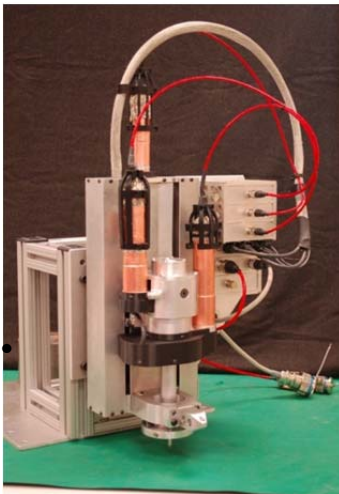


Mini-Corer Drill System

The Minicorer drill system is a low power, dry drilling prototype designed, developed and tested by Deltion for use in a Mars or lunar mission. It is designed to drill, capture and encapsulate short samples of consolidated or unconsolidated material or to abrade a rock surface for examination by other instruments. The system can be stand-alone, operated autonomously or via tele-operations. It can drill in any orientation. The system consists of the drill and the sample handler unit.



Drill

- 6.2kg (includes avionics, drill bit, cabling)
- Drills in any orientation
- Percussion only, rotation only or percussion and rotation
- Abrades rock surface
- Drills rock (10mm x 10cm)
- Captures unconsolidated sample (10mm x 8.5cm)
- Docks with SHU for tool exchange, sample encapsulation
- Designed to be mounted on a robotic arm

Sample Handler Unit

- 6.54kg (includes avionics)
- Operated on slopes up to 15°, can survive 30°
- Coring auger tools, push tubes, RAT (rock abrasion tool)
- Automated tool exchange
- Encapsulates sample and tool
- Rover mountable

