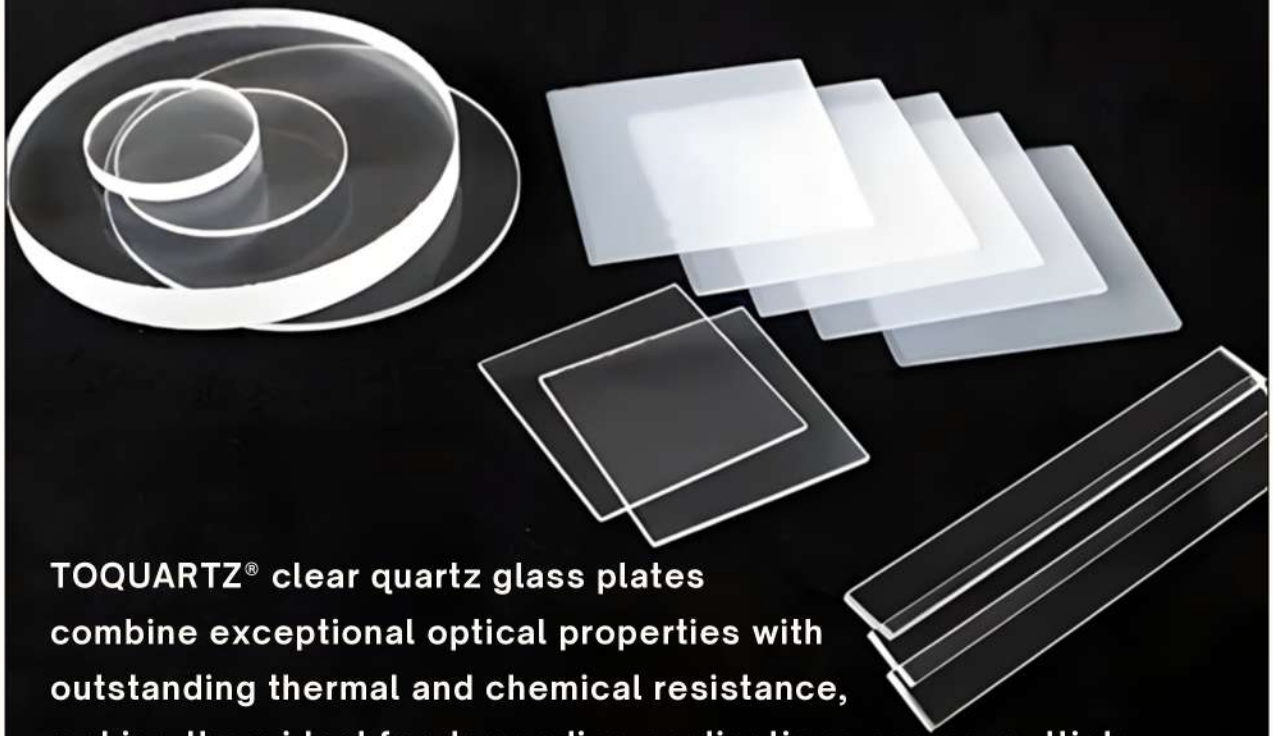
Integrated Engineering & Agile Production

for Demanded Specifications

TOQUARTZ®
CLEAR QUARTZ GLASS PLATE

Premium High-Purity Optical Grade Quartz Plates

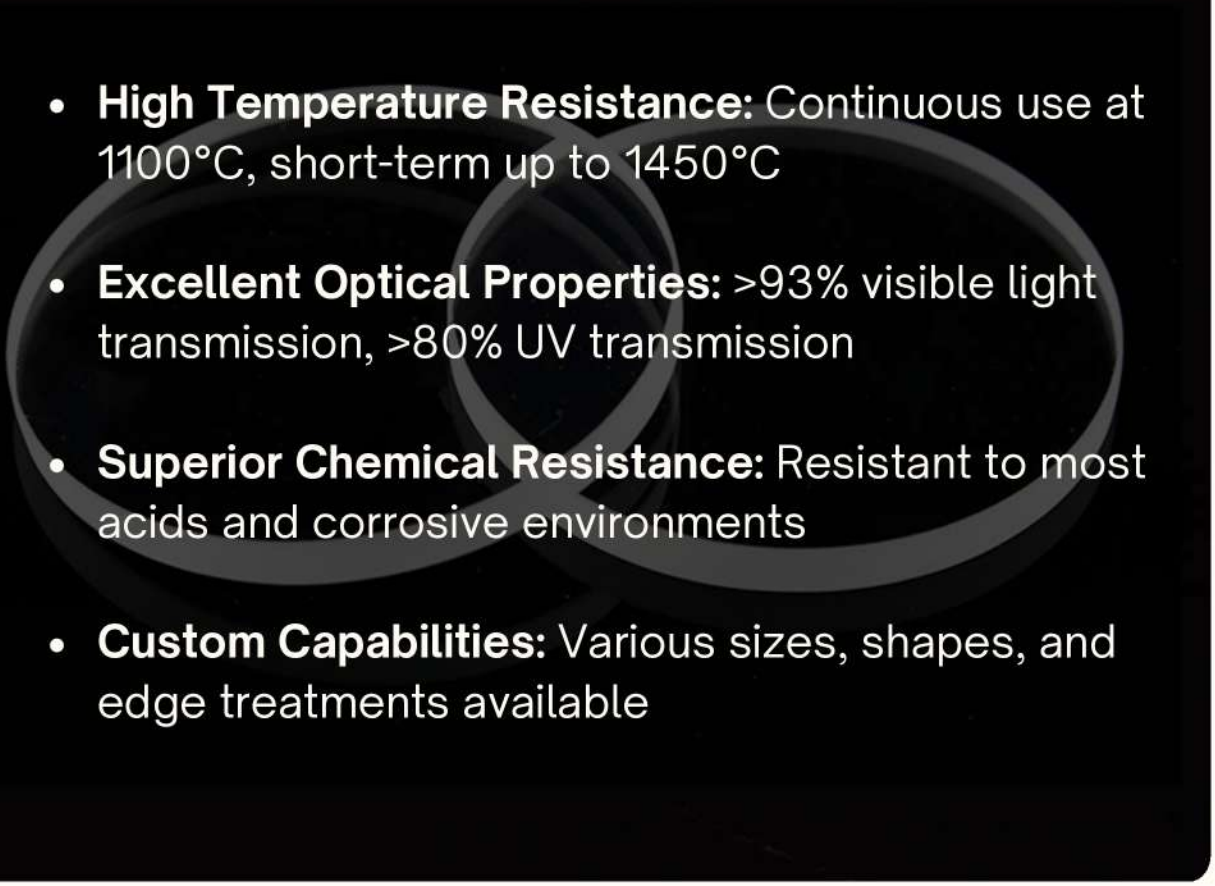
Product Overview



TOQUARTZ® clear quartz glass plates combine exceptional optical properties with outstanding thermal and chemical resistance, making them ideal for demanding applications across multiple industries. Our factory-direct manufacturing ensures consistent quality and competitive pricing.

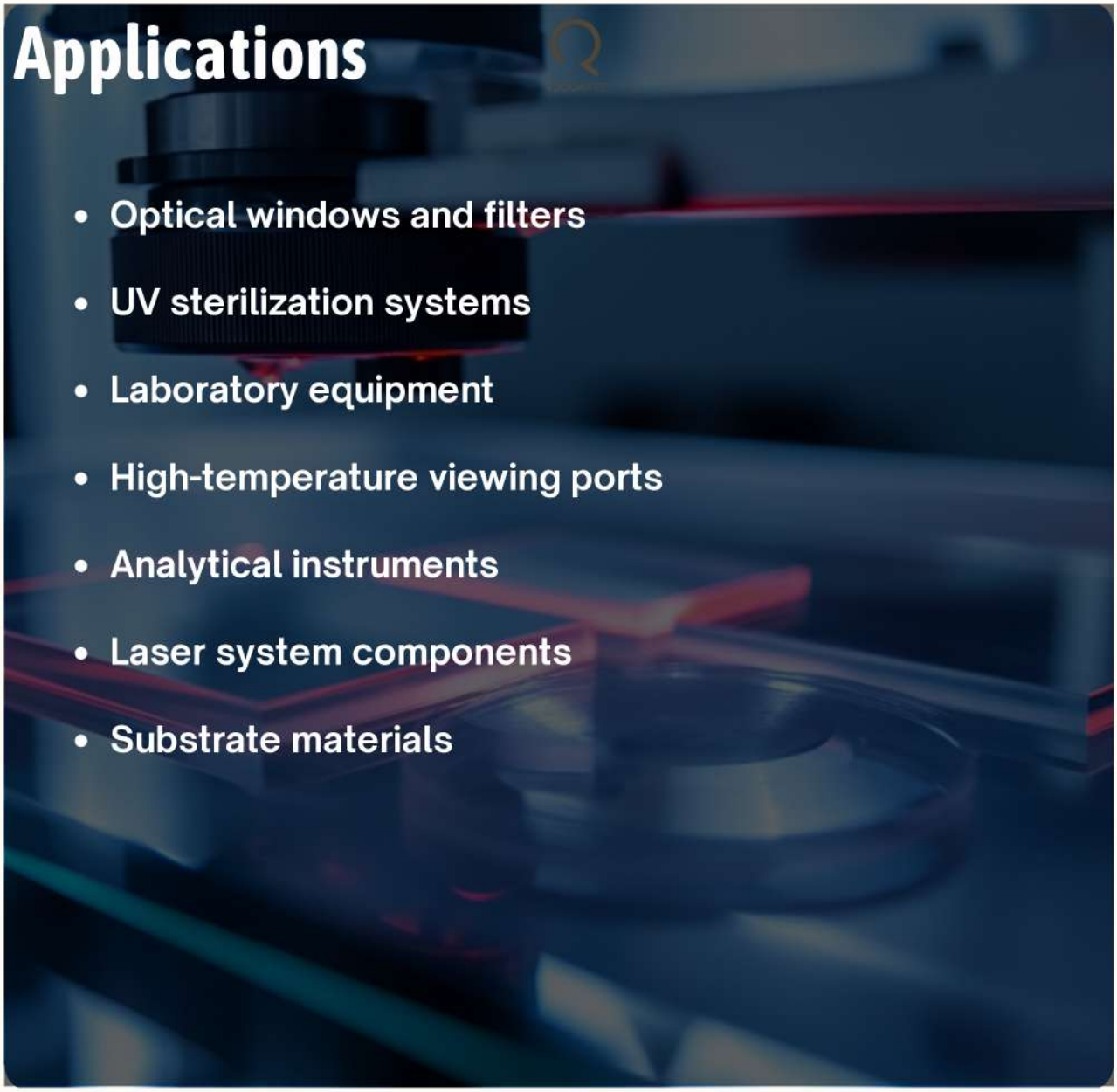
CLEAR QUARTZ GLASS PLATE

Key Features



- **High Temperature Resistance:** Continuous use at 1100°C, short-term up to 1450°C
- **Excellent Optical Properties:** >93% visible light transmission, >80% UV transmission
- **Superior Chemical Resistance:** Resistant to most acids and corrosive environments
- **Custom Capabilities:** Various sizes, shapes, and edge treatments available

CLEAR QUARTZ GLASS PLATE



MATERIAL OPTIONS

JGS-1

Far UV grade (185nm+), high OH content (2000 PPM)

JGS-2

UV grade (220-2500μm), moderate OH content (100-200 PPM)

JGS-3

IR grade (260-3500μm), minimal OH content

CUSTOMIZATION OPTIONS

- **Dimensions**: Specify exact length, width, and thickness requirements
- **Shape**: Round, square, rectangular, or custom shapes per drawing
- **Edge Treatment**: R-corner, C-edge, protective edge, or straight edge
- **Surface Finish**: Various polishing options available

TECHNICAL SPECIFICATIONS

Property	Specification	Notes
Material	High Purity Fused Silica (SiO_2)	⩾99.99% purity
Standard Sizes	50×50mm to 300×300mm	Custom sizes available
Thickness Range	0.5mm to 20mm	±0.1mm tolerance
Maximum Use Temperature	1100°C (continuous), 1450°C (short-term)	Maintains dimensional stability
Thermal Expansion Coefficient	5.5×10^{-7}/°C	Excellent thermal shock resistance
Visible Light Transmission	>93%	For 1mm thickness
UV Transmission	>80% (200-300nm)	Depends on grade selected
Surface Finish Options	Ground, Fire Polished, Optical Polish	Application dependent
Edge Treatment	Straight, C-edge, R-corner, Chamfered	Custom edge work available

