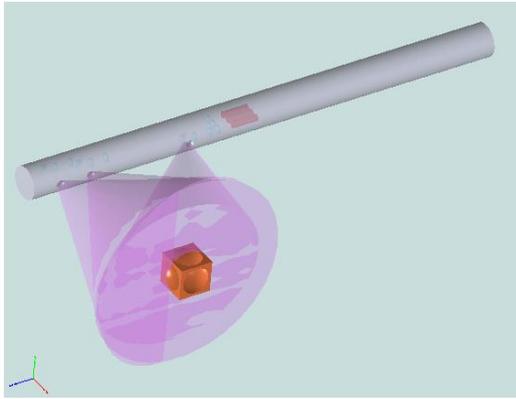


## High Temperature Probes for 3d measurement of corrosion in metal processing

ISI together with Mullard Space Science Laboratory (MSSL) has recently been awarded by the **UK space agency** a flagship project to convert the Mars Rover PanCam Instrument for use in high temperature environments to detect corrosion.



By mounting a stereo camera system within a periscope and using MSSLs GOTHCHA stereo matching software, it is possible to make accurate high resolution 3D measurements within a High temperature furnace chamber.

Corrosion in these environments is a major issue potentially leading to very expensive shutdowns. It typically manifests as either cracking or thinning the chambers walls.

With this technology it will be possible to detect these effects early and hence improve efficiency lower costs and most importantly reduce emissions within the metal processing industry.

The instrument is currently being manufactured and has generated significant interest across the industry.



It has been agreed that the device will undertake trials at the Centre for Process Engineering, one of the new TSB catapult centres

### Key features

- Can make measurements up to 2000<sup>0</sup>C
- Range accuracy of ~ 1mm
- Dense spatial coverage
- State of the art stereo processing