

Hydraulic Cylinder Test Bench

CAPABILITY SHEET · MOUNT · MOVE · HOLD · ENGINEERED TO ORDER

THE ONE IDEA

PRINCIPLE	A hydraulic cylinder is judged by where it starts and where it leaks.
WHY IT MATTERS	Proof pressure is the easy part: a strong cylinder can still stick, crawl or leak past its piston.

THE BENCH

FRAME	A rigid frame with heavy end blocks and adjustable fixtures holds the cylinder aligned, with no side load on the rod.
DRIVE	A pressure source and valves give test pressure to either chamber, and slow, steady strokes for the low-pressure moves.
READINGS	A pressure transducer on each port, with a range fine enough to see the breakaway, and a position transducer along the stroke.
CONTROL	PLC control of the strokes and holds, and a logger that keeps pressure and position for every one.

THE METHOD

ORDER	Specify, mount, proof, move, hold and prove. The low-pressure moves and the hold at each end are what a quick order skips.
LIMITS	Test pressures, forces and leakage limits come from the standard the customer names and from the duty, and are not printed here.

CONFIGURATIONS

MANUAL BENCH	One cylinder at a time on a rigid frame, with the valves set by hand.
PROGRAMMED BENCH	Strokes and holds run from a stored sequence, with pressure and position logged for each.
MULTI-SIZE BENCH	A frame and fixtures that take a range of cylinder sizes, with a range kit and one record per cylinder.

STANDARDS & SCOPE

STANDARDS	Public references: ISO 10100 for the acceptance tests of hydraulic cylinders, and SAE J1335 for the no-load friction test.
SCOPE BOUNDARY	It is the cylinder bench: not a multi-station rig, not a servo actuator bench and not a proof bench for gas cylinders.
STATUS	Neometrix has quoted against successive hydraulic cylinder and actuator test requirements, and no delivered hydraulic cylinder test bench is claimed.

DEFENCE PROGRAMMES DESK

sales@neometrixgroup.com · +91 7777 876 876 · neometrixgroup.com
Neometrix Defence Limited · E-148, Sector 63, Noida, Uttar Pradesh, India