SIZE CHART

Quartz Glass Round Disc

Model	Diameter（mm)	Thickness（mm)	SiO2's Purity（%)
AT-SY-P1001	2	0.5	99.99
AT-SY-P1002	5	0.5	99.99
AT-SY-P1003	10	1	99.99
AT-SY-P1004	10	2	99.99
AT-SY-P1005	12	1	99.99
AT-SY-P1006	13	1	99.99
AT-SY-P1007	15	1	99.99
AT-SY-P1008	15	1.5	99.99
AT-SY-P1009	18	2	99.99

SIZE CHART

Quartz Glass Round Disc

Model	Diameter（mm)	Thickness（mm)	SiO2's Purity（%)
AT-SY-P1010	19.4	2	99.99
AT-SY-P1011	20	1	99.99
AT-SY-P1012	20	1.5	99.99
AT-SY-P1013	20	2	99.99
AT-SY-P1014	24	2	99.99
AT-SY-P1015	25	1	99.99
AT-SY-P1016	30	1	99.99
AT-SY-P1017	30	2	99.99
AT-SY-P1018	30	5	99.99

SIZE CHART

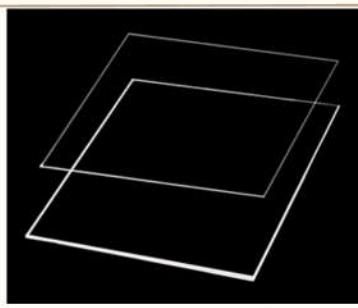
Quartz Glass Round Disc

Model	Diameter (mm)	Thickness (mm)	SiO2's Purity (%)
AT-SY-P1019	35	2	99.99
AT-SY-P1020	36	2.2	99.99
AT-SY-P1021	37	7	99.99
AT-SY-P1022	40	1	99.99
AT-SY-P1023	40	2	99.99
AT-SY-P1024	40	5	99.99
AT-SY-P1025	41.5	4	99.99
AT-SY-P1026	46	2	99.99
AT-SY-P1027	46.8	3	99.99

SIZE CHART

Quartz Glass Round Disc

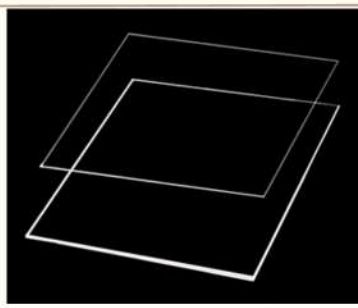
Model	Diameter (mm)	Thickness (mm)	SiO2's Purity (%)
AT-SY-P1028	50	1	99.99
AT-SY-P1029	50	2	99.99
AT-SY-P1030	50	10	99.99
AT-SY-P1031	67.5	2	99.99
AT-SY-P1032	70	2	99.99
AT-SY-P1033	80	2	99.99
AT-SY-P1034	90	8	99.99
AT-SY-P1035	80	5	99.99
AT-SY-P1036	2-750mm	0.5-100mm	99.99



SIZE CHART

Quartz Glass Square Plate

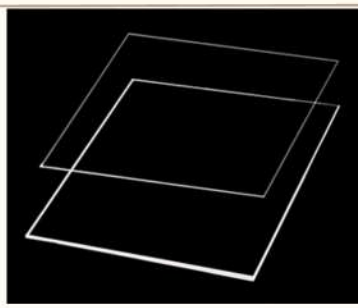
Model	L*W (mm)	Thickness (mm)	SiO2's Purity (%)
AT-SY-P1037	2*2	0.5	99.99
AT-SY-P1038	5*5	0.5	99.99
AT-SY-P1039	5*5	1	99.99
AT-SY-P1040	8*8	2	99.99
AT-SY-P1041	10*10	1	99.99
AT-SY-P1042	20*20	1	99.99
AT-SY-P1043	25*25	1	99.99
AT-SY-P1044	30*30	1	99.99
AT-SY-P1045	40*40	1	99.99



SIZE CHART

Quartz Glass Square Plate

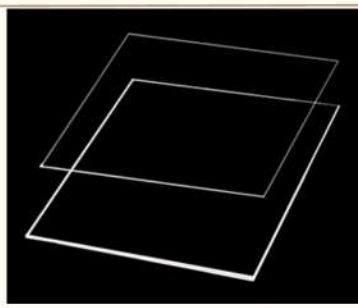
Model	L*W (mm)	Thickness (mm)	SiO2's Purity (%)
AT-SY-P1046	50*50	0.5	99.99
AT-SY-P1047	50*50	1	99.99
AT-SY-P1048	50*50	2	99.99
AT-SY-P1049	50*50	4	99.99
AT-SY-P1050	50*50	5	99.99
AT-SY-P1051	60*60	1	99.99
AT-SY-P1052	60*60	1	99.99
AT-SY-P1053	60*60	3	99.99
AT-SY-P1054	60*60	4	99.99



SIZE CHART

Quartz Glass Square Plate

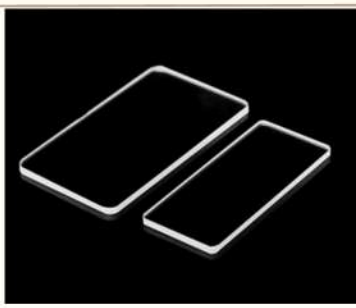
Model	L*W（mm)	Thickness（mm)	SiO2's Purity（%)
AT-SY-P1055	60*60	5	99.99
AT-SY-P1056	75*25	1	99.99
AT-SY-P1057	75*25	2	99.99
AT-SY-P1058	100*100	1	99.99
AT-SY-P1059	100*100	2	99.99
AT-SY-P1060	100*100	3	99.99
AT-SY-P1061	100*100	4	99.99



SIZE CHART

Quartz Glass Square Plate

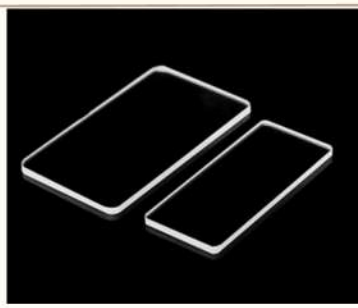
Model	L*W (mm)	Thickness (mm)	SiO2's Purity (%)
AT-SY-P1062	100*100	5	99.99
AT-SY-P1063	100*100	6	99.99
AT-SY-P1064	100*100	10	99.99
AT-SY-P1065	100*100	8	99.99
AT-SY-P1066	200*200	3	99.99
AT-SY-P1067	300*300	5	99.99
AT-SY-P1068	700*700mm	0.5-100mm	99.99



SIZE CHART

Quartz Plate Rectangular

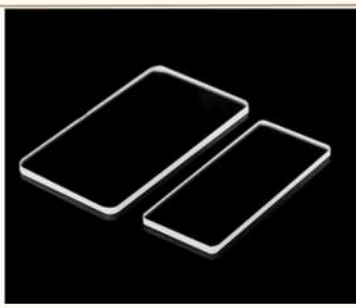
Model	L（mm)	W（mm)	Thickness (mm)	SiO2's Purity (%)
AT-SY-P1069	5	2	0.5	99.99
AT-SY-P1070	8	4	0.5	99.99
AT-SY-P1071	10	4	1	99.99
AT-SY-P1072	12	5	1	99.99
AT-SY-P1073	20	4	1	99.99
AT-SY-P1074	30	8	2	99.99
AT-SY-P1075	50	20	1	99.99



SIZE CHART

Quartz Plate Rectangular

Model	L (mm)	W (mm)	Thickness (mm)	SiO2's Purity (%)
AT-SY-P1076	60	40	5	99.99
AT-SY-P1077	80	50	2	99.99
AT-SY-P1078	100	60	5	99.99
AT-SY-P1079	100	40	0.5	99.99
AT-SY-P1080	120	70	0.8	99.99
AT-SY-P1081	120	70	1	99.99
AT-SY-P1082	120	100	2	99.99
AT-SY-P1083	150	60	1	99.99



SIZE CHART

Quartz Plate Rectangular

Model	L (mm)	W (mm)	Thickness (mm)	SiO2's Purity (%)
AT-SY-P1084	200	120	5	99.99
AT-SY-P1085	200	100	5	99.99
AT-SY-P1086	300	100	2	99.99
AT-SY-P1087	5-700mm	2-550mm	0.5-80mm	99.99

QUALITY ASSURANCE

All TOQUARTZ® products undergo rigorous quality control testing to ensure consistent performance and dimensional accuracy. Certificates of conformity are provided with all orders.

Contact Information

Email: info@toquartz.com
Website: www.toquartz.com

TOQUARTZ® - Precision Quartz Solutions for Industry and Research

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Quartz Plate & Disc

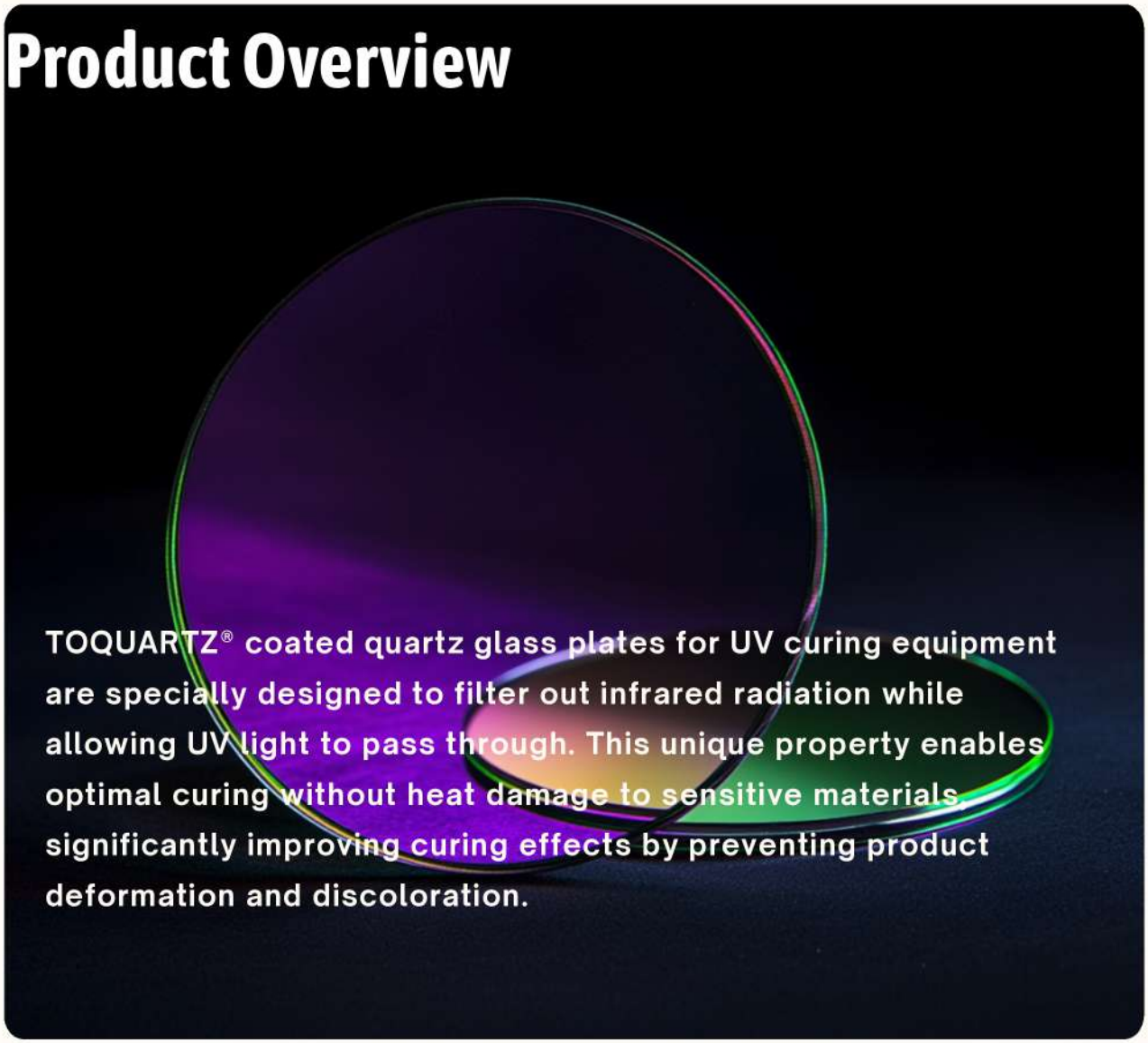
Integrated Engineering & Agile Production

