

PAD EYE, LIFTING LUG & LOAD TESTING

PROOF LOADED.
CRACK CHECKED.

Proof load testing of pad eyes, lifting lugs and lifting points, on site at the wharf, the yard or the fabrication shop. Our Green Monster PT12 pulls up to 12 t straight off the pad eye, with no crane or test weights. Calibrated 5–20 t load cells take rigged tests to 20 t. NDT before and after every pull.

GREEN MONSTER PT12 | 12 T DIRECT PULL | LOAD CELLS 5–20 T | MARINE ORDER 32 | MT & PT BEFORE AND AFTER | PROOF LOAD CERTIFICATES

GREEN MONSTER PT12 PAD EYE TESTER

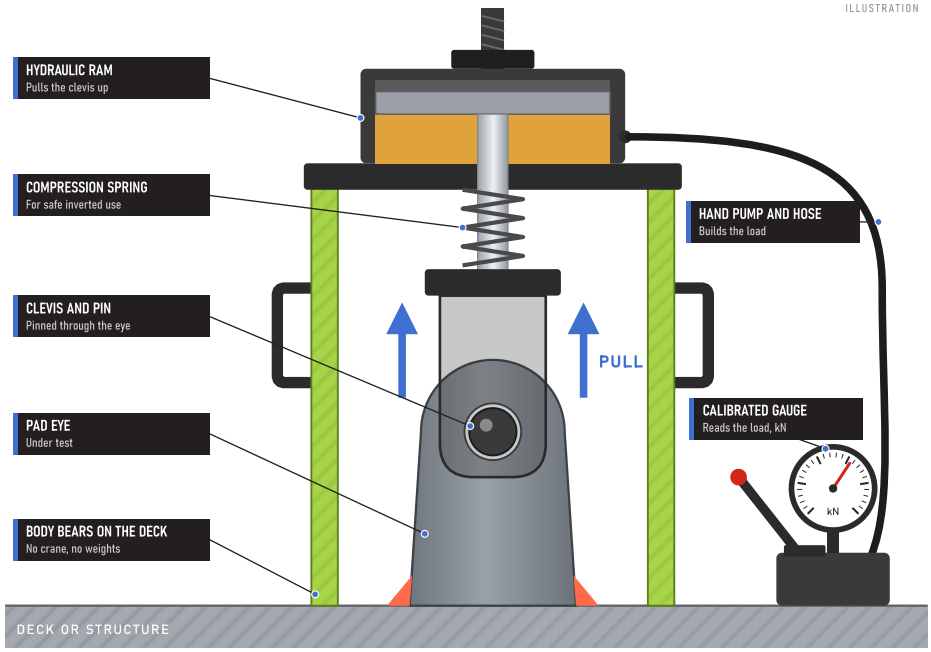
NO CRANE. NO TEST WEIGHTS. JUST THE PAD EYE.

The PT12 sits over the pad eye, pins through it and pulls hydraulically, bearing on the deck around it. The hand pump builds the load and the calibrated gauge reads it. Small enough to carry onto a vessel, or into tight spots.



Our PT12 in the Darwin workshop.

ILLUSTRATION



WORKING LOAD LIMIT
12,000 KG
Rated on the PT12's plate. Direct pull up to 12 t.

FORCE GAUGE
0–125 KN
Calibrated by a NATA-accredited calibration lab.

PAD EYE SIZES
TWO CLEVISES
Interchangeable, to suit different pad eyes.

PORTABLE
CARRY IT ON
Works inverted. Packs in its own transport case.

MARINE ORDER 32

PROOF LOADS TO MARINE ORDER 32.

Marine Order 32 (Cargo handling equipment) covers gear used to load and unload vessels. **Schedule 3 sets the proof load** for each type of gear, and after the test the item is examined for damage or permanent deformation. We test to Schedule 3, or to the proof load on your drawing or ITP.

