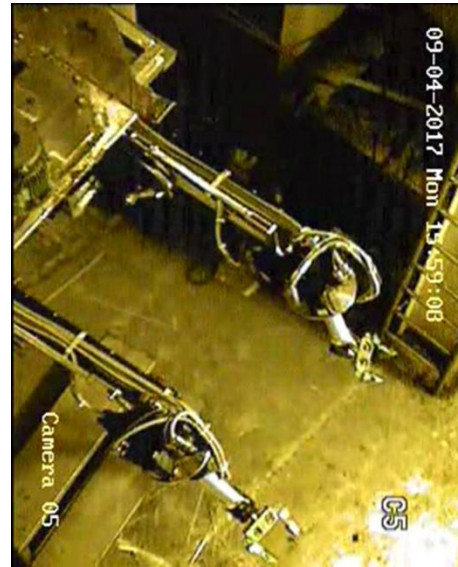


# Deployment of Advanced Servo Manipulator in WIP Hot cell

Remotisation is the only key for safe, efficient operation and maintenance of Vitrification facilities. The 1<sup>st</sup> generation Servo Manipulator (SM), indigenously developed, was deployed in 2001 in the Hot Cell of WIP Vitrification Bay, Trombay for the first time in India. An improvised 2<sup>nd</sup> version, indigenously developed, called Advanced Servo Manipulator (ASM) is installed replacing the SM. ASM is equipped with force reflection, indexing & other major improvements such as reconfigurable arm structure, & digital control to make remote operations faster, safer and accurate. Two servo manipulator systems are mounted on carriages to cover the entire vitrification bay.



Advance Servo Manipulator (ASM)



Slave Arm of ASM in Hot cell



ASM Control Panel



Vertical Cable Take-up for ASM inside Hot cell