for Demanded Specifications

TOQUARTZ®
COATED QUARTZ GLASS PLATES

For UV Curing Equipment

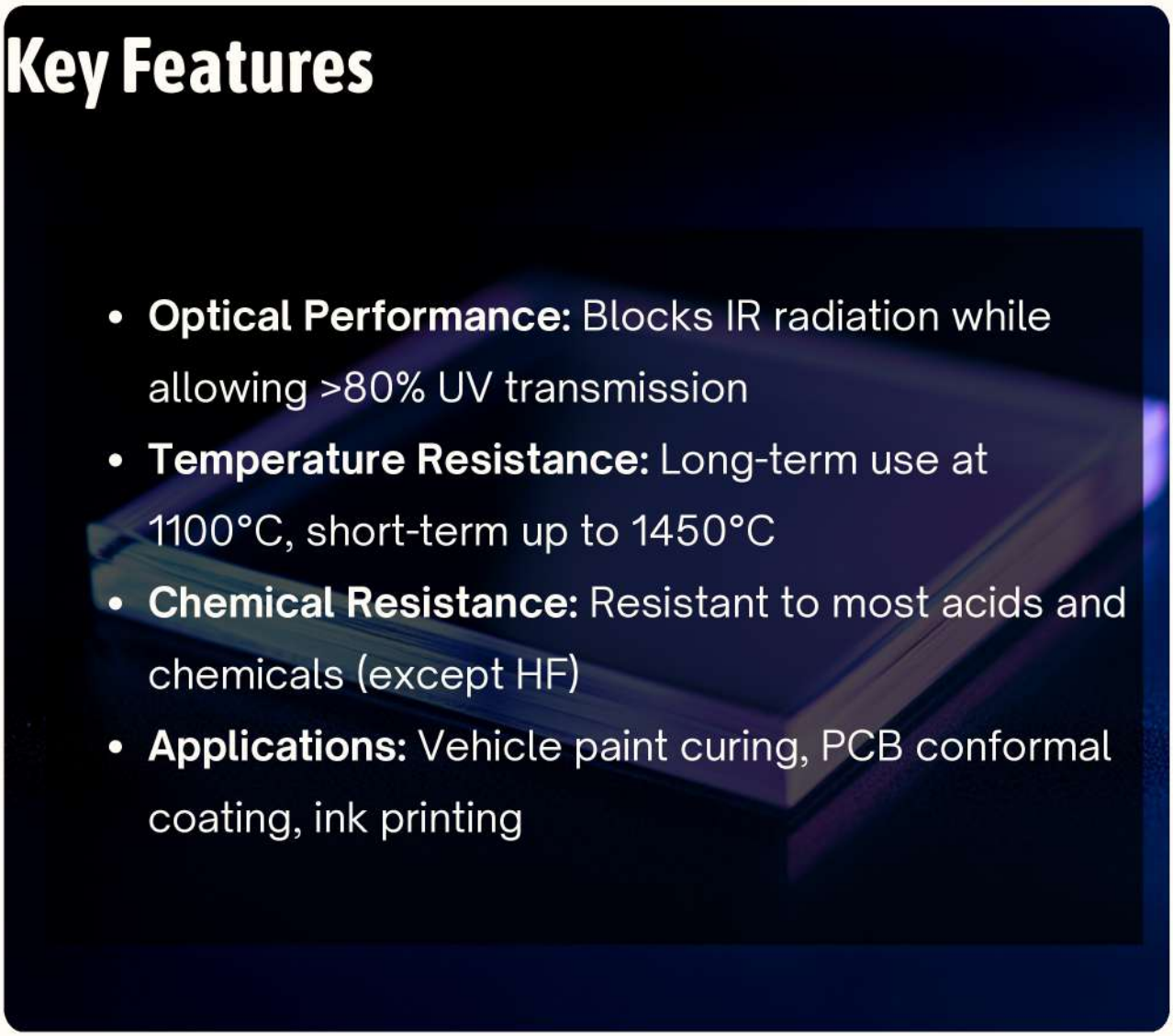
Product Overview



TOQUARTZ® coated quartz glass plates for UV curing equipment are specially designed to filter out infrared radiation while allowing UV light to pass through. This unique property enables optimal curing without heat damage to sensitive materials, significantly improving curing effects by preventing product deformation and discoloration.

COATED QUARTZ GLASS PLATES

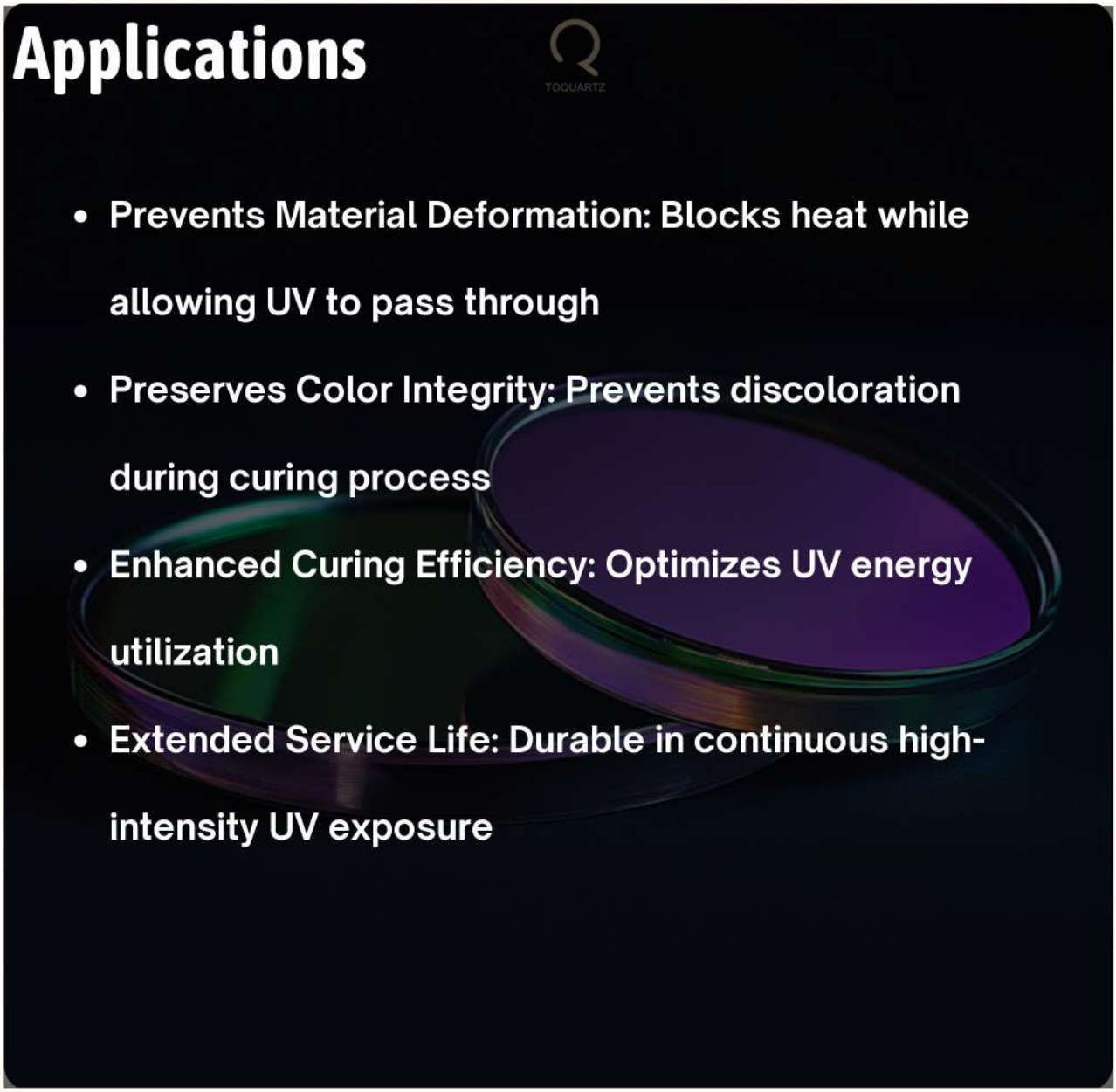
Key Features



- **Optical Performance:** Blocks IR radiation while allowing >80% UV transmission
- **Temperature Resistance:** Long-term use at 1100°C, short-term up to 1450°C
- **Chemical Resistance:** Resistant to most acids and chemicals (except HF)
- **Applications:** Vehicle paint curing, PCB conformal coating, ink printing

COATED QUARTZ GLASS PLATES

Applications



- Prevents Material Deformation: Blocks heat while allowing UV to pass through
- Preserves Color Integrity: Prevents discoloration during curing process
- Enhanced Curing Efficiency: Optimizes UV energy utilization
- Extended Service Life: Durable in continuous high-intensity UV exposure

MATERIAL GRADE SELECTION

JGS-1 Far UV Grade

High-OH content (2000 PPM) with excellent UV transmission, especially at 185nm (90% transmission)

JGS-2 UV Grade

Medium-OH content (100-200 PPM) suitable for applications above 220nm

JGS-3 IR Grade

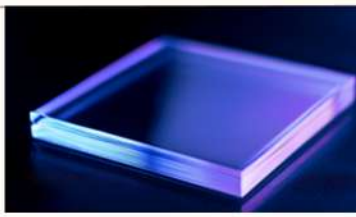
Low-OH content with superior IR transmission (>85%) for applications requiring IR management

CUSTOMIZATION OPTIONS

- **Custom Dimensions**: Round plates (diameter x thickness), Square/rectangular plates (length x width x thickness)
- **Edge Treatment**: R-corners, C-corners, protective corners, or straight edges
- **Material Grade**: JGS-1, JGS-2, or JGS-3 based on application requirements

TECHNICAL SPECIFICATIONS

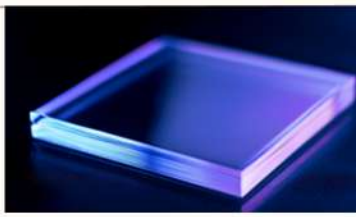
Parameter	Standard Specification	Custom Range
Material	High-purity fused silica	JGS1, JGS2, JGS3 grades available
Dimensions - Round	Ø8-500mm, thickness 1-100mm	Custom sizes available upon request
Dimensions - Square/Rectangular	Square: 10×10mm to 750×750mm, thickness 1-100mm Rectangular: L: 10-750mm; W: 10-550mm, thickness 3-100mm	Custom sizes available upon request
Edge Treatment	Straight edges (standard)	R-corner, C-corner, protective corner
UV Transmission	>80% (varies by wavelength)	Optimized for specific UV wavelengths
IR Blocking	Effective IR radiation reduction	Enhanced IR blocking available
Visible Light Transmission	>93%	Customizable based on requirements
Temperature Resistance	Long-term: 1100°C, Short-term: 1450°C	Application-specific optimization
Chemical Resistance	Resistant to most acids and chemicals	Not resistant to hydrofluoric acid



SIZE CHART

Square Coated Quartz Glass Sheet

Model Number	Dimensions (mm)	Thickness (mm)	Optical Properties
AT-SY-P2001	10×10	1	70% UV transmission, 70% IR reflection
AT-SY-P2002	25×25	1	
AT-SY-P2003	40×40	1	
AT-SY-P2004	60×60	2	
AT-SY-P2005	75*25	2	
AT-SY-P2006	75*25	2	
AT-SY-P2007	100×100	3	
AT-SY-P2008	120×120	2	



SIZE CHART

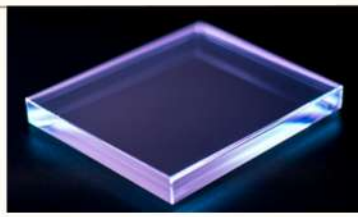
Square Coated Quartz Glass Sheet

Model Number	Dimensions (mm)	Thickness (mm)	Optical Properties
AT-SY-P2009	120×120	3	70% UV transmission, 70% IR reflection
AT-SY-P2010	150×150	2	
AT-SY-P2011	150×150	3	
AT-SY-P2012	180×180	2	
AT-SY-P2013	180×180	3	
AT-SY-P2014	250×250	3	
AT-SY-P2015	10-750 (Custom)	1-100	

