Australian Government
Department of Industry, Innovation and Science

National Measurement Institute

36 Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval

NMI S776

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.

Flintec Model RC3D GEN2–30t–C4 Digital Load Cell

submitted by Ultrahawke Pty Ltd
2/9 Production Drive
Campbellfield VIC 3061.

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 1/05/24, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern and variant 1 approved – certificate issued	10/04/19

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI S776' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S776' in addition to the approval number of the instrument, and only by persons authorised by the submittor.

It is the submittor'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*.

Darryl Hines
Manager
Pattern Approval, Policy and Licensing Section

TECHNICAL SCHEDULE No S776

1. Description of Pattern approved on 10/04/19

A Flintec model RC3D GEN2–30t–C4 digital load cell of 30 000 kg maximum capacity (Figure 1 and Table 1) and approved for use with up to 4000 verification scale intervals.

Any load cell of this approval may also be known as Diverseco load cell of the same model, in which case the manufacturer's mark required in the markings may be the Diverseco mark rather than Flintec GmbH.

These load cells shall only be used with indicators which are NMI-approved for use with compatible Flintec digital load cells.

The load cells are provided with two communication ports and are connected to an indicator in daisy chain fashion as shown in Figure 2. A termination device is used in the second port of the last load cell in the chain.

1.1 Method of Mounting

Mounting is to be in accordance with the manufacturer's instructions and as shown in Figures 3 to 4.

1.2 Markings

Each load cell is marked with the following:

Manufacturer's mark, or name written in full	Flintec GmbH
Model number	RC3D Gen2
Maximum capacity, E_{max}	…….. kg (or t)
Serial number	……..
Pattern approval mark	NMI S776

1.3 Tables of Specifications

Specifications for the pattern are given below and in Table 1.

2. Description of Variant 1 approved on 10/04/19

Certain other capacities and characteristics of the RC3D GEN2 series as listed in Table 1.

Type: Flintec RC3D GEN2-#t-C4 series as listed below, where # in the model number represents the capacity (*Emax)* in tonnes, e.g. the pattern model RC3D GEN2–30t–C4 is of 30 000 kg capacity.

TABLE 1

Model Number	#=30	#=40	#=50
Maximum capacity, E_{max} (kg)	30 000	40 000	50 000
Accuracy class - Classification	C4	C4	C4
Maximum number of verification intervals, nLC	4000	4000	4000
Minimum value of verification interval, v_{min} (kg)	2	2.67	3.33
Minimum dead load output return value, DR (kg)	3.75	5	6.25

TABLE 1 (cont…)

Output rating (resolution)	200 000 counts at E_{max}
Supply voltage (DC), (V)	12
Cable length	up to 20 m (*)
Communication	RS485
Apportionment factor, p_{LC}	0.8
Software version number	XRCv2xxxxxx (#) (where xxxxxx refers to the identification of non-legally relevant software)
Digital indicator	SysTec Model IT1 indicator SysTec Model IT6000E indicator SysTec Model IT8000E indicator (**)

(*) The load cells are provided with two communication ports into which connecting cables to other load cells and to the indicator are fitted (Figure 1). These cables may be up to 20 metres in length. The load cells are connected to an indicator in daisy chain fashion as shown in Figure 2. A termination device is used in the second port of the last load cell in the chain.

(**) Or alternative NMI-approved for use with compatible Flintec RC3 digital load cells.

(#) The software version number can be seen using a SysTec indicator.

The instructions for accessing the software ID are as follows (starting from the normal weighing mode):

i) SysTec Model IT1 indicator

- Press the ‘F4’ [F4] key, and then the ‘F5’ [F5] key.
- Press the ‘F1’ [F1] key until the ‘Master Mode’ is displayed.
- Press the ‘F5’ [F5] key twice. The software version number is displayed.
- Press the ‘F1’ [F1] key to display the software version number of other load cells.

