

Steering Assembly Test System

BiSS Steering Assembly Test System evaluates manual and power steering assemblies for durability and performance at frequencies up to 50 Hz. The tests performed are in accordance with IS 13476, JASO C717 and IS 14269.

A servo hydraulic torque motor, two linear actuators coupled with customized grips, transducers mounted on moving blocks accommodate specimens of varying length that are subjected to lateral and steering loads. The whole system is integrated onto a free standing self reacting T-slotted table.



Standard features (Customized options available)

- Two 10kN linear hydraulic actuators with +/- 125 mm stroke
- 150 N-m hydraulic servo motor
- Suitable for static and dynamic testing
- BISS 2370 MS digital controller and user-friendly application software for synchronous multi axis control and data acquisition
- "Green" highly efficient hydraulic power pack

Optional feature

- Hot oil supply for testing power steering assemblies

Applications (as per JASO C717, IS 13476 and IS 14269)

- Turning test on input shaft
- Sliding test of output shaft
- Test for turning torque fluctuation of input and mechanical efficiency
- Rigidity test
- Strength test for normal input
- Strength test for reverse input

Specifications

Hydraulic motor	Torque: 150 Nm Speed: 500 rpm coupled with torque cell of 150 Nm
Linear Actuators	Double acting, double ended +/- 10 kN force rating and +/- 125 mm stroke includes axial load cell of 10 kN and suitable position measurement LVDT
2370MS Controller	Control channels: 3 channels of servo control Input channels: 16 Performance: Typical servo-loop update and DAQ frequency up to 5 kHz
Hydraulic power pack	Digital servo-control with flow of up to 200 LPM Operating pressure: Up to 210 bar. Power consumption: 10 to 80 kVA through "flow on demand" servo control
Hot Oil Supply (Optional)	Digital servo control with flow up to 40 LPM Temperature range: Ambient to 125 °C Operating Pressure: up to 210 bar
Total weight of rig	2.5 Ton
Foot print:	L X W X H = 3.0 x 1 x 2.4 m
Customize options are available.	