SIZE CHART

Round Coated Quartz Glass Disc

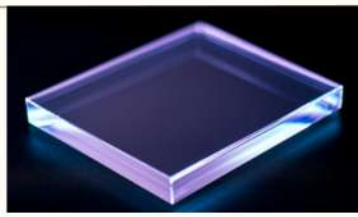
Model Number	Diameter (mm)	Thickness (mm)	Optical Properties
AT-SY-P2026	8	1	70% UV transmission, 70% IR reflection
AT-SY-P2027	10	1	
AT-SY-P2028	15	1.5	
AT-SY-P2029	30	1	
AT-SY-P2030	50	2	
AT-SY-P2031	100	5	
AT-SY-P2032	200	10	
AT-SY-P2033	8-500 (Custom)	1-100	



SIZE CHART

Rectangular Coated Quartz Glass Plate

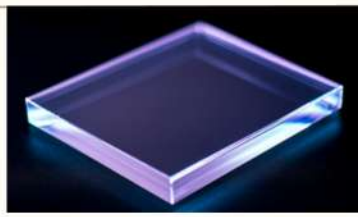
Model Number	Dimensions (mm)	Thickness (mm)	Optical Properties
AT-SY-P2016	135×320	3	70% UV transmission, 70% IR reflection
AT-SY-P2017	150×100	3	
AT-SY-P2018	150×200	3	
AT-SY-P2019	195×73.8	2	
AT-SY-P2020	215×160	4	



SIZE CHART

Rectangular Coated Quartz Glass Plate

Model Number	Dimensions (mm)	Thickness (mm)	Optical Properties
AT-SY-P2021	220×130	3	70% UV transmission, 70% IR reflection
AT-SY-P2022	280×150	3	
AT-SY-P2023	300×100	3	
AT-SY-P2024	300×150	3	
AT-SY-P2025	L: 10-750; W: 10-550(Custom)	3-100	



SIZE CHART

Special Shape Coated Quartz Glass Plates

Model Number	Dimensions (mm)	Thickness (mm)	Curvature	Optical Properties
AT-SY-P2034	121×62	2.5	68.18°	70% UV transmission, 70% IR reflection

TOQUARTZ® coated quartz glass plates for UV curing equipment are available in a wide range of dimensions and specifications to meet your exact requirements. We offer both standard sizes with quick delivery and custom dimensions for specialized applications.

QUALITY ASSURANCE

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TOQUARTZ®
QUARTZ PETRI DISH

High-Purity Quartz Petri Dish

Product Overview

TOQUARTZ® quartz petri dishes are manufactured from ultra-high purity fused silica (99.99% SiO_2), offering exceptional performance characteristics for demanding laboratory and research applications.

These premium laboratory vessels deliver superior thermal stability, chemical resistance, and optical clarity that standard glass or plastic alternatives cannot match.

QUARTZ PETRI DISH

Key Features

- **High Temperature Resistance:**
Softening point of 1730°C with long-term use capability at 1200°C

- **Superior Chemical Resistance:**
Inert to virtually all chemicals except hydrofluoric acid

- **Excellent Thermal Stability:**
Extremely low thermal expansion coefficient allows for rapid temperature changes

- **Superior Optical Properties:**
Exceptional transparency across UV to IR spectrum (visible light >93%, UV >80%)

- **Excellent Electrical Insulation:**
Electrical resistance 10,000x greater than ordinary glass

- **Ultra-High Purity:**
SiO_2 content exceeding 99.99% for minimal contamination

CLEAR QUARTZ GLASS PLATE

Applications

- **Microbiology & Cell Culture:**

High-temperature protocols, sterile environments, autoclave compatibility

- **Chemical Analysis:**

Corrosive chemical handling, trace element analysis, high-temperature reactions

- **Optical & Spectroscopic Research:**

UV fluorescence studies, spectroscopic analysis, advanced imaging

- **Materials Science:**

High-temperature sample preparation, controlled atmosphere reactions

- **Pharmaceutical Research:**

Drug screening, crystallization studies, stability testing

MATERIAL PROPERTIES

- SiO_2 Content: ≥ 99.99%
- Maximum Working Temperature: 1200°C (long-term), 1450°C (short-term)
- Thermal Expansion Coefficient: 5.5×10^{-7}/K
- Visible Light Transmission: ≥ 93%
- UV Transmission: ≥ 80%
- Surface Roughness: Ra ≤ 0.2 μm

CUSTOMIZATION OPTIONS

- **Custom Dimensions:** Available from 25mm to 300mm outer diameter with precision tolerances
- **Special Features:** Grid markings, positioning notches, alignment markers, specialized edge treatments
- **Surface Treatments:** Fire polishing, precision grinding, surface etching for specific properties
- **Matching Lids:** Available for all sizes with optional specialized features

SIZE CHART

Model	Bottom		Lid		Wall Thickness(mm)	Si2O's Purity (%)
	Outer Dia. (mm)	Height (mm)	Outer Dia. (mm)	Height (mm)		
AT-SYM-001	25	21	25	19	2	99.99%
AT-SYM-002	30	21	35	19	2	99.99%
AT-SYM-003	35	21	40	19	2	99.99%
AT-SYM-004	40	21	45	19	2	99.99%
AT-SYM-005	45	21	50	19	2	99.99%

SIZE CHART

Model	Bottom		Lid		Wall Thickness(mm)	Si2O's Purity (%)
	Outer Dia. (mm)	Height (mm)	Outer Dia. (mm)	Height (mm)		
AT-SYM-006	50	21	55	19	2	99.99%
AT-SYM-007	55	21	60	19	2	99.99%
AT-SYM-008	60	21	65	19	2	99.99%
AT-SYM-009	65	21	70	19	2	99.99%
AT-SYM-010	70	21	75	19	2	99.99%

SIZE CHART

Model	Bottom		Lid		Wall Thickness(mm)	Si2O's Purity (%)
	Outer Dia. (mm)	Height (mm)	Outer Dia. (mm)	Height (mm)		
AT-SYM-011	75	21	82	19	2	99.99%
AT-SYM-012	80	21	87	19	2	99.99%
AT-SYM-013	85	21	92	19	2	99.99%
AT-SYM-014	90	21	98	19	2	99.99%
AT-SYM-015	95	21	103	19	2	99.99%

SIZE CHART

Model	Bottom		Lid		Wall Thickness(mm)	Si2O's Purity (%)
	Outer Dia. (mm)	Height (mm)	Outer Dia. (mm)	Height (mm)		
AT-SYM-016	100	21	108	19	2	99.99%
AT-SYM-017	110	21	118	19	2	99.99%
AT-SYM-018	115	21	123	19	2	99.99%
AT-SYM-019	120	21	130	19	3	99.99%
AT-SYM-020	125	21	135	19	3	99.99%

SIZE CHART

Model	Bottom		Lid		Wall Thickness(mm)	Si2O's Purity (%)
	Outer Dia. (mm)	Height (mm)	Outer Dia. (mm)	Height (mm)		
AT-SYM-021	130	21	140	19	3	99.99%
AT-SYM-022	135	21	145	19	3	99.99%
AT-SYM-023	140	21	150	19	3	99.99%
AT-SYM-024	150	21	160	19	3	99.99%
AT-SYM-025	160	21	170	19	3	99.99%

SIZE CHART

Model	Bottom		Lid		Wall Thickness(mm)	Si2O's Purity (%)
	Outer Dia. (mm)	Height (mm)	Outer Dia. (mm)	Height (mm)		
AT-SYM-026	180	21	195	19	4	99.99%
AT-SYM-027	190	21	205	19	4	99.99%
AT-SYM-028	200	21	215	19	4	99.99%
AT-SYM-029	250	21	265	19	4	99.99%
AT-SYM-030	300	21	315	19	4	99.99%

QUALITY ASSURANCE

All TOQUARTZ® products undergo rigorous quality control including:

- Dimensional verification to ensure ±0.1mm tolerance
- Optical inspection for material defects and surface quality
- Material composition verification
- Thermal stability testing

Contact Information

Email: info@toquartz.com
Website: www.toquartz.com

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Quartz Plate & Disc

Integrated Engineering & Agile Production

for Demanded Specifications

TOQUARTZ®
QUARTZ HEATING ELEMENT

QUARTZ HEATING ELEMENT

Key Features

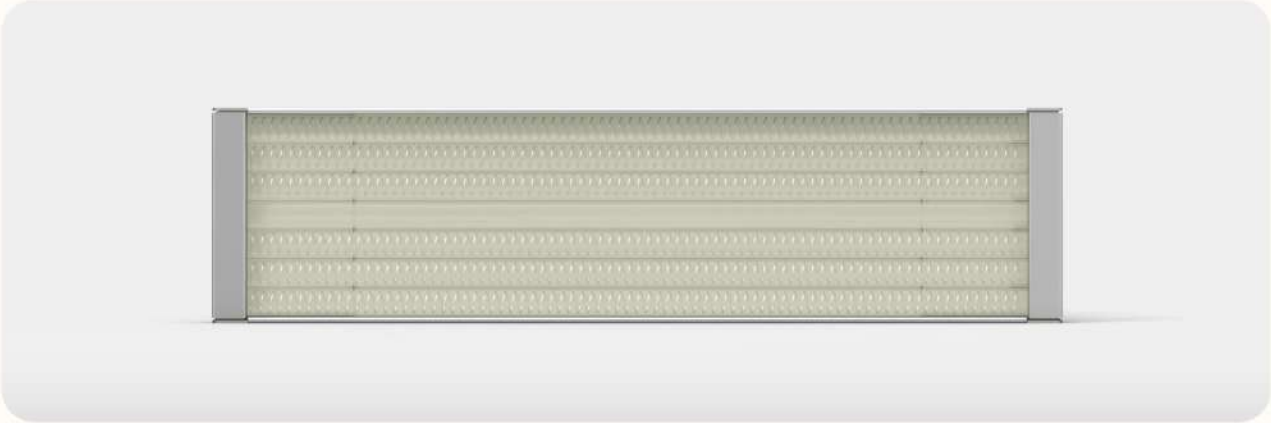
- High Temperature Resistance: Withstands extreme temperatures up to 1600°C
- Superior Corrosion Resistance: Highly resistant to acids, alkalis, molten salts, and fluorinated gases
- Rapid Thermal Response: Reaches operating temperature within 1 minute
- Excellent Thermal Conductivity: 120-160 W/m.K for efficient heat distribution
- Exceptional Electrical Insulation: Dielectric strength ⩾40kV/mm
- Customizable Dimensions: Available with precision tolerances (±0.2mm)
- Long Service Life: 10,000+ hours under normal operating conditions

QUARTZ HEATING ELEMENT

Applications

- Laboratory Equipment: Thermal analysis instruments, sample preparation systems
- Medical Devices: Sterilization equipment, incubators, sample processing
- Industrial Processing: Vacuum forming, paint drying, food processing
- Materials Processing: Plastic molding, adhesive curing, composite fabrication
- New Energy Technologies: Battery component drying, fuel cell manufacturing

TECHNICAL PARAMETERS



- Rated Voltage (V): 380, 220, 110, 55 (Standard: 220V)
- Heating Power (W): 300-1000 (Standard: 325, 400, 500, 650, 800, 1000)
- Thermal Response: Within 1 minute
- Installation Type: Plug-in, typically non-stainless steel imported material
- Surface Temperature (°C): Low: 100-460°C, Medium: 500-580°C, High: 700-1100°C
- Spectral Range (μm): 2.5-6
- Spectral Emissivity: 0.92 (at wavelengths 4-8μm; 11-25μm)
- Thermal Conductivity: 120-160 W/m.K
- Thermal Expansion Coefficient: 1.1×10^{-6}/K
- Material Purity: 99.99% SiO_2 (standard), 99.995% SiO_2 (high-purity option)

CUSTOMIZATION OPTIONS

TOQUARTZ offers extensive customization capabilities to meet your specific requirements:

