

TESTING

SERVICES





Frame #1



Frame #2



Frame #3

FRAME #1 FEATURES

- Compressive Capacity of 9,500,000 lb (42,200 kN)
- 9" (229 mm) of vertical stroke
- 71"x31" (1,800 mm x 787 mm) Opening with Expandability (Dependent on Loading)
- ASTM E-4 Certified to 3,000,000 lb (13,344 kN) for Non-Destructive Compression Testing
- Compression Loading & Horizontal Loading Simultaneously
- Various Actuators up to 600,000 lb (2,668 kN), 48" (1,219 mm) of Displacement, and 36 in/min (914 mm/min) Velocities
- Able to Record Force, Pressure, Displacement, and Many Others
- Adaptability for Unique Setups
- Large Plate Straightening Capacity

FRAME #2 FEATURES

- Universal Fixture with 400,000 lb (1,780 kN) capacity
- 132"x35" (3,353 mm x 889 mm) Opening
- Various Loading Capabilities in Multiple Directions
- Highly Adaptable for Unique Setups

FRAME #3 FEATURES

- Compressive Capacity of 2,000,000 lb (8,900 kN)
- 2" (5 cm) of vertical stroke
- 37"x27" (686 mm x 940 mm) Opening
- ASTM E-4 Certified to 1,500,000 lb (6,672 kN) for Non-Destructive Compression Testing
- Compression Loading & Horizontal Loading Simultaneously
- Horizontal Actuator Capacity of 200,000 lb (890 kN)
- 8" (203 mm) of horizontal stroke

TESTING SERVICES

RJ Watson specializes in high load, large displacement, structural and mechanical testing. Our three main test fixtures are equipped with high precision instrumentation that also provide flexibility for a multitude of test applications.

EQUIPMENT

RJ Watson uses a range of calibrated test equipment to serve many testing needs. All equipment is on site including:

- Pacific instruments data acquisition system with 16 input channels and 8 output channels
- Hydraulic actuators ranging from 15,000 lbs to 600,000 lbs (66 kN - 2669 kN)
- Actuator displacements from 3" to 48" (76 mm - 1,219 mm)
- Tension & Compression load cells ranging from 250 lbs to 600,000 lbs (1 kN - 2,669 kN)
- 2 Universal test machines of 20,000 lb (89 kN) and 60,000 lb (266 kN) capacity in tension and compression
- Various LVDT's, string pots, temposonic transducers, and thermocouples
- Various hydraulic jacks and pumps
- Please visit www.rjwatson.com/services for a full list of equipment and resources

ADDITIONAL RESOURCES

Our machining and fabrication operations, coupled with our low rates for raw materials in our manufactured products, give our customers excellent pricing on fixturing, commonly the highest cost of custom testing. RJ Watson's in-house operations include a fabrication shop with overhead cranes, heavy lifting capacities, certified welders, weld positioners, media blasting and machine shop to suit your needs.



Experienced Staff: Our staff of engineers are well experienced in design, setup, instrumentation, and data analysis, ready to support you and your testing needs.



Data Acquisition: 16 Available Channels for many types of measurement devices, High Sample Rates, Live Video Streaming Ability.

NO COST / NO OBLIGATION ESTIMATES

RJ Watson provides at no cost estimates for performance testing, specimen adapter engineering, adapter fabrication & machining. A variety of different products and materials have been tested at RJ Watson for a range of customers with short lead times and competitive pricing. We can also provide accelerated rates for production testing and other high priority needs.



RJ Watson's test laboratory is within our 75,000 square foot manufacturing facility located in the Buffalo-Niagara Region



Cryogenic (-25C) Horizontal Stiffness Test on an Elastomeric Bridge Bearing. 10 inch displacement, using RJ Watson's 48 inch Actuator



Friction Testing with Simultaneous Vertical Load



Fatigue Test on a Large Displacement Finger Joint



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