

Mica Shields for Liquid Level Gauges

General Description

Mica Shields are made from high quality natural muscovite sheet mica by cutting and punching to accurate and specified dimensions. The fabrication involves use of foot or power presses and may also be hand-sheared or lathe-turned.

Colour

Available in shades of Ruby colour and Green colour.

Appearance and Features

It has excellent transparency and optical clarity, high heat resistance, flexibility and nearly flat surface. Ruby Muscovite is harder than Green Muscovite.

Qualities

The quality is determined and suitability is assessed on the basis of visual examination. Emphasis is placed on clarity, colour, flatness, hardness, air inclusions, visible mineral and vegetable stains and structural imperfections. As a result, Mica is classified into grades. The most common mica grades used in liquid level gauge applications are as follows :

- Ruby Good Stained (M)
- Ruby Stained 1st
- Ruby Stained B
- Green Clear

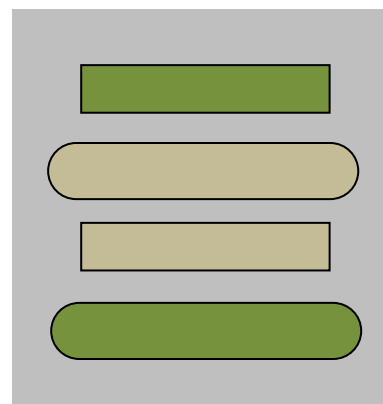
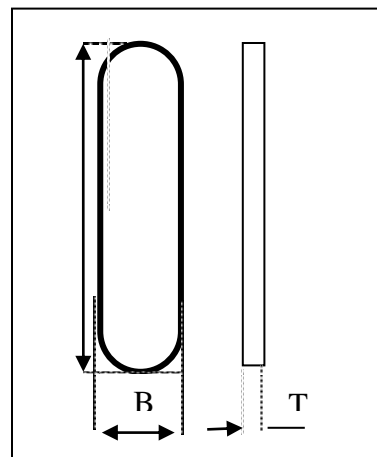
Applications and Uses

Mica Shields are widely used in water and liquid level gauges and columns of high pressure steam boilers suitable for :

- Electricity Generating Stations
- Thermal and Nuclear Power Stations
- Oil Refineries
- Petrochemical Plants
- Sugar Plants
- Fertilizer Plants
- Pulp and Paper Production
- Iron and Steel Production
- Chemical Industry
- Pharmaceutical Industry
- Pressure Tanks and Vessels

Quality Control

- The Mica Shields are rigidly tested and inspected to remove imperfection and provide reliable quality before dispatch.
- Each Mica Shield is supplied in individual packets to eliminate scratching and protecting against damage.
- In terms of purity, our Mica Shields meet the requirements of ASTM (D351-97T, MIL-G-18498C(SH) and ISO-2185-1972.



Ruby and Green

Characteristics

- Mica Shields guarantees a direct reading and clear observation of liquid levels. It is unaffected by the thermal cycling and provides perfect visibility for monitoring the nature and degrees of combustion in blast furnaces of high pressure steam boilers.

- Mica Shields provides best protection to flat and transparent sight glasses. The Mica Shields increases the service life of sight glasses by retaining. It is essential where saturated steam pressure exceed 350 psi (Upto 600°C).

- Mica Shields safeguards the inner surfaces of the gauge glass against erosion by steam and other elements and from the corrosive chemical effects of aggressive acids, alkaline solution, water, bases, solvents, mineral oils and other media.

- Mica Shields completely eliminates the risk of breakage, cracks, thermal shocks, strains, vibrations and combustion effects or fuses when used at extreme steam pressures and working temperatures.

Mica Shields for Liquid Level Gauges

Standard Mica Shield Sizes

NO.	TYPE A/B			TYPE A			TYPE B/H			TYPE TA-28		
	L		B	L		B	L		B	L		B
0	95	X	24	95	X	30	95	X	34		-	
I	115	X	24	115	X	30	115	X	34	133	X	47
II	140	X	24	140	X	30	140	X	34	158	X	47
III	165	X	24	165	X	30	165	X	34	183	X	47
IV	190	X	24	190	X	30	190	X	34	208	X	47
V	220	X	24	220	X	30	220	X	34	238	X	47
VI	250	X	24	250	X	30	250	X	34	268	X	47
VII	280	X	24	280	X	30	280	X	34	298	X	47
VIII	310	X	24	320	X	30	320	X	34	338	X	47
IX	320	X	24	340	X	30	340	X	34	358	X	47
X	340	X	24	370	X	30	370	X	34	378	X	47
XI	360	X	24	400	X	30	400	X	30		-	
XII	370	X	24	430	X	30	430	X	34		-	
XII	400	X	24	460	X	30	460	X	34		-	
XIV	430	X	24	500	X	30	500	X	34		-	

The above dimensions are in millimeters

L = Length B = Breadth T = Thickness

Standard Thickness : 0.10 - 0.15 mm / 0.13 - 0.17 mm

0.15 - 0.20 mm / 0.18 - 0.22 mm

0.20 - 0.30 mm / 0.30 - 0.40 mm

We are capable to supply Mica Shields in any desired length, width and thickness in semi-circular, rectangular or notch ends.

Caution

The service of a transparent glass much depends on the Mica Shield used. Once the mica is worn out, the entire assembly including the glass has to be replaced which is both a costly and a complicated task. It is, therefore, advised to use only superior quality Mica Shields having accurate thickness to provide complete safety and guaranteed service life to the sight glasses.

The thickness of Mica Shields are usually calculated on the basis of the steam pressures and working temperatures. However, in no case should such thickness be calculated on the minimum (minus) values. This would result in shortening the life of a transparent glass by half or even less.

Our Company

We are a leading producer of a complete range and mica products including Mica Shields. By virtue of our experience and long association in the industry, we are

- Specialising in large volume production.
- Matching specific requirements of customers.
- Dedicated to offer cost effective prices.
- Committed to supply steady and consistent quality.
- Meeting the scheduled delivery time.
- Upholding highest standard in customer satisfaction.

Since we believe in establishing and maintaining long term trade relations, we are always eager to serve customers no matter how "large" or how "small" the requirements may be.