- **Dimensional Customization:** Custom sizes, thicknesses, and shapes
- **Surface Treatment Options:** Specialized surface finishes including polishing, etching, or coating
- **Performance Optimization:** Tailored thermal properties and power handling capabilities
- **Custom Mounting Solutions:** Specialized mounting features and connection points
- **Electrical Configuration:** Custom voltage, power ratings, and connection types
- **Small Batch Production:** Flexible manufacturing for specialized equipment

SIZE CHART

Quartz Heating Element

Model	Dimensions (mm)	Power Range (W)	Wavelength Range (μm)	Average Weight (g)	Average Lifespan
AT-SY-J001	247x22.5x62.5	150 - 1000W	1.5 - 8μm	403g	10,000 hours
AT-SY-J002	123.5x22.5x62.5	150 - 500W	1.5 - 8μm	210g	10,000 hours
AT-SY-J003	247x62.5x59	150 - 1000W	1.5 - 8μm	403g	10,000 hours
AT-SY-J004	123.5x62.5x59	125 - 500W	1.5 - 8μm	268g	10,000 hours

QUALITY ASSURANCE

All TOQUARTZ® heating plates undergo rigorous quality control testing including:

- Dimensional verification
- Surface inspection
- Thermal performance testing
- Electrical safety testing
- Material composition analysis

Contact Information

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Website: www.toquartz.com

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TOQUARTZ®
TRANSPARENT QUARTZ LAB DISH

Premium laboratory-grade vessels

Product Overview

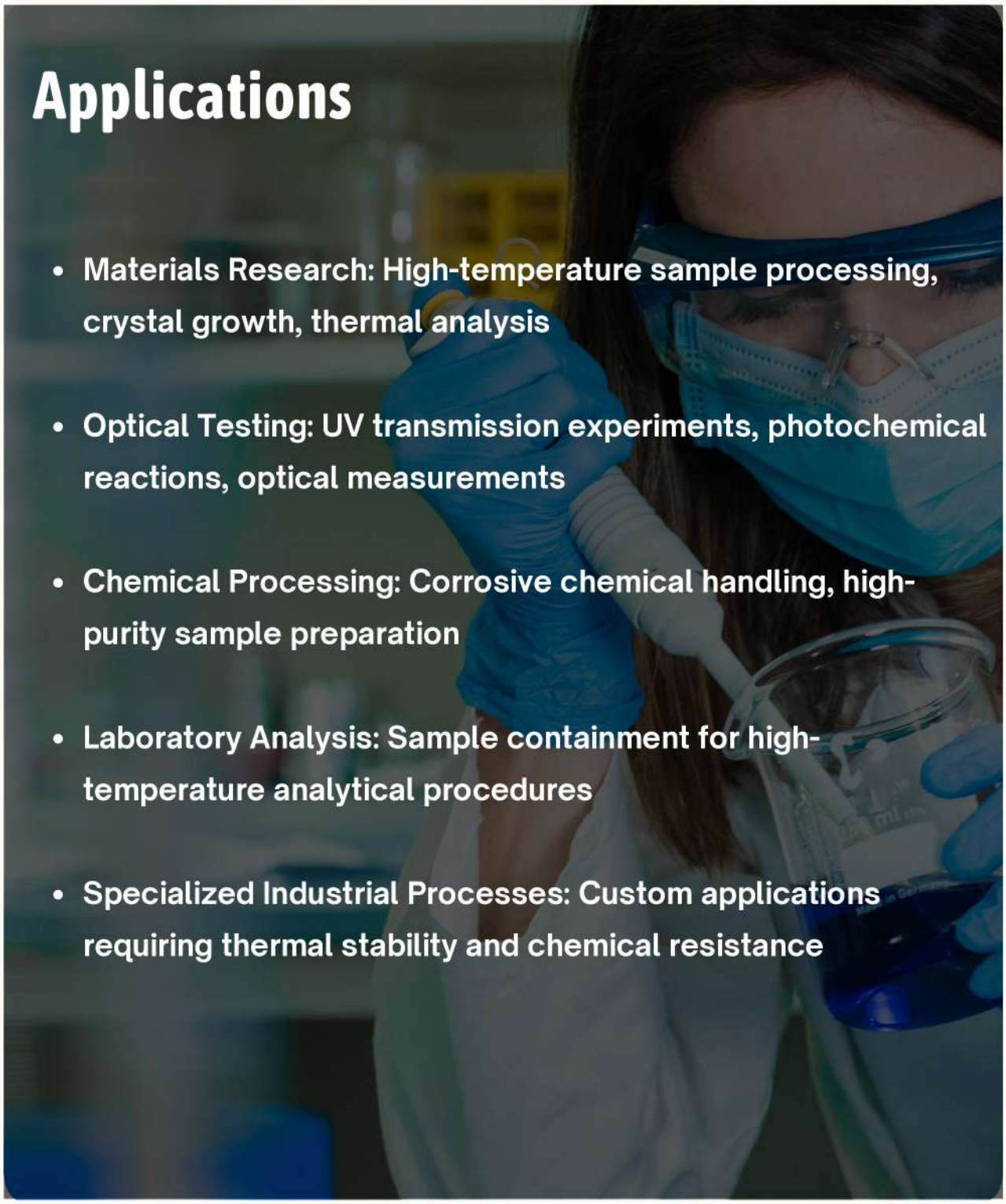
TOQUARTZ® Transparent quartz dishes are premium laboratory-grade vessels manufactured from high-purity fused silica (99.99-99.995% SiO_2). Engineered for exceptional performance in demanding research and industrial applications, our quartz dishes combine superior thermal stability, excellent chemical resistance, and outstanding optical properties.

TRANSPARENT QUARTZ LAB DISH

Key Features

- Exceptional Thermal Stability: Withstands temperatures up to 1600°C without deformation
- Superior Chemical Resistance: Resistant to most acids, alkalis, and solvents
- Excellent Optical Transparency: ⩾90% transmission in UV-Visible spectrum (200-2000nm)
- High Material Purity: 99.99-99.995% SiO_2 content for minimal contamination
- Precision Manufacturing: Tight dimensional tolerances (±0.1mm)
- Superior Electrical Insulation: Excellent dielectric properties
- Low Thermal Expansion: Excellent thermal shock resistance

TRANSPARENT QUARTZ LAB DISH



Applications

- Materials Research: High-temperature sample processing, crystal growth, thermal analysis
- Optical Testing: UV transmission experiments, photochemical reactions, optical measurements
- Chemical Processing: Corrosive chemical handling, high-purity sample preparation
- Laboratory Analysis: Sample containment for high-temperature analytical procedures
- Specialized Industrial Processes: Custom applications requiring thermal stability and chemical resistance

TECHNICAL SPECIFICATIONS

- Material: High-purity fused silica (SiO_2)
- Purity: 99.99-99.995%
- Temperature Resistance: Up to 1600°C (short-term)
- Continuous Operating Temperature: 1100-1200°C
- Thermal Expansion Coefficient: 5.5 x 10^-7/°C
- Optical Transmission: ≥90% (UV-Visible range)
- Surface Finish: Ra <0.8μm
- Dimensional Tolerance: ±0.1mm standard (±0.05mm available for certain dimensions)
- Chemical Resistance: Resistant to most acids, alkalis, and solvents (except HF and hot phosphoric acid)

CUSTOMIZATION OPTIONS

TOQUARTZ offers extensive customization capabilities to meet your specific requirements:

- **Specialized Dimensions & Geometries:** Custom diameters, depths, wall thicknesses, and shapes
- **Surface Modifications:** Fire-polishing, mechanical polishing, or sandblasting
- **Integrated Features:** Pouring spouts, handling tabs, bottom perforations, connection points
- **Material Optimization:** Higher purity grades or specialized doping for specific properties

SIZE CHART

QUARTZ GLASS ROUND LABORATORY DISH

Model	Outer Diameter(mm)	Height(mm)	Wall Thickness(mm)	Si2O's Purity (%)
AT-QTZ-D001	8	4	1-1.8	99.95-99.99
AT-QTZ-D002	10	5.5	1.5-2.5	99.95-99.99
AT-QTZ-D003	15	7	2-3	99.95-99.99
AT-QTZ-D004	20	8	2-4.5	99.95-99.99
AT-QTZ-D005	30	6	2.5	99.95-99.99

SIZE CHART

QUARTZ GLASS ROUND LABORATORY DISH

Model	Outer Diameter(mm)	Height(mm)	Wall Thickness(mm)	Si2O's Purity (%)
AT-QTZ-D006	50	15	3-5	99.95-99.99
AT-QTZ-D007	85	18	5-7	99.95-99.99
AT-QTZ-D008	100	20	5-7	99.95-99.99
AT-QTZ-D009	120	25	7-10	99.95-99.99
AT-QTZ-D010	180	30	7-10	99.95-99.99
AT-QTZ-D011	260	35	7-10	99.95-99.99

SIZE CHART

QUARTZ GLASS ROUND LABORATORY DISH

Model	L(mm)	W(mm)	H(mm)	Wall Thickness(mm)	Si2O's Purity (%)
AT-QTZ-F001	30	20	5	2	99.95-99.99
AT-QTZ-F002	40	40	8	3	99.95-99.99
AT-QTZ-F003	45	30	10	3.5	99.95-99.99
AT-QTZ-F004	50	50	12	4	99.95-99.99
AT-QTZ-F005	70	70	15	4.5	99.95-99.99
AT-QTZ-F006	100	100	20	4.5	99.95-99.99

SIZE CHART

QUARTZ GLASS ROUND LABORATORY DISH

Model	L(mm)	W(mm)	H(mm)	Wall Thickness(mm)	Si2O's Purity (%)
AT-QTZ-F007	150	150	22	5	99.95-99.99
AT-QTZ-F008	200	100	25	5	99.95-99.99
AT-QTZ-F009	200	200	13	5	99.95-99.99
AT-QTZ-F010	300	300	18	6	99.95-99.99
AT-QTZ-F011	350	200	25	6	99.95-99.99
AT-QTZ-F012	400	400	30	7	99.95-99.99

QUALITY ASSURANCE

Every TOQUARTZ transparent quartz dish undergoes rigorous quality control procedures:

- **Material Verification**: Composition and purity testing
- **Dimensional Inspection**: Precision measurement of all critical dimensions
- **Optical Quality Assessment**: Transmission and clarity verification
- **Surface Finish Evaluation**: Surface roughness measurement
- **Visual Inspection**: 100% inspection for defects or imperfections

