

National Measurement Institute

36 Bradfield Road, West Lindfield NSW 2070

Certificate of Approval NMI 6/14G/17

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.

Delford Model 8060 Automatic Catchweighing Instrument

submitted by Marel Limited

(formerly AEW Delford Systems Ltd)

now of Wyncolls Road Severalls Industrial Park

Colchester CO4 9HW United Kingdom

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 51, *Automatic Catchweighing Instruments*, dated August 2009.

This approval is subject to review at the decision of the Chief Metrologist in accordance with the conditions specified in the document NMI P 106.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern provisionally approved – interim certificate issued	29/03/07
1	Pattern & variants 1 to 6 approved – interim certificate issued	30/10/07
2	Variant 7 approved – interim certificate issued (incl. notification	10/06/10
	of change)	
3	Variant 7 approved – certificate issued (incl. notification of	6/08/10
	change)	
4	Pattern & variants 1 to 7 reviewed & updated – certificate	19/04/17
	issued	

DOCUMENT HISTORY (cont...)

Rev	Reason/Details	Date
5	TABLE 2 amended and variants 8 to 11 approved – certificate	21/06/19
	issued	
6	TABLE 2 amended and variants 12 to 13 approved –	17/11/20
	certificate issued	
7	Variant 14 approved – certificate issued	5/10/21
8	Variant 15 approved – certificate issued	08/12/21

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/14G/17' 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.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificates No S1/0/A or No S1/0B.

This approval shall NOT be used in conjunction with General Certificate of Approval No 6B/0.

Special Condition of Approval:

Certain aspects of this instrument (in particular label formats) are able to be configured by the user. Whilst NMI believes that acceptable label and ticket formats can be achieved for typical basic sales modes, it is also possible for the instrument to be configured to produce unacceptable formats, and use of some formats may be inappropriate for different sales modes. It is the responsibility of the user to ensure that acceptable and appropriate formats are used in any particular situation.

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 Policy and Regulatory Services

TECHNICAL SCHEDULE No 6/14G/17

1. Description of Pattern

provisionally approved on 29/03/07 approved 30/10/07

A Delford model 8060 class Y(a) automatic catchweighing instrument (Figures 1 and 2) which is approved for use to weigh objects while in motion. May also be known as Marel instruments of the same model.

Instruments have a price computing facility and are intended for use as weigh/price labellers.

Note: It may be possible for this instrument to operate in modes other than as an automatic catchweighing instrument. Use of such modes is not approved.

1.1 Details

The pattern is a multi-interval class Y(a) automatic catchweighing instrument with a verification scale interval (e_1) of 1 g up to 1500 g and with a verification scale interval (e_2) of 2 g from 1500 g up to the maximum capacity of 4600 g (the maximum capacity may alternatively be limited to 3000 g).

Instruments are approved for use over a temperature range of 0 °C to +35 °C and must be so marked.

The instrument operates dynamically (package in motion on the weighing receptor). The instrument has a variable conveyor speed with a maximum conveyor speed for the weighing receptor of 0.8 m/s (48 m/min).

The instrument is nominally rated for a maximum throughput of 60 packs per minute, however the throughput in practical operation is dependent on factors such as belt speed, pack length and label printing and application speed. The instrument calculates optimum throughput based on such factors (and may automatically vary conveyor speed to achieve acceptable weighing). Where acceptable weighing is not achieved the instrument detects this and provides error messages.

Instruments may be fitted with sockets (output interfacing capability) for the connection of peripheral and/or auxiliary devices, and for the external programming of PLU and labelling data. Interfaces may be of the following types – digital input/output, CAN bus, Serial RS-232, RS-422, RS-485.

The pattern comprises:

- A weighing unit with associated conveyor system (including infeed/outfeed conveyors);
- A display and control electronics cabinet; and
- A printing unit.

1.2 Zero

The instrument has an initial zero-setting device which operates to zero the instrument to within $\pm 0.25e_1$ for the initial zero-setting after power to the instrument is switched on. This device has a nominal range of not more than 20% of the maximum capacity of the instrument.

The instrument has an automatic zero-setting device which operates to zero the instrument to within $\pm 0.25e_1$ periodically (whenever an adequate interruption in the supply of packs occurs, or after 100 packs, or after 2 minutes, whichever is the sooner). This device has a nominal range of not more than 4% of the maximum capacity of the instrument and may operate whilst the conveyors are operating.

1.3 Tare

The instrument has a pre-set subtractive taring device of up to 1.000 kg. Preset tare values may be stored in association with product-look-up (PLU) items.