TABLE 4 Chains, rings, hooks, shackles, swivels	Up to 25 t SWL: **2 × SWL**
TABLE 5 Trays, bins, crates and other receptacles	Up to 3 t: **2 × SWL** 3 to 12 t: **SWL + 3 t** 12 to 20 t: **1.25 × SWL**
TABLE 6 Lifting beams, spreaders, lifting frames	Up to 10 t: **2 × SWL** 10 to 160 t: **1.04 × SWL + 9.6 t**

Pad eyes: where the drawing gives no proof load, our procedure uses 2 × SWL up to 3 t and SWL + 3 t from 3 to 12 t.



Proof load against SWL from Marine Order 32 Schedule 3. Dots mark the largest SWL each kit can proof test.

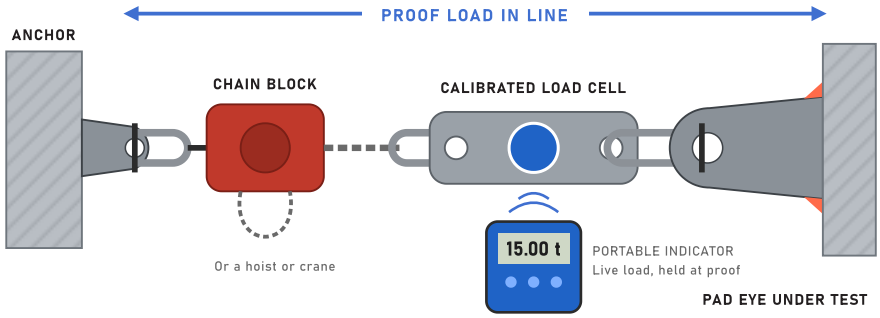
LOAD CELLS 5 TO 20 T

PAST 12 T, WE RIG IT AND MEASURE IT.

When the load is past the PT12's 12 t, or the lifting point won't take the tester, we rig the test with a calibrated load cell in line. The pull comes from a chain block, hoist or crane, and the load cell reads the load live while we hold it at proof.



Load cell in line on a mast pad eye test.



Example set-up. The rigging is planned to suit the item and the site.



LIVE READOUT

The portable indicator shows the load as it builds, so the proof load is reached and held without overshooting.

CALIBRATED AND TRACEABLE

Load cells and the PT12 gauge are calibrated, and the equipment and calibration details go on your certificate.

WHAT WE TEST

PAD EYES & LIFTING LUGS

On vessels, barges, masts, skids and structures, before first use or after repair.

FRAMES & SPREADERS

Lifting frames, spreaders and beams, attached the way they are designed to lift.

BASKETS, BINS & PALLETS

The proof load carried on the floor of the item, as Marine Order 32 asks.

WITNESS TESTING

We witness and report load tests run by others, to your specification.

BEFORE AND AFTER

NDT BEFORE AND AFTER EVERY PULL.



PT on an aluminium pad eye before its test.



MT on a steel lifting lug after its test.

