



James Anchor Test System

Anchor testers measures a wide range of anchor strengths in construction materials.

Features and Benefits

- Two models are available, each with two different gauge capacities for precision readings over a wide range of loads and applications.
- A load diffusion bridge and pyramid are available to keep reaction loads away from the anchor point.
- Gauges have maximum load indicator and viscose damping protection against sudden load release.
- Long Pull Stroke for complete extraction and efficient operation.
- A variety of adaptors are available for different fixings.
- Compact mechanical design offers reliability and ease of use.
- Conforms to BS 5080: 5973 and other international standards.

Distributed by:

NDT INTERNATIONAL, INC.

711 S. CREEK ROAD
WEST CHESTER, PA 19382

info@ndtint.com
www.ndtint.com

Tel: 610-793-1700
Fax: 610-793-1702

James Anchor Test System

Four Basic Capacities

The James Anchor Test System is available in light to heavy duty versions as follows:

Standard Anchor Test System

- Light Duty:** 0–1200 lbs. Force (0–5 kN)
40 lbs. (0.2 kN) gauge division
- Medium Duty:** 0–3600 lbs. Force (0–15 kN)
100 lbs. (0.5 kN) gauge division

The tensile load is applied to the fixing mechanically; hydraulics are used to register the load only. This enhances the systems' reliability as it is not prone to hydraulic leaks. Also, mechanical loading provides smoother operation, eliminating hydraulic backlash.

Super Anchor Test System

- Heavy Duty:** 0–7200 lbs. Force (0–30 kN)
1000 lbs. (5.0 kN) gauge division
- Heavy Duty:** 0–20,000 lbs. Force (0–90 kN)
2000 lbs. (10 kN) gauge division

The load application is achieved via a ratchet handle driving a 4:1 hydraulic multiplier; the applied load is recorded directly on a gauge mounted on the tester body. This compact design is lighter and more convenient to use than that of separate hydraulic pump and ram arrangements.

An integral movement indication is provided allowing "First Movement" to be identified as well as total displacement before failure.



Standard Anchor Test System



Super Anchor Test System with Load Diffusion Bridge

Applications

- Expansion, resin and undercut anchors.
- Frames, anchors and screw fixings.
- Structural anchors for safety harness eyebolts.
- Scaffolding ring-bolts.
- Safety anchors for ladder restraints.

Reaction Load Diffusion

In order to test correctly and avoid damage to the host construction material, reaction loads must be absorbed by the structure well away from the fixing under test. This can be achieved by either a load diffusion bridge or, if greater distance is required, by a load diffusion pyramid. Both of these optional accessories have large feet to minimize bearing pressure and are height adjustable to accommodate different adaptors.

Long Pull Stroke

The Standard Anchor System has a pull stroke of 2 inches (50mm) with an option to extend to 4 inches (100mm). The increased stroke has the following advantages:

- Complete extraction of most fixings after test in one simple operation. When fixings are tested to failure, they usually need to be fully extracted from the base material. With plastic and other types of anchors, which fail by pulling from the base material, the extraction can be carried out without readjustment of the bridge legs.
- Faster set-up saves time on multiple testing projects. Initial adjustment of the height of the Tester relative to the fixing can be made with the loading handle rather than moving the bridge legs.

Gauges

Each gauge has the following features:

- Maximum load indicator.
- Rubber casing for protection against shocks.
- Shatter proof glass.
- Built-in protection against sudden load release.
- Quick release coupling.
- Calibration certificate.



**Standard Anchor
Test System with Load
Diffusion Pyramid**

James Anchor Test System

Technical Specifications



Testing Ring Anchors



Standard Anchor Test with Bolt Test Adaptor

Standard Anchor Test System

P-C-7260 STANDARD TEST UNIT WITH 2" (50mm) STROKE

0-1200 lbs (0-5 kN) gauge.
0-3600 lbs (0-15 kN) gauge.
Carrying case, calibration certificate.
Weight: 12 lbs. (5.5 kg).

P-C-7261 STANDARD TEST SYSTEM WITH 4" (100mm) STROKE

Accessories

P-C-7262 LOAD DIFFUSION BRIDGE

3 adjustable legs; 2.5" (62 mm) height adjustment.
35 mm diameter swivel feet to compensate for uneven surfaces.
Keyhole slot for easy linkage to fixing or adaptor.
Narrow width allows testing to within 1¼ in. (32 mm) of an edge.
Weight: 5 lbs. (2.2 kg).

P-C-7263 LOAD DIFFUSION PYRAMID

3 adjustable legs; 5.5" (140 mm) height adjustment.
2" (50 mm) diameter swivel feet to compensate for uneven surfaces.

Pulling adaptor replicates Test Unit.
Support to fixing distance: 6" (160 mm).
Weight: 13.2 lbs. (6.0 kg).

P-C-7216 BOLT FIXING ADAPTOR:

for testing fasteners up to 5/8" (16 mm) diameter.

P-C-7212 RING BOLT ADAPTOR:

for testing eye-bolts and safety harnesses.

P-C-7264 ALUMINUM LOAD SPREADING STOOL

Height: 4.7" (120 mm); Diameter: 4" (100 mm).

P-C-7265 THREADED ADAPTOR:

for normal applications. *(Please specify size)*

P-C-7266 SLOTTED ADAPTORS:

for torque anchors. *(Please specify size)*

Super Anchor Test System

P-C-7270 SUPER TEST UNIT

7200 lbs. (0-30 kN) gauge.
0-20,000 lbs. (0-90 kN) gauge.
Steel carrying case, calibration certificate.
Weight: 39 lbs. (18.0 kg).

Accessories

P-C-7271 LOAD DIFFUSION BRIDGE

3 adjustable legs 11" (275 mm) height adjustment.
Swivel feet to compensate for uneven surfaces.
Made of square hollow section steel.
Weight: 39 lbs. (18.0 kg).

P-C-7269 PULLING FRAME

P-C-7268 THREADED ADAPTORS

(Please specify size)

Distributed by:

NDT INTERNATIONAL, INC.

711 S. CREEK ROAD
WEST CHESTER, PA 19382

info@ndtint.com
www.ndtint.com

Tel: 610-793-1700
Fax: 610-793-1702