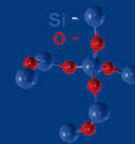




Opaque Quartz Glass Tube



There are three production methods of opaque quartz glass.

QT401 In the single step process(QT401), very pure and tightly controlled raw material is continuously electrically fused to form quartz glass tubes. The range of direct drawn tubes covers an outer diameter of 2-50mm with a wall thickness from 1mm up to 2.5mm.



QT402 In flexible two step process (QT402), very pure quartz sand is electrically fused to form quartz glass ingot. Then remelt the ingot by the furnace, drawing the tube. The range of drawn tubes covers an outer diameter of 8-120mm with a wall thickness depending on the outer diameter.



QT403 This fusion method is called rotation fusion. The tubes have even thickness with complete roundness and used for baking furnace tube, sinter tube and other usage ·
Max Dia 1200mm×1000mm Length.



Physical Properties

Property	QT401	QT402	QT403
Density	$1.92 \times 10^3 \text{kg/m}^3$	$1.95 \times 10^3 \text{Kg/m}^3$	$1.93 \times 10^3 \text{Kg/m}^3$
Compression Strength	$> 1.0 \times 10^9 \text{Pa(N/m}^2\text{)}$	$> 1.0 \times 10^9 \text{Pa(N/m}^2\text{)}$	$> 1.0 \times 10^9 \text{Pa(N/m}^2\text{)}$
Coefficient of Thermal Expansion (20-300°C)	$5.4 \times 10^{-7} \text{cm/cm}^\circ\text{C}$	$5.4 \times 10^{-7} \text{cm/cm}^\circ\text{C}$	$5.4 \times 10^{-7} \text{cm/cm}^\circ\text{C}$
Thermal Conductivity(20°C)	Low	Low	Low
Specific Heat	640J/Kg°C	640J/Kg°C	640J/Kg°C
Softening Point	1508°C	1600°C	1550°C
Annealing Point	1050°C	1100°C	1060°C

Chemical Composition

	QT401	QT402	QT403
Al	25	15	45
Fe	0.5	0.2	1
K	1.2	0.6	2.5
Li	0.8	0.4	1.5
Cu	0.08	0.02	0.15
Na	2	0.8	5
B	0.5	0.1	-
Ca	0.8	0.4	1.5
Mg	0.25	0.05	0.75
P	-	0.06	-
Ti	-	1.2	-

Dimension Tolerance (other tolerance are available upon request)

Unit:mm

Size	<10	10-20	20-30	30-40	40-60	60-90	90-120	120-150	150-200	200-600	600-1200
OD	±0.25	±0.30	±0.50	±0.80	±1.50	±2.0	±3.0	±4.0	±5.0	±6.0	±10.0
Thickness	±0.10	±0.10	±0.15	±0.60	±0.80	±1.0	±1.50	5-15	10-22	15-30	25-40
Length	±1.00	±1.0	±1.0	±1.0	±1.0	±1.5	±2.0	±5.0	±5.0	±5.0	±5.0
Max Siding	1	0.2	0.2	0.8	0.8	1.0	1.5	2.0	1.5	2.0	2.5
Max Ovality	0.2	0.2	0.4	0.5	0.6	0.8	1	1.2	1.5	1.6	2
Max Bow	2‰	2‰	2‰	3‰	3‰	3‰	5‰	5‰	5‰	5‰	5‰

