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PULL TEST AND INSPECTION REPORT

AM-PT-3715A-001 20 Nov 2026

TEST 1	TEST 2	TEST 3
		
87.8 kg peak	90.2 kg peak	89.1 kg peak

PART NUMBER	SHAPE	GRADE	COATING	DIMENSIONS
3715A	**Pot**	**Neodymium N45**	**Nickel (Ni-Cu-Ni) over steel pot**	**OD 42mm x H 7.6mm, ID 6.5mm/12mm countersunk**

TEST RESULT

MEAN HOLDING FORCE	PEAK READING	LOWEST READING	SPREAD
89.03 kg 3 pulls, 10mm or thicker mild steel	**90.20 kg** highest of the set	**87.80 kg** lowest of the set	**2.40 kg** 2.7% of mean, SD 1.20 kg

INDIVIDUAL READINGS

READING	KG	NEWTONS	NOTE
Pull 1	**87.8**	**861**	below mean by 1.23 kg
Pull 2	**90.2**	**885**	above mean by 1.17 kg
Pull 3	**89.1**	**874**	above mean by 0.07 kg
Mean of 3	**89.03**	**873**	**1,188 times the magnet's own weight**

TEST CONDITIONS

Test date	**20 Nov 2026**	Operator	**A.S**
Equipment	**Digital force gauge**	Gauge mode	**Peak hold (PEAK / MEM)**
Substrate	**Mild steel plate, 10mm or thicker**	Surface condition	**Clean, dry, unpainted, flat**
Air gap / shim	**None. Direct contact**	Direction of pull	**Perpendicular to the magnet face**
Ambient temperature	**23 °C**	Sample	**One magnet, three consecutive pulls**
Unit weight	**74.92 g**	Report number	**AM-PT-3715A-001**

HOLDING FORCE IN USE — ESTIMATED ONLY

CONDITION	ESTIMATE	CHANGE	NOTE
Horizontal surface, magnet pulled straight off the face	**89.03 kg**		**Measured, the baseline above**
Vertical surface, load hanging down the face	**26.71 kg**	**-70%**	**Held by friction, not by the pull force**

Mount with no air gap. A pot magnet works through its steel cup, and the cup only closes the magnetic circuit while it is touching the plate. The face and the steel must meet metal to metal, on bare, flat, clean steel, with nothing between them. Paint, powder coat, decals, tape, rust, gaskets, packers and swarf are all air gaps, and every one of them costs holding force.
Only the first row above was measured. The vertical figure is a projection, calculated rather than tested, and is a planning figure rather than a specification: hung down a vertical face the magnet is held by friction alone and keeps roughly 30 per cent of its straight pull. How much friction is available depends on the finish of both surfaces.

Measured Result — Test Conditions Apply

The headline figure is a physical measurement taken in our own workshop and applies only to the conditions recorded above. The projections are estimates, not guarantees, and anything that opens a gap between the magnet face and the steel costs more holding force than most people expect.

Results come from a single sample and a small number of pulls. They are not a certified calibration and must not be relied on for lifting, suspension, overhead, safety-critical or life-supporting applications. For those, specify a device rated and certified for the purpose. The Aussie Magnet Co Pty Ltd accepts no liability for decisions made solely on these figures.