



Robotic Fast Prototyping Platform

The robotic fast prototyping platform is a collection of industrial size 3D printing devices and a precision workshop dedicated to the design, fabrication and assembly of robot and medical robots. The fabrication centre comprises several 3D printer with large building volume. The printers are several polyjet printers, FDM printer, SLS metal printer. An electronic lab equipped with pick and place PCB machine allows for large scale fabrication of electronics board. A state of the art workshop and precision manufacturing tool is also available with a micro EDM and 5 axis milling machine. A Clean Room assembly space allows for an assembly complying with medical grade devices. The characterisation platform assure the conformity of the final prototyped both mechanically and electrically in semi-production scale.

Key Features

- Polymer and Metal 3d printing
- Large scale electronic assembly and testing
- Clean room for medical grade assembly

Possible Applications

- Robotic fabrication and prototyping
- Zero assembly mechanism manufacture
- Multi material fabrication
- Test rig manufacture
- Prototype manufacture



Access information

Corresponding infrastructure	Imperial College London The Hamlyn Centre
Location	Bessemer Building, Kensington, London SW7, UK
Unit of access	Working day

Technical specifications

3D Printer	Object Connex 250, Oject 500, Fortus 400mc, Concept Laser
Fabrication	Sari Micro EDM, Daltron C5
Characterisation	Carl Zeiss O-Inspect 322, Tester SPEA 4020 Flying Probe, Skycan Brucker Micro CT

Additional information

<https://www.imperial.ac.uk/hamlyn-centre/facilities/epsrc-micro-engineering-facility-for-medical-robotics/>