The Prosim Knee Wear Simulator: Machine Specification

The Prosim Knee Wear Simulator is a multi-station machine designed for the reliable and repeatable wear testing of knee and patella implants.
The Prosim Knee Wear Simulator meets the following apparatus requirements:


The Prosim Knee Wear Simulator (Independent Stations) includes numerous features and benefits:

- Up to six knee implants can be tested simultaneously
- Up to ± 90 degrees of programmable motion on the flexion-extension axis
- Five independent axes of articulation for each station
- Up to ±15mm of programmable anterior/posterior translation
- Single load axis per station
- Up to ± 30 of programmable motion on the tibial rotation axis
- Up to ±10 of programmable motion on the adduction/abduction axis
- Each station is equipped with a six-axis loadcell
- Load soak incorporated into each station
- Up to ±10mm of medial/lateral translation
- Simple user programmability of any articulation/load cycle
- Able to run both force and displacement control
- Operating frequency of motions programmable up to 2.0 Hz
- Can incorporate deep flexion bending
- Capable of running programmed sequences of walking, jogging, running and periods of rest
- Easy to use Windows operator screen
- Test fluid temperature is maintained at 37°C ±2°C
- Realtime logging of position and load allows instant verification of the test cycle
- Axial loading of up to 5kN per station
- Clinically and physiologically representative testing