

G-load Test Rig



- Scope: Design and development of customized test rig
- Application: Centrifugal load test of motor driven products
- Competency: Machine design, manufacturing process, assembly and integration.



Technical Spec

- 3.3mH x 3mW x 3mD
- Weigh approx. 2,000kg
- Total rotate load: 300kg
- Rotate speed: 0 to 100rpm

Hydro-Drive System



- Scope: Proof of concept and development of human powered hydraulic transmission system.
- Application: Future human transport application
- Competency: Fluid power, computational fluid dynamics simulation, mechanical design, assembly, rapid prototyping.

Hydraulic pump and motor design

Cartesian Robot for Portrait Drawing

Application



- Scope: Image capture and drawing sketch through an open architecture Robot
- Application: Concept can be applied to Liquid/Paste Dispensing, Engraving, Laser Cutting, etc.
- 3 degree of freedom with independent controllers aided in parallel motion.

Project on display with Bedok Community Arts and Culture Club cum Exhibition, ITE Art show, ITE Fiesta