Contact Information

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Website: www.toquartz.com

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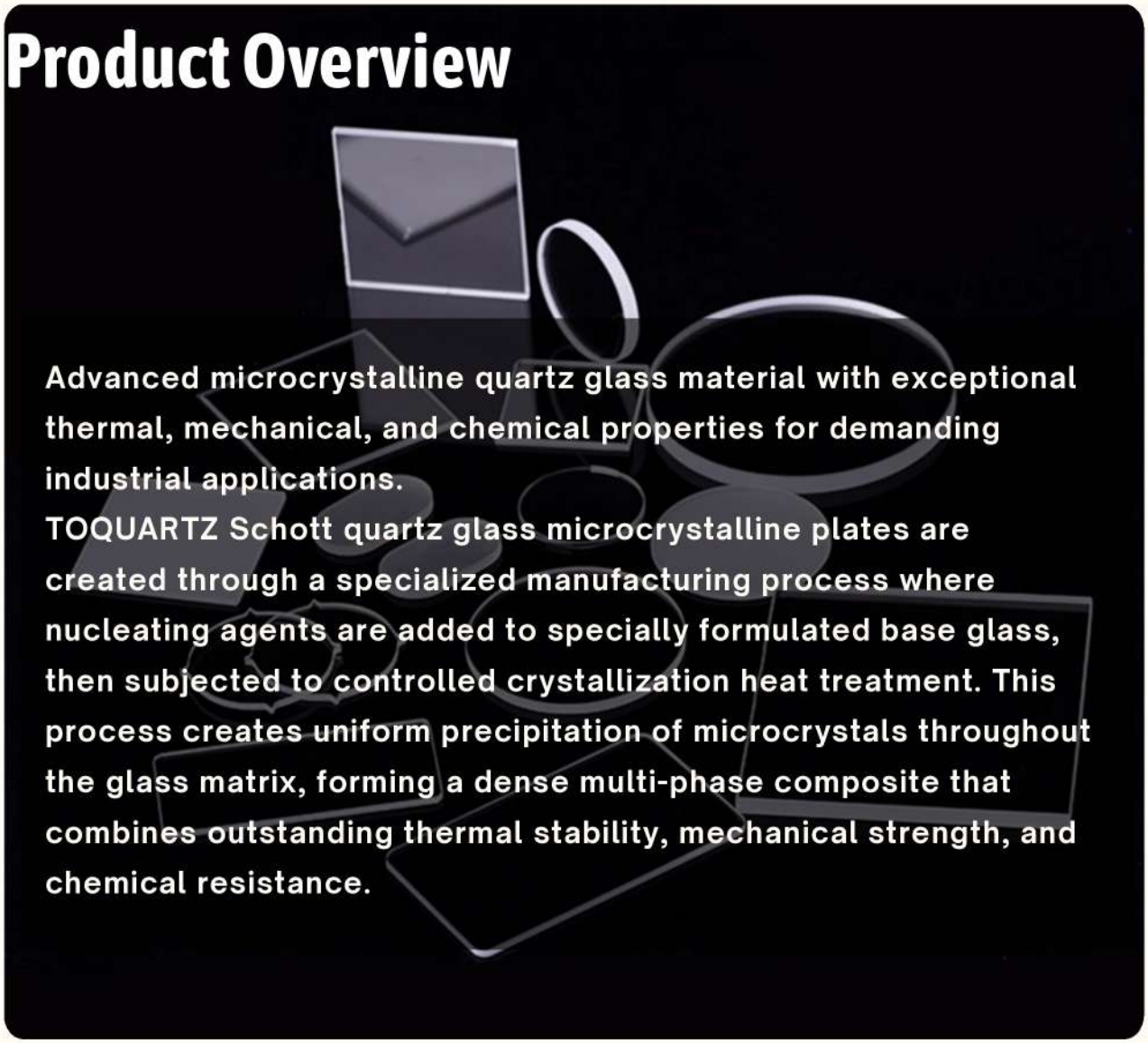
TOQUARTZ®
SCHOTT QUARTZ GLASS
MICROCRYSTALLINE PLATE

Product Overview



Advanced microcrystalline quartz glass material with exceptional thermal, mechanical, and chemical properties for demanding industrial applications.

TOQUARTZ Schott quartz glass microcrystalline plates are created through a specialized manufacturing process where nucleating agents are added to specially formulated base glass, then subjected to controlled crystallization heat treatment. This process creates uniform precipitation of microcrystals throughout the glass matrix, forming a dense multi-phase composite that combines outstanding thermal stability, mechanical strength, and chemical resistance.

SCHOTT QUARTZ GLASS MICROCRYSTALLINE PLATE

Key Features

- Superior Thermal Properties: Operating temperature up to 1100°C with low thermal expansion coefficient (72×10^{-7}/°C)
- Exceptional Mechanical Strength: Flexural strength >108 MPa, compressive strength >508 MPa
- Excellent Chemical Stability: Resistance to acids, alkalis, and salts
- Superior Electrical Performance: Volume resistivity 1.08×10^{16} Ω·cm at 25°C
- Precision Manufacturing: Dimensional tolerance ±0.2mm, surface roughness Ra≤0.01μm

SCHOTT QUARTZ GLASS MICROCRYSTALLINE PLATE

Applications

- Laboratory equipment (heating platforms, microwave digestion systems)
- Industrial heating systems (infrared heaters, industrial ovens, furnaces)
- Optical instruments (optical platforms, laser systems)
- High-temperature viewing windows
- Thermal processing equipment

MATERIAL PROPERTIES

Property	Value	Notes
Density	2.6 g/cm³	Archimedes method
Density	2.6 g/cm³	Archimedes method
Apparent porosity	0.07%	
Water absorption	0	
Hardness	4-5	Mohs scale
Color	White	
Thermal expansion coefficient	72×10^{-7}/°C	-50°C to 200°C average
Thermal conductivity	1.71 W/m.K	at 25°C
Long-term use temperature	800°C	
Flexural strength	>108 MPa	

MATERIAL PROPERTIES

Property	Value	Notes
Compressive strength	>508 MPa	
Impact resistance	>2.56 KJ/m^2	
Elastic modulus	65 GPa	
Dielectric loss	1-4×10^{-3}	Room temperature
Dielectric constant	6-7	Room temperature
Breakdown strength	>40 KV/mm	Sample thickness 1mm
Volume resistivity	1.08×10^{16} Ω·cm	at 25°C
	1.5×10^{12} Ω·cm	at 200°C
	1.1×10^{9} Ω·cm	at 500°C

SIZE CHART

SCHOTT QUARTZ GLASS MICROCRYSTALLINE PLATES

Model	Dimensions (L×W mm)	Thickness (mm)
AT-WJ-B1001	100×100	3
AT-WJ-B1002	300×300	4.0-8.0
AT-WJ-B1003	330×330	4.0-8.0
AT-WJ-B1004	400×400	4.0-8.0
AT-WJ-B1005	500×500	4.0-8.0
AT-WJ-B1006	720×500	4.0-8.0
AT-WJ-B1007	1200×800	4.0-8.0
AT-WJ-B1008	1950×1100	4.0-8.0

PROCESSING CAPABILITIES

- Edge processing: Rough grinding/polishing/step-shaped/custom profiling
- Corner treatment: Cut corners/round corners (tolerance: ±0.3mm)
- Drilling/cutting: Square/round/oval/custom shapes
- Linear precision: ±0.15mm, Positioning accuracy: ±0.25mm
- Printing: Silk screening available in 10 colors; custom colors available
- Dimensional tolerance: ±0.2mm for custom sizes
- Surface roughness: Ra≤0.01μm
- Available colors: Light brown, milky white, transparent, black

CUSTOMIZATION OPTIONS

TOQUARTZ offers comprehensive customization services for Schott quartz glass microcrystalline plates to meet your specific application requirements:

- **Dimensional Customization:** Custom lengths and widths up to 1950×1100mm, thickness from 3mm to 8mm
- **Surface Treatments:** Polished finish, ground finish, sand-blasted surface, custom silk screening
- **Edge & Corner Treatments:** Beveled edges, rounded corners, step edges, chamfered edges
- **Drilling & Machining:** Precision hole drilling, complex cutouts, threaded inserts, multi-level machining

QUALITY ASSURANCE

Each TOQUARTZ Schott quartz glass microcrystalline plate undergoes rigorous quality control testing to ensure consistent performance and reliability:

- Dimensional inspection
- Surface quality assessment
- Material property verification
- Visual inspection

Contact Information

Email: info@toquartz.com
Website: www.toquartz.com

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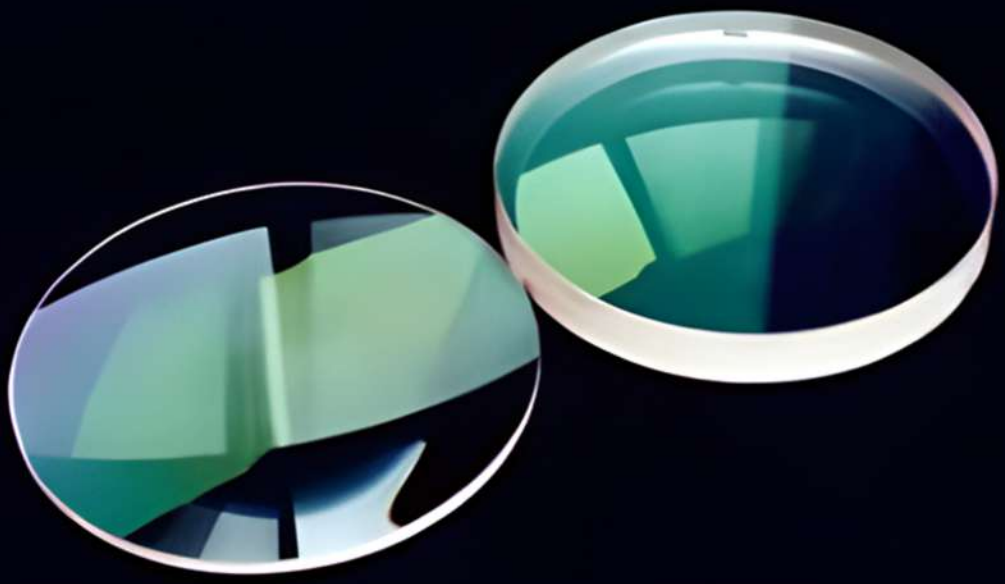
TOQUARTZ®
QUARTZ SIGHT GLASS

High Temperature Quartz Sight Glass Solutions for Industrial Applications

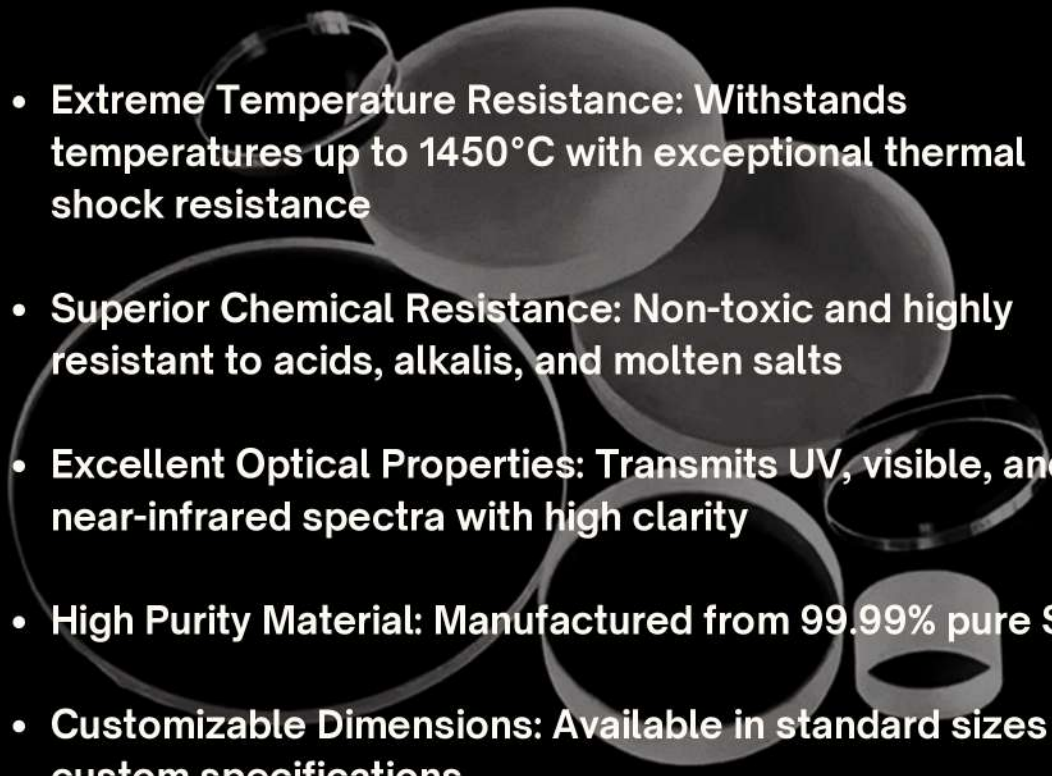
Product Overview



TOQUARTZ® quartz sight glass is manufactured from high-purity quartz (99.99% SiO_2), designed for extreme temperature environments up to 1450°C with excellent thermal shock resistance. These viewing windows provide superior optical clarity for monitoring processes in industrial furnaces, vacuum chambers, and chemical reactors.

