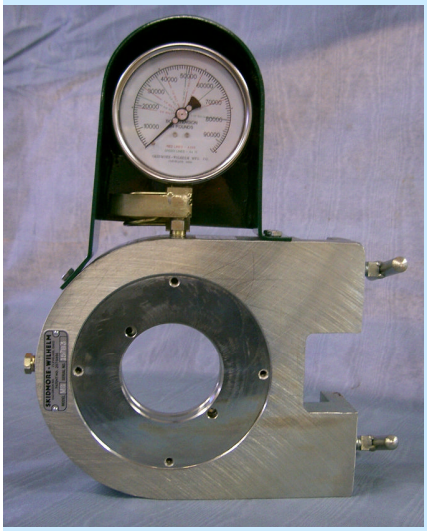
Model MS



Capacity: 90,000 lbs. Of Bolt Tension

For Accurate Measurement of Bolt Tension In Short Structural Fasteners

Two developments in construction practice have created a demand for the Model MS bolt tension calibrator: thinner sections of structural steel and the use of tension-control bolts. Designed to accept shorter grip length bolts, the Model MS provides all the features and capabilities of our standard Model M calibrator.

Whether calibrating power wrenches or testing fasteners, you need no special training, no additional equipment. Simply clamp the calibrator to a beam or column and insert your fastener. Tightening it gives a direct dial pressure reading equivalent to the tension created in the fastener—guaranteed accurate within 2% every time.

For Economical Quality Assurance

With a Skidmore-Wilhelm Model MS, you can accurately simulate joint conditions, then transfer your tightening procedure to the joint itself. Result: consistent tightening to bolt tension specifications.

The Research Council on Structural Connections recommends that a tension measuring device such as the Model MS be available at every job site.* Obsolete torque checking methods will not let you meet approved bolt tension specifications.

The Model MS Bolt Tension Calibrator Allows You to Verify:

- Fasteners meet minimum bolt tension specifications.
- Impact wrenches are properly calibrated.
- Tension-control fasteners sheer off at the correct tension.
- Bolting crew understands how to achieve proper tension in all types of fasteners
- Have the right installation tools and equipment.

Avoid Costly Rework and Re-inspection.

How do you give the best evident of properly installed fasteners? First demonstrate with the calibrator that your tightening procedures produce proper bolt tension. Then consistently apply these procedures to the job itself.

Skidmore-Wilhelm Bolt Tension Calibrators let you build the inspection into your selected bolt tightening procedure. Proof of correct bolt tightening is right on the Model MS calibrator dial.

*Research Council On Structural Connections, "Specification for Structural Joints Using ASTM or A490 Bolts."

Skidmore Wilhelm

How The Model MS Works:
Tightening a fastener inserted into the calibrator creates pressure, which is transmitted through hydraulic fluid to a gage. The gage gives a direct reading equivalent to fastener tension in pounds. Recommended minimum tensions for various bolt sizes are indicated on the face of the gage.

How To Use The Model MS:
1. Clamp the calibrator on a convenient beam or column.
2. Install the proper size plate (item 5) and bushing (item 6) for the fastener being tested, either round or hex head.
3. Conventional fasteners: Tighten the fastener according to Research Council procedures for your selected tightening method until the gage reads the required minimum tension. Test at least three representative samples.
   Tension-control bolts: Using the installation tool required for your fastener,
   Tighten the tension-control bolt, according to the manufacturer's instructions until twist-off.
4. Tighten the fasteners on the job itself using the same wrench control mechanism and air pressure settings from step 3.

Detailed operating instructions and a test report are included with your Model MS Bolt Tension Calibrator. If desired, test reports can be made traceable to NIST specifications

How To Order The Model MS:
The Model MS bolt tension calibrator comes with complete sets of plates and bushings for round head or hex head bolts. Please specify preference when ordering.

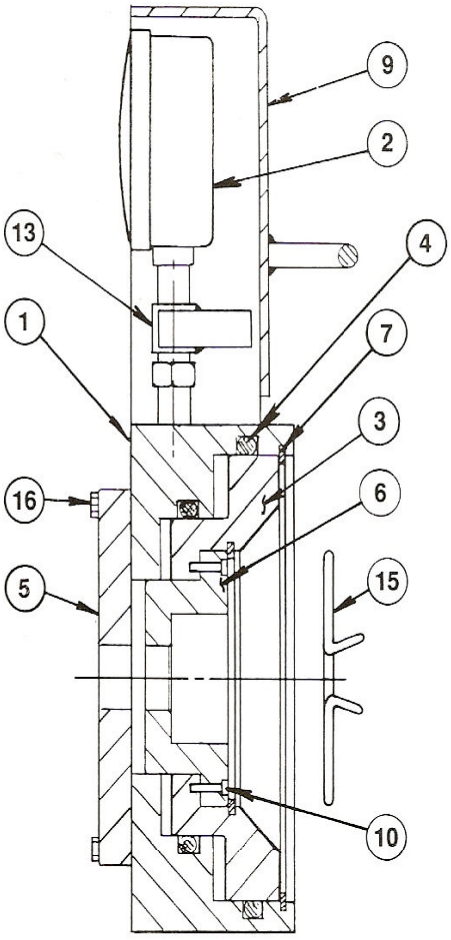
The Model MS provides a grip length as short as 1-1/8" for bolts with the following specifications:

Bolt Diameter	Minimum Bolt Length
5/8"	2.00"
3/4"	2.00"
7/8"	2.25"
1"	2.50"

The Model MS comes complete in its own Pelican carrying case.

Skidmore-Wilhelm BOLT TENSION CALIBRATORS

Over forty years of providing measureable quality control in thousands of
Jobs worldwide. **Portable, Direct reading, Self-contained, Accurate**



Parts List

Item No.	Part No.	Name
1	MS-001	Body
2	MS-002	90,000# gage (or 42,000 kg.)
3	MS-003	Piston
4	MS-004	Packing
5	MS-500	Bolt plate
6	MS-600	Round head bolt bushing
	MS-700	Heavy hex bolt bushing
		When ordering parts MS-500, MS-600, and MS-700, specify size: 5/8, 3/4, 7/8, or 1 inch. Metric equivalents are available at no extra cost.
7	MS-007	Snap ring
8	M-008	Mounting screw *(not shown)*
9	M-009	Gage guard
10	M-010	Bushing dowel pin
13	M-013	Gage saver
15	MS-015	Bushing retainer
16	M-016	1" Plate screw