The instrument has a facility whereby pre-set tare values may be set in increments of one-eighth of the verification scale interval. This is not indicated by a numeric indication of the actual tare value, but by use of a number of dots (up to seven) following the tare value. For example, if the tare value is followed by three dots

like **0.501**: kg, this indicates a tare value of 0.501 kg and 3/8 of a verification scale interval (e_1) – i.e. as the verification scale interval is 1 g, 3/8 x e1 = 0.000375 and the tare value is 0.501375 kg.

1.4 Operation

On switch-on the weighing instrument carries out a checking sequence, displays the software version, and enters a 15 minute warm-up period, after which it enters its normal weighing mode.

Whilst the instrument is stopped, program mode can be selected to allow for entering data into the product-look-up (PLU) items (entering of data into the PLU items can occur whilst the instrument is operating, but in this case alteration of the currently operating PLU item is not possible).

In dynamic mode, an object to be weighed moves from the infeed conveyors to the weighing receptor conveyor and is weighed dynamically. After weighing, the object continues onto the outfeed conveyor where a label is then printed and applied to the object.

If the instrument is unable to obtain an acceptable weight reading, the weight and price fields are blanked and an error message is displayed.

1.5 Display and Control Electronics (Figure 2)

The instrument display (LCD type), keyboard, main system processor and conveyor control electronics are housed in a control cabinet. This unit controls the system and stores data such as system parameters (e.g. conveyor speed, printing unit position and label format).

The weight value is displayed in kg or g (refer also to Variant 5).

Instruments have a price-computing facility with unit price to \$999.99/kg, price to \$9999.99, a display of the pre-set tare value and a product-look-up (PLU) facility (also known by Delford as 'comformats'). Note that particular 'comformats' may limit aspects of the operation of the instrument (e.g. the unit price and price may be limited).

1.6 Weighing Unit and Conveyors (Figure 1b)

The weighing unit of the Delford model 8060 catchweigher uses a Tedea Huntleigh model 1040 C3/30 load cell of 15 kg capacity.

The load receptor (belt conveyor of the weighing unit) has dimensions of 460 x 254 mm. A plastic cover may be provided over the weighing area.

The load cell power supply, signal processing and conversion electronics are housed directly below the conveyor in a box attached to the platform base. Weight data is transferred to the display and control electronics unit via a fibre optic cable.

The conveyor system comprises an infeed and separator conveyor, the weighing unit/conveyor and an outfeed conveyor, with an associated electric motor and drive arrangement for each conveyor (the drive arrangement including control electronics are contained within the display and control electronics housing, see clause 1.5 above).

Optical sensors are located along the conveyor path. The infeed conveyors space the objects to be weighed and the side guides are manually adjusted to suit the pack size.

Where instruments are liable to be tilted (i.e. they are not installed in a permanently fixed location) they are provided with adjustable feet and a level indicator. Adjacent to the level indicator is a notice stating 'instrument must be level when in use', or similar wording.

1.7 Printing Unit

The printing unit is comprised of a thermal printer with associated electronics, utilising compressed air to apply the label to the weighed object.

The printing unit also incorporates a display and keyboard to allow configuration and testing of the printing unit (e.g. print density and speed).

More than one printing unit may be provided.

1.8 Verification Provision

Provision is made for the application of a verification mark.

1.9 Sealing Provision

Calibration adjustments are able to be made by switches and potentiometers on the voltage to frequency circuit board located within a diecast box beneath the weighing platform.

Sealing of access to these adjustments can be achieved by applying destructible adhesive labels to prevent access within the diecast box as shown in Figure 3.

To do so it is necessary to use a 5 mm hexagonal key to remove the instrument platter and then lift out the instrument platter (also taking the drive belt from the motor). The manufacturer advises that this is an operation which the owner may be expected to perform for cleaning purposes.

Note: If it is not acceptable to a trade measurement authority to perform this operation, it is alternatively possible to seal access to the adjustments by use of a destructible adhesive label over one of the hexagonal bolts which attach the platter.

In addition to the above, calibration and configuration adjustments may be carried out using the instrument software. Physical access keys may restrict access to these facilities to appropriate personnel (e.g. manufacturer, engineer, supervisor).

Also, access to the calibration and configuration facilities of the instrument is secured by a password and evidence of alteration is provided by non-resettable calibration and configuration counters which are incremented whenever the calibration or configuration parameters of the instrument are altered.

The value of these counters can be seen as follows:

- (a) Press the arrow keys adjacent to the following text items: 'Program Mode', 'System Admin', 'Counters'. The calibration and configuration counter values can now be seen.
- (b) To return to normal operational mode, press the arrow keys adjacent to the following text items: 'Return', 'Main Menu', 'Weigh Mode'.