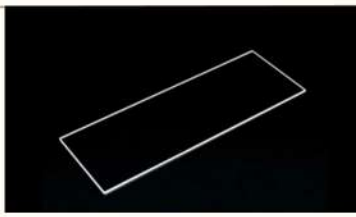
QUARTZ SIGHT GLASS

Key Features



- Extreme Temperature Resistance: Withstands temperatures up to 1450°C with exceptional thermal shock resistance
- Superior Chemical Resistance: Non-toxic and highly resistant to acids, alkalis, and molten salts
- Excellent Optical Properties: Transmits UV, visible, and near-infrared spectra with high clarity
- High Purity Material: Manufactured from 99.99% pure SiO_2
- Customizable Dimensions: Available in standard sizes or custom specifications

QUARTZ SIGHT GLASS



SIZE CHART

RECTANGULAR QUARTZ SIGHT GLASS

Model	Length (mm)	Width (mm)	Thickness (mm)	SiO_2 (%)
AT-SY-SJ024	20	10	2	99.99
AT-SY-SJ025	50	30	5	99.99
AT-SY-SJ026	80	50	5	99.99
AT-SY-SJ027	80	50	8	99.99
AT-SY-SJ028	80	50	10	99.99
AT-SY-SJ029	100	80	5	99.99
AT-SY-SJ030	150	100	5	99.99
AT-SY-SJ031	200	120	10	99.99
AT-SY-SJ032	500	400	1-30	99.99

SIZE CHART

ROUND QUARTZ SIGHT GLASS

Model	Diameter (mm)	Thickness (mm)	SiO_2 (%)
AT-SY-SJ001	10	2	99.99
AT-SY-SJ002	35	5	99.99
AT-SY-SJ003	50	5	99.99
AT-SY-SJ004	50	8	99.99
AT-SY-SJ005	55	5	99.99
AT-SY-SJ006	55	10	99.99
AT-SY-SJ007	60	5	99.99
AT-SY-SJ008	60	10	99.99
AT-SY-SJ009	65	5	99.99

SIZE CHART

ROUND QUARTZ SIGHT GLASS

Model	Diameter (mm)	Thickness (mm)	SiO_2 (%)
AT-SY-SJ010	70	5	99.99
AT-SY-SJ011	80	3	99.99
AT-SY-SJ012	80	8	99.99
AT-SY-SJ013	95	8	99.99
AT-SY-SJ014	100	8	99.99
AT-SY-SJ015	120	10	99.99
AT-SY-SJ016	150	8	99.99
AT-SY-SJ017	150	20	99.99
AT-SY-SJ018	175	20	99.99

SIZE CHART

ROUND QUARTZ SIGHT GLASS

Model	Diameter (mm)	Thickness (mm)	SiO_2 (%)
AT-SY-SJ019	200	20	99.99
AT-SY-SJ020	200	30	99.99
AT-SY-SJ021	250	20	99.99
AT-SY-SJ022	250	30	99.99
AT-SY-SJ023	300	1-30	99.99

PROCESSING CAPABILITIES

- JGS1 High-OH Content Quartz: Superior UV transmission (90% at 185μm), ideal for UV applications
- JGS2 Medium-OH Content Quartz: Suitable for 220-2500μm wavelength transmission
- JGS3 Low-OH Content Quartz: Superior infrared transmission (>85%), ideal for 260-3500μm applications

INSTALLATION & MAINTENANCE

Proper installation ensures optimal performance and extended service life. Key recommendations:

- Use appropriate gasket materials compatible with your application
- Apply uniform pressure when tightening retaining fixtures
- Avoid direct contact between quartz and metal surfaces
- Inspect regularly for signs of etching or cracking
- Clean using non-abrasive, solvent-free cleaners

CUSTOMIZATION SERVICES

TOQUARTZ® offers comprehensive customization services for quartz sight glass including:

- Custom dimensions and shapes
- Specialized surface treatments
- Material grade selection for optical requirements
- Edge treatments and mounting solutions

QUALITY ASSURANCE

All TOQUARTZ® products undergo rigorous quality control testing to ensure consistent performance and reliability. Material certificates and dimensional inspection reports available upon request.

Contact Information

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Website: www.toquartz.com

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TOQUARTZ®
QUARTZ 96 WELL PLATES

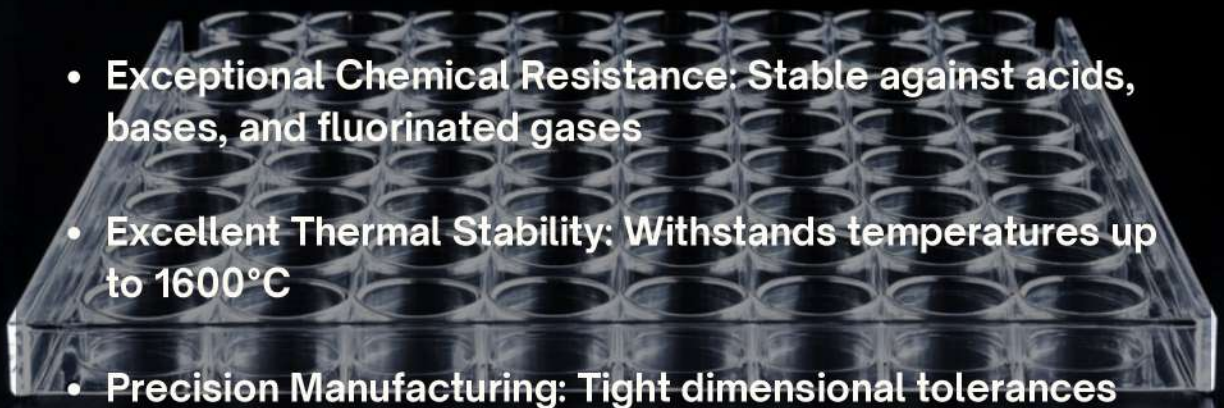
Product Overview

TOQUARTZ® quartz microplates are precision-engineered from high-purity quartz (⩾99.99% SiO_2) for demanding laboratory applications. Our plates offer exceptional optical transparency, superior chemical resistance, and outstanding thermal stability, making them ideal for sensitive detection methods and harsh experimental conditions.

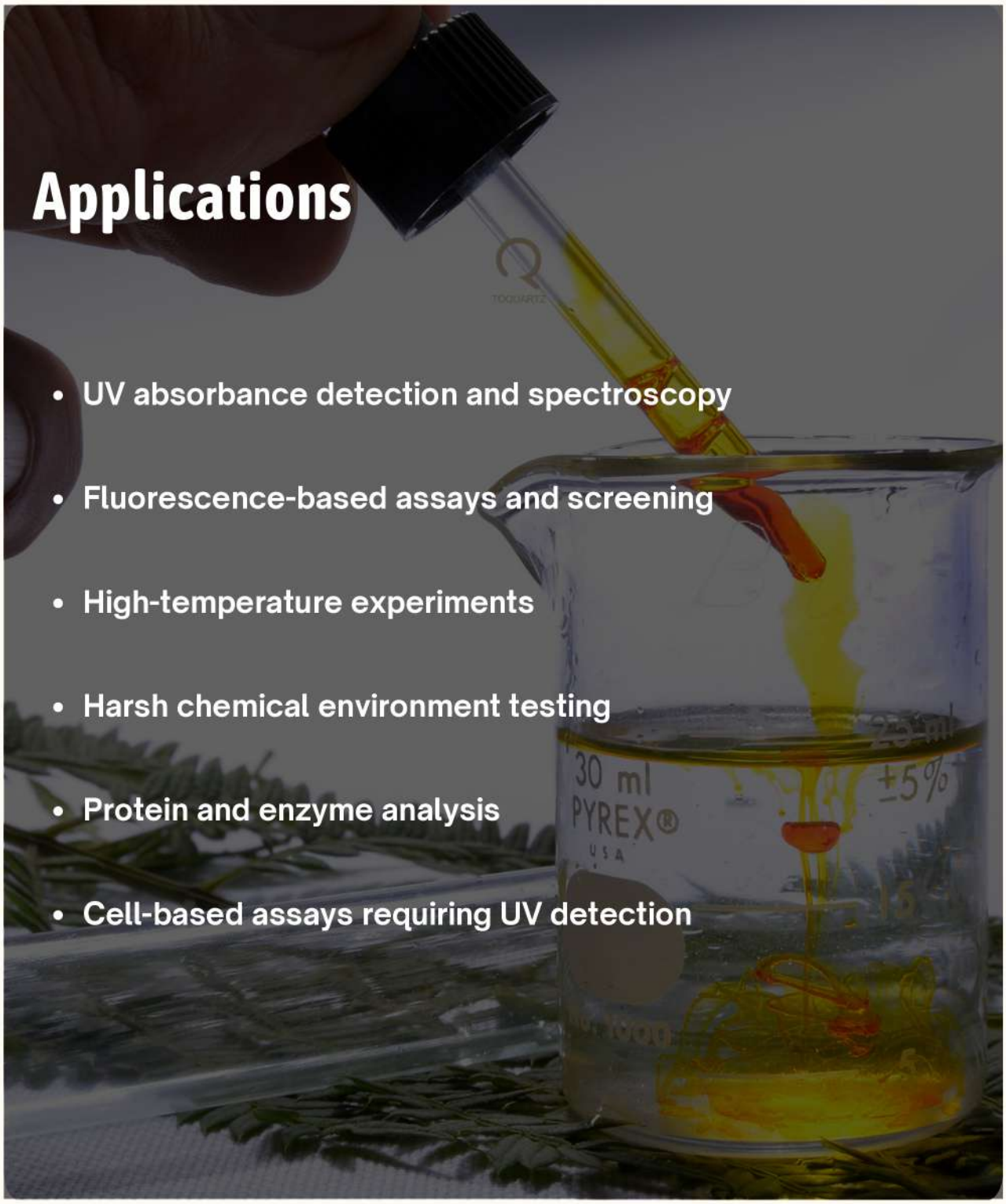
QUARTZ 96 WELL PLATES

Key Features

- Superior Optical Properties: ⩾90% transmission in the 200-800nm range
- High Material Purity: Manufactured from 99.99% SiO_2
- Exceptional Chemical Resistance: Stable against acids, bases, and fluorinated gases
- Excellent Thermal Stability: Withstands temperatures up to 1600°C
- Precision Manufacturing: Tight dimensional tolerances (±0.1mm)
- Low Auto-fluorescence: Minimal background interference for sensitive assays



QUARTZ 96 WELL PLATES



SIZE CHART

QUARTZ 96 WELL PLATES

Model	Well Configuration	TC Treatment
AT-SY-MB001	6	NO
AT-SY-MB002	8	NO
AT-SY-MB003	12	NO
AT-SY-MB004	24	NO
AT-SY-MB005	48	NO
AT-SY-MB006	96	NO
AT-SY-MB007	96(U-bottom)	NO
AT-SY-MB008	96(V-bottom)	NO
AT-SY-MB009	384	NO

SIZE CHART

QUARTZ 96 WELL PLATES

Model	Well Configuration	TC Treatment
AT-SY-MB010	6	YES
AT-SY-MB011	8	YES
AT-SY-MB012	12	YES
AT-SY-MB013	24	YES
AT-SY-MB014	48	YES
AT-SY-MB015	96	YES
AT-SY-MB016	96(U-bottom)	YES
AT-SY-MB017	96(V-bottom)	YES
AT-SY-MB018	384	YES

TECHNICAL SPECIFICATIONS

- Material: High-purity quartz (≥99.99% SiO_2)
- Optical Transmission: ≥90% (200-800nm range)
- Thermal Expansion Coefficient: 5.5×10^{-7} /°C
- Surface Treatment: Bubble-free, scratch-free, no impurities
- Electrical Properties: Non-conductive

CUSTOMIZATION OPTIONS

TOQUARTZ® offers comprehensive customization services to meet your specific requirements:

- Custom well configurations (6, 8, 12, 24, 48, 96, 384)
- Specialized well geometry (flat, U-bottom, V-bottom)
- Custom well dimensions (diameter, depth, spacing)
- Surface treatments (TC-treated, hydrophobic, etc.)
- Non-standard plate dimensions for specialized equipment
- Detachable well configurations

QUALITY ASSURANCE

Every TOQUARTZ® quartz microplate undergoes rigorous quality control testing to ensure consistent performance and reliability:

- Dimensional verification
- Optical transparency testing
- Surface quality inspection
- Material composition analysis

