Mechanical Calibration Device for Torque Wrenches – ML

Image shows ML-1000 with System 5, Switch Box and Transducers on Large Cart (not incl.)

Options: Transducers, Tester, Signal Cable, Switchbox a.o.m.

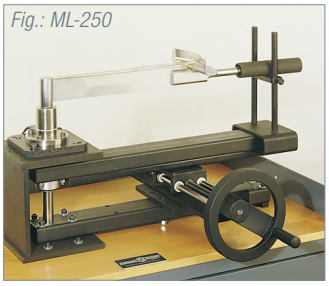

Fig.: ML-250

Option: Quad Plate for ML-250

- Every SR *Mechanical Loader* assures true 90-degree force application to eliminate force angle error in testing.
- SR Mechanical Loaders meet or exceed requirements for ASME B107.29M Type 1 loaders.
- Mechanical advantage reduces technician effort and fatigue, particularly in high-capacity tool testing.
- Four capacities available; 250, 600, 1 000 and 2 000 foot-pounds.
- ML 250 accepts an optional Quad Plate for connecting and switching among up to four transducers quickly and efficiently.
- ML 1000 and ML 2000 use the SR Quick Connect system for rapid switching among transducers.
- Two sizes of cart are available for mounting the loader and holding the tester and transducers.

High-Capacity Torque Wrench Calibration

Torque wrench calibration can be done by hand – more or less. Since distance is a key component in the calculation of "force times distance", the maintenance of the correct distance during calibration is extremely important in obtaining accuracy. Since the human hand is about 4" wide, the "load point" where force is applied to the tool is a variable – a variable that works against, instead of for, you. Well designed mechanical loaders eliminate that variable, as well as errors caused by applying force at other than a 90 degree angle. They also reduce operator fatigue and improve productivity.

Mechanical loaders increase the accuracy ot torque test results while simultaneously reducing technician fatigue from pulling or pushing on torque wrenches during testing. SR Mechanical Loaders use the highest quality ball screws to assure smooth operation and extended service life. Welded steel frames and rigid transducer mounting plates assure torque load is properly resisted. Optimized gearing selection reduces physical effort to operate, enhancing productivity and ergonomic safety.

The design of each loader makes it very easy to hold direct-reading torque tools (dial, beam and digital torque wrenches) at a specific and stable torque during testing. ML 250 and ML 600 loaders use a swing arm to rotate the tool about the center of the transducer, while ML 1000 and ML 2000 loaders hold the tool in a stable position and rotate the torque transducer around its center.

Mechanical Loader

Model	Item No.	Description	Torque Capacity		Weight
			lbf·ft	N·m	~kg
ML-250	R10160	Mechanical Loader 250 Foot-Pounds (339 Newtonmeter)	25 - 250	34 - 338	41
ML-600	R10431	Mechanical Loader 600 Foot-Pounds (813 Newtonmeter)	60 - 600	81 - 813	n.a.
ML-1000	R10167	Mechanical Loader 1000 Foot-Pounds (1355 Newtonmeter)	100 - 1000	135 - 1355	118
ML-2000	R10168	Mechanical Loader 2000 Foot-Pounds (2711 Newtonmeter)	200 - 2000	271 - 2711	163

Optional Accessories

Model	Item No.	Description	Dimensions [cm]			Weight
			W	D	H	~kg
Standard Cart	R10161	Cart suitable for ML-250	117	61	117	n.a.
Large Cart	R10208	Cart suitable for ML-1000	163	76	76	n.a.
Quad Plate	R10308	Permits mounting up to 4 torque transducers on the ML 250	–	–	–	n.a.
Switch Box	R10601	Connects up to 4 torque transducers to DTT System 4 / 5 / 8	–	–	–	n.a.

Further information available on our website – 24/7.