The calibration and configuration counter values shown should be recorded onto the verification/certification label to indicate the value when verification/certification was carried out.

The calibration and configuration counter values recorded on the verification/certification label, and those indicated in step (b) above should be the same. Any discrepancy indicates that calibration/configuration data has been altered.

1.10 Descriptive Markings and Notices

Instruments are marked with the following data, together in one location, in the form shown at right:

Manufacturer's mark, or name written in full	
Importer's mark, or name written in full	
Model designation	
Serial number	
Accuracy class	Y(a)
Pattern approval mark	6/14G/17
Maximum capacity	<i>Max</i> kg
Minimum capacity	<i>Min</i> kg
Verification scale interval	e = kg
Maximum subtractive tare	$T = - \dots kg$
Maximum conveyor speed	m/min or m/s
Special temperature limits	0°C to +35°C

Note: For multi-interval instruments such as the pattern, the Maximum Capacity and Verification Scale Interval shall include the values for both interval ranges (e.g. Max 1500 / 4600 kg and e = 1 / 2 g).

2. Description of Variant 1

approved on 30/10/07

Instruments in the Delford 8000 series of certain capacities and having characteristics as indicated in Table 1. (Note that the model and configuration shown in bold is that described as the pattern.)

Some models or configurations are multi-interval whilst others are single interval instruments.

In all cases the special temperature limits of 0°C to 35°C apply.

3. Description of Variant 2

approved on 30/10/07

The pattern or variants using alternative printer arrangements, including base labellers, top labellers, rotary labellers, and 'sleeving/labelling' units with labels applied by blowing onto or by physically placing on the pack. Multiple printers may also be provided.

The use of alternative printers may require differing outfeed conveyor lengths.

Please note the Special Condition of Approval regarding printing formats.

Ancillary package handling devices (e.g. a 'package centraliser') may also be provided.

4. Description of Variant 3

approved on 30/10/07

With the display and keyboard located in a separate module to the control electronics (e.g. Figures 4 and 5).

5. Description of Variant 4

approved on 30/10/07

With a modified construction arrangement (e.g. Figures 4 and 5).

The main instrument framework supports infeed, separator and weighing conveyors as well as the control and display electronics cabinet.

The outfeed conveyor and label printer are located on a separate frame which is connected to the main framework following the weighing conveyor.

6. Description of Variant 5

approved on 30/10/07

In situations where the instrument is intended to be used for packing items for export the instrument may be provided with alternative units and currency denominations (e.g. lb, \pm , \pm). In this case instruments shall be marked 'UNITS OTHER THAN kg and \$ MAY ONLY BE USED FOR EXPORT PURPOSES'.

7. Description of Variant 6

approved on 30/10/07

The Delford model 8500 (Figure 5b) using a Tedea Huntleigh model 1260 C3 load cell of 75 kg maximum capacity, with platform dimensions of 700×400 mm and in a multi-interval configuration having three interval ranges: $Max_1 = 5$ kg $e_1 = 5$ g, $Max_2 = 10$ kg $e_2 = 10$ g, $Max_3 = 40$ kg $e_3 = 20$ g.

The special temperature limits of 0°C to 35°C apply.

The instrument has a maximum belt speed of 0.8 m/s (48 m/min) for loads up to 3000 g, reducing linearly to 0.4 m/s (28.2 m/min) for loads of 5500 g, and remaining at 0.4 m/s (28.2 m/min) for loads above 5500 g. Should the applicable belt speeds be exceeded an error message will appear and the belt speed may be reduced automatically (or manually) until acceptable weighing is achieved.

The model 8500 has a pre-set subtractive taring device of up 9999 g capacity.

The Delford model 8500 described above may alternatively be provided in a single range configuration with Max = 40 kg and e = 20 g.

TABLE 1

Model	Nominal	Multi-	Max ₁	e 1	Max ₂	e 2	Max	Load	Platform
	Throughput	interval	g	g	g	g	speed	cell	size
	packs/min						m/s		
8060	60	Υ	1500	1	4600	2	(#)	X	Α
		Υ	1500	1	3000	2	8.0	Χ	Α
		Ν	3000	2			8.0	X	Α
		Ν	4600	2			(#)	X	Α
		Ν	5500	2			(#)	Χ	Α
8060HP	60	Υ	10000	5	20000	10	(#)	У	D
		Ν	27500	10			(#)	У	D
8100	100	Υ	1500	1	3000	2	0.8	Х	Α
		Υ	1500	1	4600	2	(#)	Χ	Α
		Ν	3000	2			0.8	X	Α
		Ν	4600	2			(#)	X	Α
		Ν	5500	2			(#)	Χ	Α
8120	120	Υ	1500	1	3000	2	0.8	Х	В
		Υ	1500	1	4600	2	(#)	Χ	В
		Ν	3000	2			0.8	Х	В
		Ν	4600	2			(#)	Х	В
		Ν	5500	2			(#)	Х	В
8160	160	N	1500	1			(#)	Х	С
		Ν	1500	2			(#)	Х	С