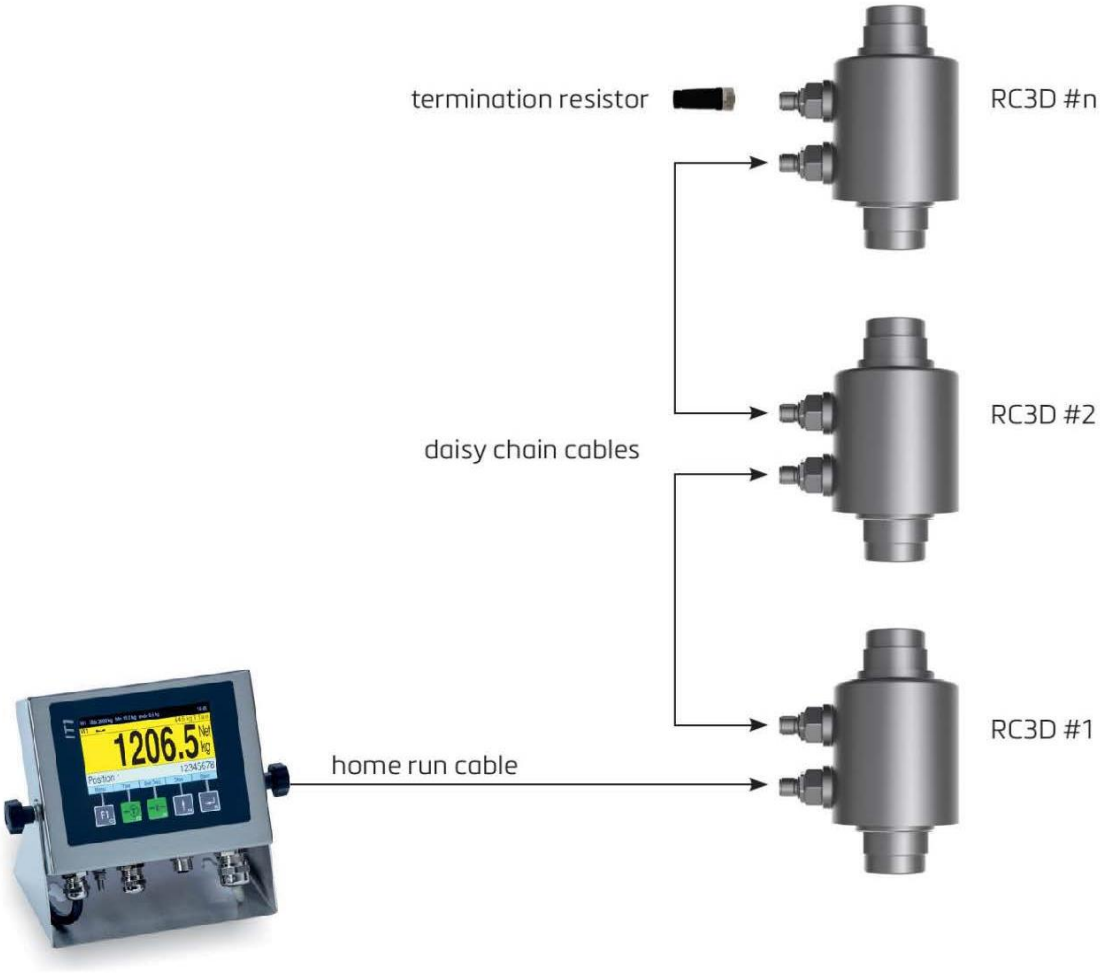
ii) SysTec model IT6000E or SysTec IT8000E indicator

- Press the [Alt] and [⚖] keys simultaneously.
- The identification number of operating system and software version numbers are automatically scrolled.

