



Australian Government

National Measurement
Institute

Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval

NMI S638

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the instruments herein described.

Gedge Systems Model Hercules-10t Load Cell

submitted by Gedge Systems Pty Ltd
 50 Mandarin Street
 Fairfield East NSW 2165

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This approval has been granted with reference to document NMI R 60, *Metrological Regulation for Load Cells*, dated July 2004.

This approval becomes subject to review on 1/09/19, and then every 5 years thereafter.

DOCUMENT HISTORY

| Rev | Reason/Details | Date |
|-----|---|----------|
| 0 | Pattern and variant 1 – approved – certificate issued | 18/08/14 |
| | | |

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI S638' and only by persons authorised by the submitter.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S638' in addition to the approval number of the instrument, and only by persons authorised by the submitter.

It is the submitter's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with document NMI P 106.

The values of the performance criteria (maximum number of scale intervals etc.) applicable to an instrument incorporating the pattern approved herein shall be within the limits specified herein and in any approval documentation for the other components.

Signed by a person authorised by the Chief Metrologist to exercise their powers under Regulation 60 of the *National Measurement Regulations 1999*.

A handwritten signature in black ink, appearing to be 'Dr A Rawlinson', with a horizontal line underneath.

Dr A Rawlinson

TECHNICAL SCHEDULE No S638

1. Description of Pattern approved on 18/08/14

A Gedge System model Hercules-10t stainless steel compression load cell of 10 000 kg maximum capacity (Figure 1 and Table 1) and approved for use with up to 5000 verification scale intervals.

1.1 Method of Mounting

Mounting is to be in accordance with the manufacturer's instructions and as shown in Figure 1.

1.2 Markings

Each load cell is marked with the following:

| | |
|--|---------------|
| Manufacturer's mark, or name written in full | Gedge Systems |
| Model number | |
| Maximum capacity, E_{max} | kg (t) |
| Serial number | |
| Pattern approval mark | NMI S638 |

1.3 Table of Specifications

Specifications for the pattern are given in Table 1.

2. Description of Variant 1 approved on 18/08/14

Certain other capacities and characteristics of the Gedge Systems Hercules series as listed in Table 1.

Type: Gedge Systems Hercules-# series as listed below, where # in the model number represents the capacity (E_{max}) in tonnes, e.g. the pattern model Hercules-10t is of 10 t (10 000 kg) capacity.

TABLE 1

Type: Gedge Systems Hercules-# series as listed below, where # in the model number represents the capacity (E_{max}) in tonnes, e.g. the pattern model Hercules-10t is of 10 t (10 000 kg) capacity.

| Model Number | #=10t | #=20t | #=30t | #=40t | #=50t |
|-------------------------------|--------|--------|--------|--------|--------|
| E_{max} (kg) | 10 000 | 20 000 | 30 000 | 40 000 | 50 000 |
| E_{min} (kg) | 2 | 2 | 2 | 2 | 2 |
| Class | C | C | C | C | C |
| nLC | 5000 | 5000 | 5000 | 5000 | 5000 |
| V_{min} (kg) | 0.909 | 1.818 | 2.727 | 3.636 | 4.545 |
| DR (kg) | 0.975 | 1.95 | 2.925 | 3.9 | 4.875 |
| mV/V | 2 | | | | |
| Input imp (Ω) | 700 | | | | |
| Voltage (V) | 15 | | | | |
| Cable length (m) | 15 | | | | |
| Number of leads (plus shield) | 4 | | | | |

Where:

| | | |
|------------|---|--|
| E_{max} | = | Maximum capacity |
| E_{min} | = | Minimum dead load |
| nLC | = | Maximum number of verification intervals |
| V_{min} | = | Minimum value of verification interval |
| DR | = | Minimum dead load output return value |
| mV/V | = | Output rating (nominal) |
| Input imp. | = | Input impedance (nominal) |
| Voltage | = | Maximum supply voltage (AC/DC) |

FIGURE S638 – 1



Gedge Systems Hercules Series Load Cell Including Mounting Arrangement

~ End of Document ~