Notes:

(#) These instruments have a maximum belt speed of 0.8 m/s (48 m/min)

for loads up to 3000 g, reducing linearly to 0.4 m/s (28.2 m/min) for loads of 5500 g, and remaining at 0.4 m/s (28.2 m/min) for loads above 5500 g. Should the applicable belt speeds be exceeded an error message will appear and the belt speed may be reduced

automatically (or manually) until acceptable weighing is achieved.

Tare capacity: The model 8060HP has a pre-set subtractive taring device of up to

9999 g capacity. Other models have a pre-set subtractive taring

device of up to 1000 g capacity.

Load cell: x = Tedea Huntleigh model 1040 C3/30, 15 kg maximum capacity

y = Tedea Huntleigh model 1260 C3, 50 kg maximum capacity

Platform size: $A = 460 \times 254 \text{ mm}$

 $B = 420 \times 254 \text{ mm}$ $C = 300 \times 254 \text{ mm}$ $D = 700 \times 400 \text{ mm}$

8. Description of Variant 7

approved on 6/08/10

The Marel 9000 series of class Y(a) automatic catchweighing instruments which are similar to the Delford 8000 series as described for the pattern and variants 1 to 5. Instruments in the Marel 9000 series have certain capacities and characteristics as indicated in Table 2. May also be known as the Delford WPL9000 series.

Some models or configurations are multi-interval whilst others are single interval instruments.

In all cases the special temperature limits of 0°C to 35°C apply and instruments must be so marked.

The 9000 series instruments have a pre-set subtractive taring device of up to 450 verification scale intervals (e) for single interval instruments and 450 verification scale intervals (e_1) for multi-interval instruments.

The 9000 series instruments (Figure 6) are comprised of:

- A weighing unit with associated conveyor system (including infeed/outfeed conveyors);
- A Marel model 9000 terminal/indicator (Figure 7a) with an LCD touch screen display and control electronics cabinet; and
- A printing unit.

8.1 Sealing

Access to calibration and configuration facilities of the instrument is secured by a Marel USB dongle (Figure 7b) and a password. In addition evidence of alteration is provided by non-resettable calibration and configuration counters. The value of these counters can be seen in 'Main Menu/System Information' and should be recorded onto the verification label to indicate the value when verification was carried out.

9. Description of Variant 8

approved on 21/06/19

The Marel model 9500W class Y(a) automatic catchweighing instruments which are similar to variant 7 but having a revised terminal/indicator fixed to the top of the electrical cabinet located behind the conveyors (Figure 8) and in certain capacities as listed in Table 2. May also be known as Delford model WPL9500W.

9.1 Software

Instruments are fitted with Windows XP operating system and Marel Weighing software 1.1

The weighing measurement software version and Windows operating system information can be seen by pressing the 'System Information' key/icon.

10. Description of Variant 9

approved on 21/06/19

Variants 7 to 8 may be fitted with alternative Windows 7 or Windows 10 operating system.

11. Description of Variant 10

approved on 21/06/19

The Marel model 9500+ class Y(a) automatic catchweighing instruments which are similar to variant 8 but having a processor board type M10K and in certain capacities as listed in Table 2. May also be known as Delford model WPL9500+.

11.1 Software

Instruments are fitted with Windows 7 or Windows 10 operating system and Marel Weighing software 1.2.

The weighing measurement software version and Windows operating system information can be seen by pressing the 'System Information' key/icon.

12. Description of Variant 11

approved on 21/06/19

The Marel model 9000+ series of class Y(a) automatic catchweighing instruments which are similar to Marel model 9100 instruments but having a revised terminal/indicator with a processor board type M10K and in certain capacities as listed in Table 2. May also be known as Delford model WPL9000+.

12.1 Software

Instruments are fitted with Windows 7 or Windows 10 operating system and Marel Weighing software 1.2.

The weighing measurement software version and Windows operating system information can be seen by pressing the 'System Information' key/icon.

13. Description of Variant 12

approved on 17/11/20

The Marel models 9040, 9060, 9100, 9120, 9160 and 9000+ class Y(a) automatic catchweighing instruments using an HBM model SP4MC3MR load cell of 15 kg maximum capacity and in certain capacities as listed in Table 2.