01 CHECK BEFORE
Visual, plus MT on steel or PT on aluminium and stainless, on the eye and its welds.

02 MEASURE
Reference distance across the eye, recorded before the pull.

03 PULL AND HOLD
Proof load applied, held and recorded.

04 MEASURE AGAIN
Any change in the distance shows permanent set.

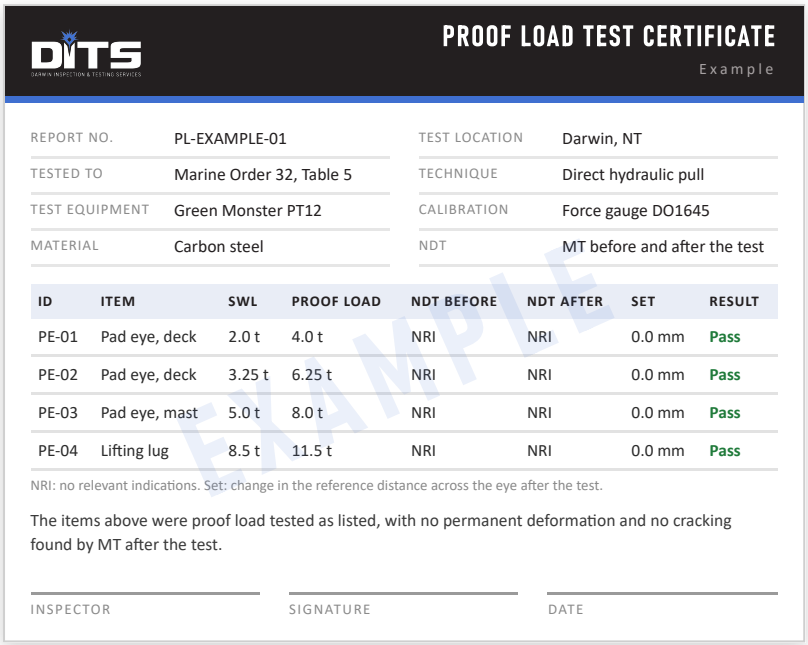
05 CHECK AFTER
Visual and MT or PT again, for cracks at the weld toes and the eye.

NATA accredited (No. 12303) for magnetic particle and penetrant testing, so the crack checks either side of the test carry weight.

WHAT YOU GET

A CERTIFICATE FOR EVERY ITEM, WITH THE EVIDENCE BEHIND IT.

Each item gets its own line on the certificate, backed by the NDT and measurements either side of the test, ready for your lifting equipment register.



DITS

PROOF LOAD TEST CERTIFICATE

Example

REPORT NO.	PL-EXAMPLE-01	TEST LOCATION	Darwin, NT
TESTED TO	Marine Order 32, Table 5	TECHNIQUE	Direct hydraulic pull
TEST EQUIPMENT	Green Monster PT12	CALIBRATION	Force gauge DO1645
MATERIAL	Carbon steel	NDT	MT before and after the test

ID	ITEM	SWL	PROOF LOAD	NDT BEFORE	NDT AFTER	SET	RESULT
PE-01	Pad eye, deck	2.0 t	4.0 t	NRI	NRI	0.0 mm	Pass
PE-02	Pad eye, deck	3.25 t	6.25 t	NRI	NRI	0.0 mm	Pass
PE-03	Pad eye, mast	5.0 t	8.0 t	NRI	NRI	0.0 mm	Pass
PE-04	Lifting lug	8.5 t	11.5 t	NRI	NRI	0.0 mm	Pass

NRI: no relevant indications. Set: change in the reference distance across the eye after the test.

The items above were proof load tested as listed, with no permanent deformation and no cracking found by MT after the test.

INSPECTOR SIGNATURE DATE

EXAMPLE

WITH EVERY TEST

- A proof load certificate listing each item, its SWL, the proof load applied and the result
- NDT reports for the checks before and after the test
- Before and after measurements across the eye
- Photos of each item
- The tester or load cell used, with its calibration details

WHAT WE NEED FROM YOU

- The SWL and proof load for each item, or the drawing
- Certified slings and shackles, rated for the test load
- Safe access, and a clear zone around the test

AT THE WHARF

Vessel masts, deck pad eyes, davits and barges, tested where they sit.

IN THE YARD

Lifting frames, spreaders, skids and baskets, tested before they ship.

REMOTE SITES

The PT12 and load cells travel with our technicians, wherever the job is.

OUR KIT

PAD EYE TESTER
GREEN MONSTER PT12
12 t hydraulic tester with hand pump and calibrated gauge.

RIGGED TESTS
LOAD CELLS 5–20 T
Calibrated load cells with a portable load indicator.

CRACK DETECTION
MT & PT
Yokes and penetrant kits, NATA accredited.

MEASUREMENT
PERMANENT SET
Reference marks measured before and after each pull.

PAD EYES DUE FOR A PROOF LOAD TEST?

Swift reporting, round the clock.

NATA 12303 | ISO 9001 | AINDT

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