



MICHIGAN CUSTOM MACHINES, INC.

Product Highlight:
ROTATING CONTROL DEVICE

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The MCM rotating control device (RCD) durability machine is used to validate functionality/durability of RCDs prior to being installed in the field. This machine performs static, dynamic and stripping tests. Ensuring the seal integrity prior to installation potentially saves thousands of dollars and downtime.

Background

RCD technology has become a key element in mining/ drilling industry. The stripper element rotates with the drill string, while a robust steel housing and bearing assembly provide control of the flow by diverting the drill cuttings, fluids and gases away from the rig. RCDs create a pressure-tight barrier in the wellbore annulus that enables safe fluid containment and diversion, a vital defense against drilling hazards. As a critical element of managed pressure drilling (MPD) systems, RCDs provide an additional line of defense to protect your personnel and your assets.



Machine Features:

- Single Test head with Semi-Automatic DUT loading
- Ability to pause and resume cycle for inspection
- Programmable mandrel rotation and reciprocation
- Programmable up to 7500psi back pressure
- Tank pressure is monitored and test will suspend based on loss limit
- Live run screen displays speeds and pressures at all times
- Machine can send SMS message to operator in the event of a failure

Ease of Use

We design our touch interface to be intuitive to use. The display always shows what you need to know and if you want to know more detail, this is possible with the touch of a finger. The load is generated by hydraulic power and controlled by independent servo valves.

Specification

Feature	Description	Range
Linear Stroke	Stroke of mandrel	5ft @ 1FPS 76,745LBS Max Force
Test Fluid Pressure	Pressure applied to DUT	7500PSI
Rotational Speed	Drive mandrel rotation speed	0-200 RPM
Cycle Duration	Total Duration of Testing	3min - 200 Hours
Alarms	Force Exceeded (Linear) Drive Rotation speed out of range Excessive Rotation torque Motion Linear Velocity Hydraulic Temperature Hydraulic Level Hydraulic Filter Perimeter Breach	Programmable Software Limit Programmable Software Limit Programmable Software Limit Programmable Software Limit Fixed Programmable Fixed 2 stage warning/alarm Door switch

Please contact us at sales@mcm1.com for more information.