FIGURE S776 – 1

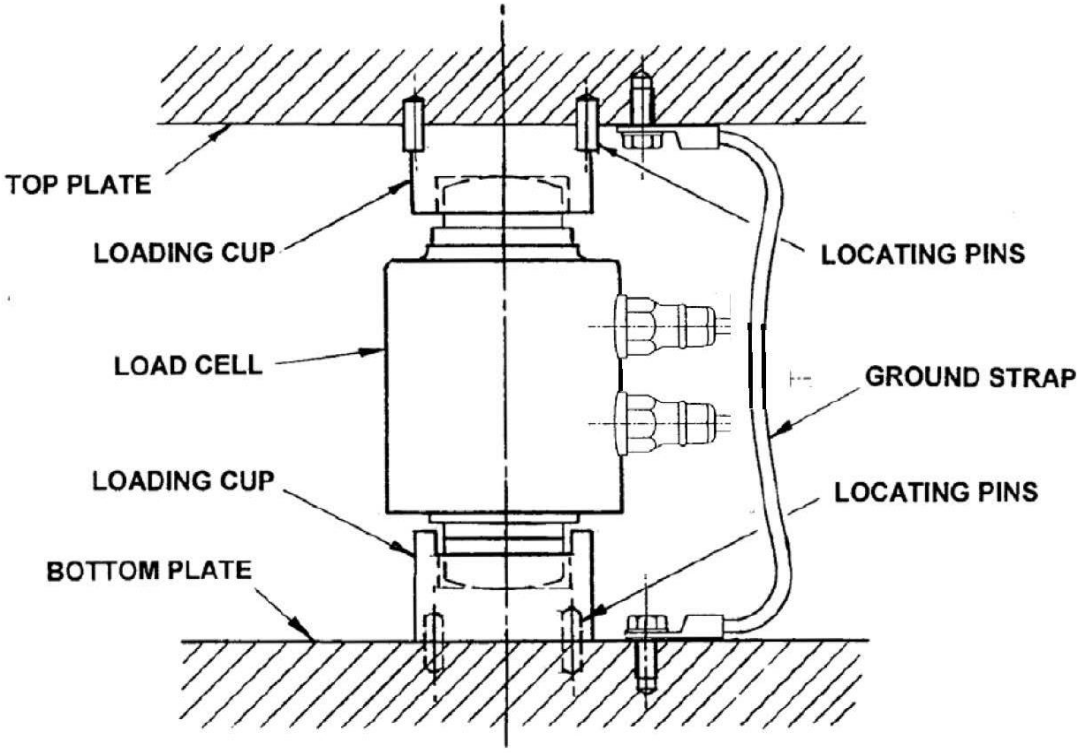
Flintec Model RC3D GEN2 Series Digital Load Cell (Pattern & Variant 1)

FIGURE S776 – 2



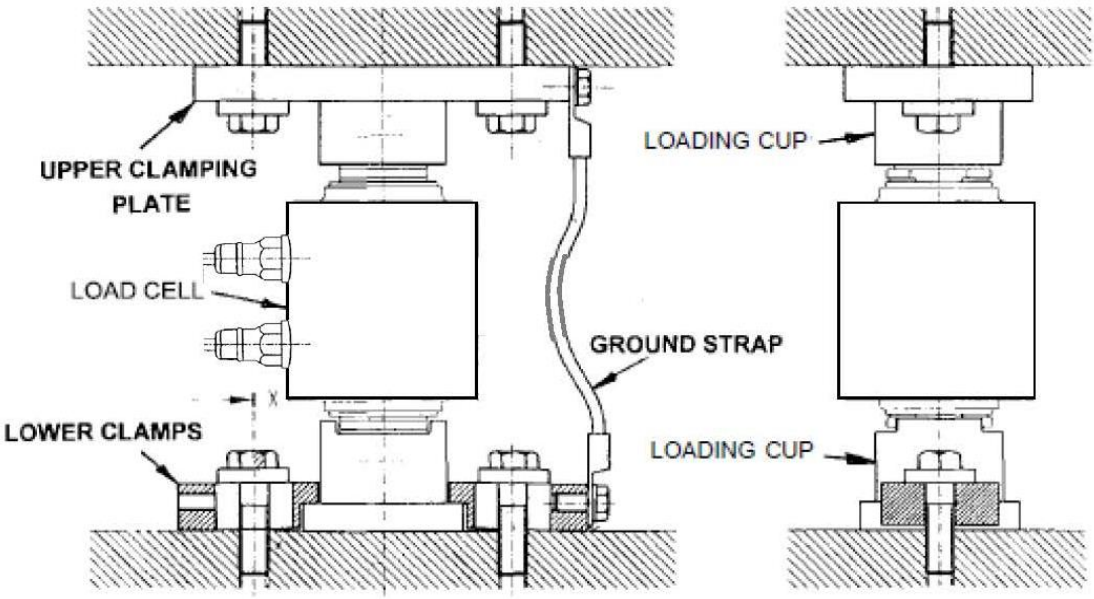
Flintec RC3D GEN2 Series Daisy Chain Network

FIGURE S776 – 3



A Typical Mounting Arrangement

FIGURE S776 – 4



Alternative Mounting Arrangement

~ End of Document ~