Metriguard offers a number of hydraulic pump options so you may optimize performance, convenience, and cost. If you are unsure as to the best option for your application, give us a call.

Hand Pumps

Single-Stage Hand Pump

This is the most economical hand pump we offer. (HYD-PUM-1003).

Specifications:

Maximum pressure ..... 10,000 psi (69 MPa)

Oil volume per stroke ..... 0.16 in^3 (2.6 ml)

Reservoir capacity ..... 55 in^3 (0.9 l)

Usable capacity ..... 45 in^3 (0.74 l)

Weight ..... 15.8 lbs (7.2 kg)

Two-Stage Hand Pump

A practical pump for tension tester Models 401 and 403. For high-volume testing, we recommend a powered pump. (HYD-PUM-1004).

Specifications:

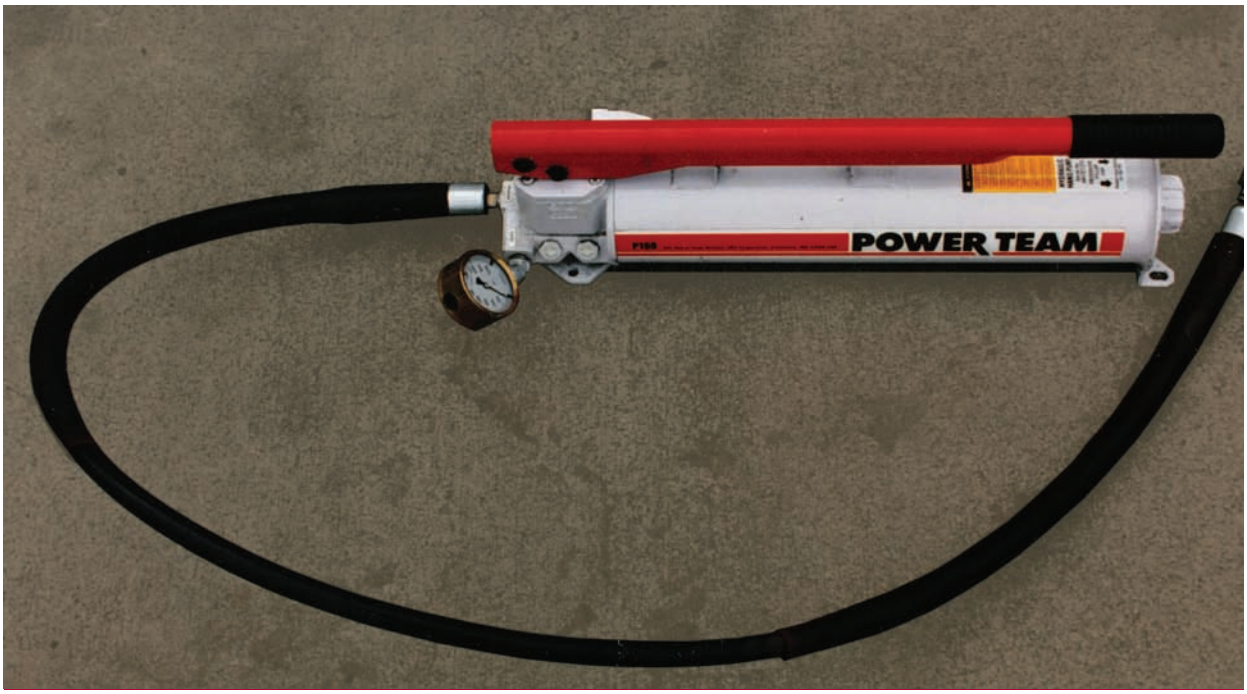
Maximum pressure ..... 10,000 psi (69 MPa)

Oil volume per stroke..... Below 300 psi (2 MPa): 2.6 in^3 (43 ml); above 300 psi (2 MPa): 0.16 in^3 (2.6 mL)

Reservoir capacity ..... 152 in^3 (2.5 l)

Usable capacity ..... 137 in^3 (2.25 l)

Weight ..... 26.2 lbs (11.9 kg)



Two-stage Hand Pump, with optional gauge and adapter.

Electric Pumps

Half-Horsepower Electric Pump, with gauge and pressure-compensated flow-control valve.

(HYD-PUM-1001).

Ideally suited for Metriguard's wedge-grip tension tester Models 401 and 403 in quality control applications. This pump comes with a steel reservoir.

Specifications:

Maximum pressure	10,000 psi (69 MPa)
Oil flow at max pressure	17 in^3/min (280 ml/min)
Valve positions	Retract, Hold, Metered Advance, and Full Advance
Electric control	Pendant on/off switch
Electric power	1/2-hp, 50/60 Hz, single phase. (115 Vac standard; 230 Vac 50 Hz motor available.)
Reservoir capacity	450 in^3 (7.4 l)
Usable capacity	295 in^3 (4.8 l)
Weight	45 lbs (20 kg) (without oil)
Duty Cycle	Heating restrictions limit continuous testing to 30 boards followed by a 60% duty cycle

2-Horsepower Electric Pump, with gauge and pressure-compensated flow-control valve.

(HYD-PUM-1002).

The most powerful electric-powered pump normally used with Metriguard's off-line tension tester Models 412 and 422; this pump comes with a steel reservoir and is equipped with casters to aid cooling and provide mobility.

Specifications:

Maximum pressure	10,000 psi (69 MPa)
Oil flow at max pressure	60 in^3/min (1 l/min)
Valve positions	Retract, Hold, Metered Advance, And Full Advance
Electric control	Pendant on/off switch.
Electric power	2-hp, 50/60 Hz, single-phase 230 Vac, 11 Amp
Standard Reservoir capacity	1317 in^3 (21.6 l)
Optional Reservoir capacity	2310 in^3 (37.9 l)
Weight	154 lbs (69.8 kg) / total weight with oil
Duty Cycle	Heating restrictions limit continuous testing to 13 consecutive boards followed by a 40% duty cycle. Requires additional oil cooling for full continuous testing

The half-horsepower pump—usually the best option when a power pump is needed. For applications requiring more flow, the 2-horsepower pump is recommended.