Contact Information

Email: info@toquartz.com
Website: www.toquartz.com

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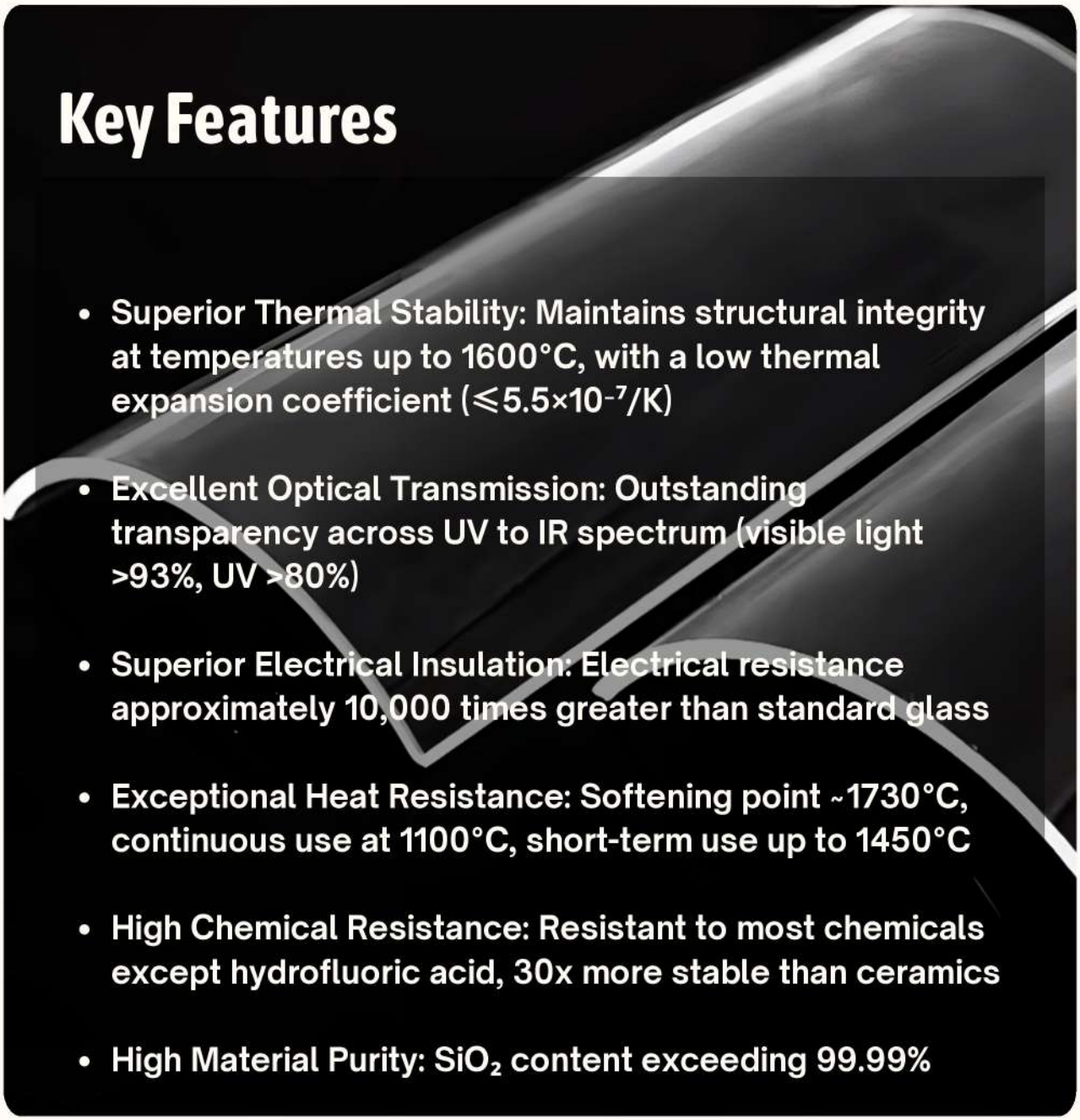
TOQUARTZ®
FUSED QUARTZ CURVED PLATES

Product Overview

TOQUARTZ® high-purity fused quartz curved plates feature exceptional thermal stability up to 1600°C with 99.99% SiO_2 purity. These precision-manufactured curved quartz plates offer superior chemical resistance, excellent optical transmission, and high mechanical strength for demanding industrial applications.

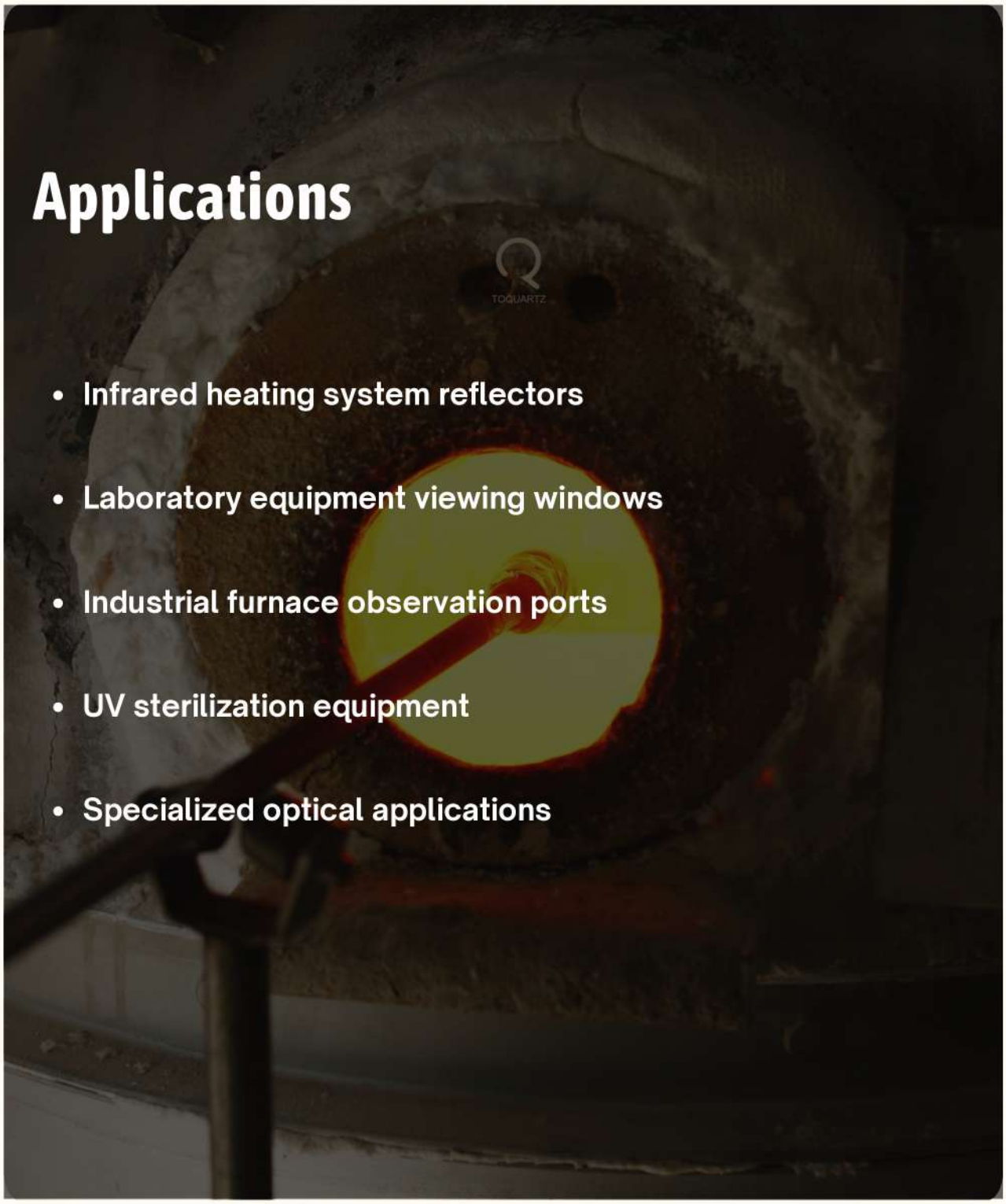
FUSED QUARTZ CURVED PLATES



Key Features

- Superior Thermal Stability: Maintains structural integrity at temperatures up to 1600°C, with a low thermal expansion coefficient (≤5.5×10^{-7}/K)
- Excellent Optical Transmission: Outstanding transparency across UV to IR spectrum (visible light >93%, UV >80%)
- Superior Electrical Insulation: Electrical resistance approximately 10,000 times greater than standard glass
- Exceptional Heat Resistance: Softening point ~1730°C, continuous use at 1100°C, short-term use up to 1450°C
- High Chemical Resistance: Resistant to most chemicals except hydrofluoric acid, 30x more stable than ceramics
- High Material Purity: SiO_2 content exceeding 99.99%

FUSED QUARTZ CURVED PLATES



SIZE CHART

SEMI-CIRCULAR FUSED QUARTZ CURVED PLATES

Model	Outer Dia.*Thickness*Width(mm)	SiO_2 Purity (%)
AT-SY-P3001	10mm *1.5mm *100mm	99.99
AT-SY-P3002	10mm *1.5mm *200mm	99.99
AT-SY-P3003	15mm *1.5mm *100mm	99.99
AT-SY-P3004	15mm *1.5mm *200mm	99.99
AT-SY-P3005	20mm *2mm *100mm	99.99
AT-SY-P3006	20mm *2mm *200mm	99.99
AT-SY-P3007	25mm *2mm *100mm	99.99
AT-SY-P3008	25mm *2mm *200mm	99.99
AT-SY-P3009	30mm *2mm *100mm	99.99

SIZE CHART

SEMI-CIRCULAR FUSED QUARTZ CURVED PLATES

Model	Outer Dia.*Thickness*Width(mm)	SiO_2 Purity (%)
AT-SY-P3010	30mm *2mm *200mm	99.99
AT-SY-P3011	35mm *2.5mm *100mm	99.99
AT-SY-P3012	35mm *2.5mm *200mm	99.99
AT-SY-P3013	40mm *2.5mm *100mm	99.99
AT-SY-P3014	40mm *2.5mm *200mm	99.99
AT-SY-P3015	50mm *3mm *100mm	99.99
AT-SY-P3016	50mm *3mm *200mm	99.99
AT-SY-P3017	50mm *3mm *300mm	99.99
AT-SY-P3018	60mm *3mm *100mm	99.99

SIZE CHART

SEMI-CIRCULAR FUSED QUARTZ CURVED PLATES

Model	Outer Dia.*Thickness*Width(mm)	SiO_2 Purity (%)
AT-SY-P3019	60mm *3mm *200mm	99.99
AT-SY-P3020	60mm *3mm *300mm	99.99
AT-SY-P3021	70mm *3mm *100mm	99.99
AT-SY-P3022	70mm *3mm *200mm	99.99
AT-SY-P3023	70mm *3mm *300mm	99.99
AT-SY-P3024	80mm *3mm *100mm	99.99
AT-SY-P3025	80mm *3mm *200mm	99.99
AT-SY-P3026	80mm *3mm *300mm	99.99
AT-SY-P3027	80mm*3mm*170mm	99.99

SIZE CHART

SEMI-CIRCULAR FUSED QUARTZ CURVED PLATES

Model	Outer Dia.*Thickness*Width(mm)	SiO_2 Purity (%)
AT-SY-P3028	80mm*3mm*380mm	99.99
AT-SY-P3029	80mm*3mm*420mm	99.99
AT-SY-P3030	90mm *3mm *100mm	99.99
AT-SY-P3031	90mm *3mm *200mm	99.99
AT-SY-P3032	90mm *3mm *300mm	99.99
AT-SY-P3033	100mm *3mm *100mm	99.99
AT-SY-P3034	100mm *3mm *200mm	99.99
AT-SY-P3035	100mm *3mm *300mm	99.99
AT-SY-P4001	Outer Dia.*Thickness*Width(mm)	99.99

TECHNICAL SPECIFICATIONS

- Material: High-purity fused quartz
- SiO_2 Content: ≥99.99%
- Softening Point: ~1730°C
- Maximum Continuous Operating Temperature: 1100°C
- Short-term Temperature Resistance: Up to 1450°C
- Thermal Expansion Coefficient: ≤5.5×10^{-7}/K
- Visible Light Transmission: >93%
- UV Transmission: >80%
- Shape: Semi-circular (standard)

ENGINEERING SUPPORT

TOQUARTZ® offers comprehensive engineering support to meet your specific requirements:

- Technical drawing assistance
- Material selection consultation
- Prototyping and sample development
- Performance testing and validation

QUALITY ASSURANCE

All TOQUARTZ® fused quartz curved plates undergo rigorous quality control to ensure consistent performance in demanding applications.:

- Dimensional verification
- Optical transparency testing
- Surface quality inspection
- Material composition analysis

Contact Information

Email: info@toquartz.com
Website: www.toquartz.com

TOQUARTZ® - Precision Quartz Solutions for Industry and Research

For technical specifications, custom requirements, or pricing information, please contact our sales team.