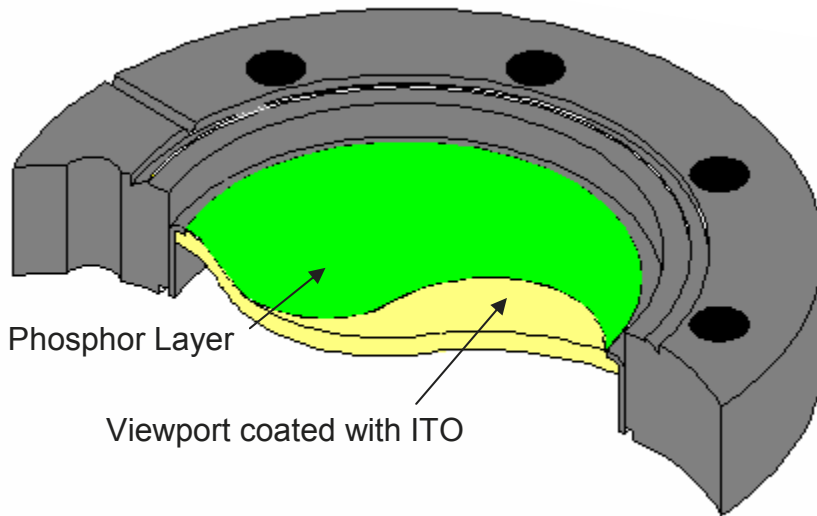




HIGH RESOLUTION RHEED

Reflection High Energy Electron Diffraction is used as a structural probe during material growth & deposition in Molecular Beam Epi-taxty for example

CF Viewport



Torr Scientific Ltd. produce a range of RHEED screens to suit all applications:

The phosphor thickness and type is determined by its application.

Typical Phosphor Types

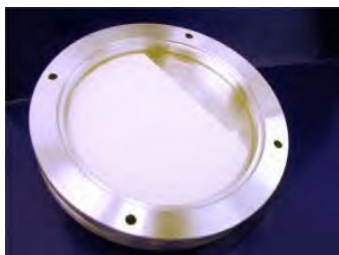
P20

P22

P11

P43

Other 's available on request

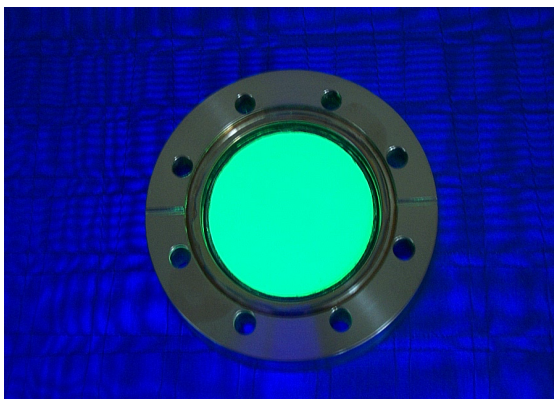


TSL's understanding of the application means that we can determine the required thickness to optimise brightness, whilst maintaining a high degree of resolution for clear images.

FIG 1 shows a typical RHEED arrangement. A CF Viewport is coated with ITO (Indium Tin Oxide – a clear electrically conducting film) and subsequently coated with a uniform layer of phosphor.

For high voltage applications there may be a need for lead glass to protect from potentially harmful X-rays. This is available as an external clip on assembly.

There is also an arrangement where the phosphor is deposited on to the Pb glass, which is then fastened into CF flange internally via a clip arrangement.





Some Common RHEED Screen Configurations and Part Numbers

Code Number	Description
VPZ38-22-ITO	VPZ38 Viewport coated with P22 phosphor over a layer of ITO
VPZ64-22-ITO	VPZ64 Viewport coated with P22 phosphor over a layer of ITO
VPZ100-22-ITO	VPZ100 Viewport coated with P22 phosphor over a layer of ITO
VPZ150-22-ITO	VPZ150 Viewport coated with P22 phosphor over a layer of ITO
VPZ100-22-PB	Lead glass coated with ITO and P22 phosphor clipped to Vacuum face of VPZ100
VPZ150-22-PB	Lead glass coated with ITO and P22 phosphor clipped to Vacuum face of VPZ150
PB38-22	Lead glass coated with ITO and P22 phosphor with section removed for shutter assembly to fit a VPZ38 assembly
PB64-22	Lead glass coated with ITO and P22 phosphor with section removed for shutter assembly to fit a VPZ64 assembly
PB100-22	Lead glass coated with ITO and P22 phosphor with section removed for shutter assembly to fit a VPZ100 assembly
PB150-22	Lead glass coated with ITO and P22 phosphor with section removed for shutter assembly to fit a VPZ150 assembly
Specials On Request	Aluminium backed coatings available on all sizes up to VPZ100
Special Phosphors	All phosphors available on TSL chart (ask for info or see website) 22 denotes P22 phosphor change to suite.

TORR SCIENTIFIC Ltd.

The Knoll Business Centre
 Old Shoreham Road
 Hove
 East Sussex
 BN3 7GS
 UK



Tel: (44) 1273 424477
 Fax: (44) 1273 424962
 Email: sales@torrscientific.co.uk
 Web: www.torrscientific.co.uk