# High Density Radiation Shielding Window Glass for Nuclear Hot Cell Application

#### **IPR STATUS**

Trade Secret

#### APPLICATION/USES

Nuclear Hot cell, X-ray room, Operation theatre, Radiation therapy room

#### SALIENT FEATURES

- Involves cullet making in 310 lit refractory pot, final melting in 40 lit platinum pot, casting through bottom pouring technique (cast block size is 425 x 425 x 130mm³), annealing and final processing.
- Windows of dimensions 550 x

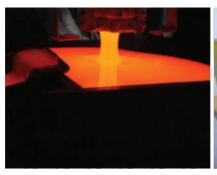
 $550 \times 50$  mm and  $700 \times 700 \times$  35mm from the same melt size through slumping technique in order to increase the viewing area has been developed

### LEVEL/SCALE OF DEVELOPMENT

• Pilot scale facility established. Technology for producing homogeneous and defect free high density RSW glass blocks up to 400 x 400 x 100 mm<sup>3</sup> sizes successfully demonstrated.

## LINE MINISTRY MAPPING/USER SECTOR

Department of Atomic Energy





Bottom-Pouring-Flow-Casting and Radiation Shielding Window (RSW) Glass blocks