14. Description of Variant 13

approved on 17/11/20

The Marel models 9500, 9500W and 9500+ class Y(a) automatic catchweighing instruments using an HBM model PW16A C3 load cell of 75 kg maximum capacity and in certain capacities as listed in Table 2.

TABLE 2

Model	odel Nominal Multi- Maximu		Maximum	Verification	Max	Load	Platform
	throughput	interval			speed	cell	size
	packs/min			interval			
			(g)	(g)	(m/s)	(#1)	(#2)
9040	40	Yes	1000/2000	1/2	0.8	U	Α
		Yes	1500/3000	1/2	0.8	W/X/U	Α
		Yes	1500/4600	1/2	(#3)	W/X/U	Α
		No	3000	2	0.8	W/X/U	Α
		No	4600	2	(#3)	W/X/U	Α
		No	5500	2	(#3)	W/X/U	Α
9060	60	Yes	1000/2000	1/2	0.8	U	A/B/H/L/M
		Yes	1500/3000	1/2	0.8	W/X/U	A/B/H/L/M
		Yes	1500/4600	1/2	(#3)	W/X/U	A/B/H/L/M
		No	3000	2	0.8	W/X/U	A/B/H/L/M
		No	4600	2	(#3)	W/X/U	A/B/H/L/M
		No	5500	2	(#3)	W/X/U	A/B/H/L/M
9100,	100	Yes	1000/2000	1/2	0.8 (*)	U	A/B/H/L/M
9000+		Yes	1500/3000	1/2	0.8 (*)	W/X/U	A/B/H/L/M
		Yes	1500/4600	1/2	(#3) (*)	W/X/U	A/B/H/L/M
		No	3000	2	0.8 (*)	W/X/U	A/B/H/L/M
		No	4600	2	(#3) (*)	W/X/U	A/B/H/L/M
		No	5500	2	(#3) (*)	W/X/U	A/B/H/L/M
9120	120	Yes	1000/2000	1/2	0.8 (*)	U	C/D
		Yes	1500/3000	1/2	0.8 (*)	W/X/U	C/D
		Yes	1500/4600	1/2	(#3) (*)	W/X/U	C/D
		No	3000	2	0.8 (*)	W/X/U	C/D
		No	4600	2	(#3) (*)	W/X/U	C/D
		No	5500	2	(#3) (*)	W/X/U	C/D
9160	160	No	1500	1	0.8 (*)	W/X/U	E/J
		No	1500	2	0.8 (*)	W/X/U	E/J
9500,	40	Yes	10000/20000	5/10	0.4	Y/Z/V	F/G/K
9500W,		Yes	5000/10000/40000	5/10/20	0.4	Y/Z/V	F/G/K(#4)
9500+		Yes	10000/40000	10/20	0.4	Y/Z/V	F/G/K(#4)
		No	27500	10	0.4	Y/Z/V	F/G/K(#4)
		No	40000	20	0.4	Y/Z/V	F/G/K(#4)

Notes:

(#1) Load cells – All Tedea Huntleigh (Vishay) models:

W = model 1040 C3/30 of 10 kg maximum capacity.

X = model 1040 C3/30 of 15 kg maximum capacity.

Y = model 1260 C3 of 50 kg maximum capacity.

Z = model 1260 C3 of 75 kg maximum capacity.

Load cells – All HBM models:

U = model SP4MC3MR of 15 kg maximum capacity.

V = model PW16A C3 of 75 kg maximum capacity.

(#2) Platform sizes: $A = 460 \times 254 \text{ mm}$ $B = 460 \times 354 \text{ mm}$

 $C = 420 \times 254 \text{ mm}$ $D = 420 \times 354 \text{ mm}$

 $E = 300 \times 254 \text{ mm}$ $F = 700 \times 400 \text{ mm}$

 $G = 700 \times 500 \text{ mm}$ $H = 700 \times 254 \text{ mm}$

 $J = 360 \times 254 \text{ mm}$ $K = 750 \times 500 \text{ mm}$

 $L = 520 \times 254 \text{ mm}$ $M = 520 \times 354 \text{ mm}$

(#3) Belt speed: These instruments have a maximum belt speed of 0.8 m/s

(48 m/min). For loads above 3000 g, the conveyors automatically slow down to 0.6 m/s (36 m/min). Should the applicable belt speeds be exceeded an error message will appear and the belt speed may be reduced automatically (or

manually) until acceptable weighing is achieved.

(#4) Belt speed: Model 9500+ instruments have a maximum belt speed of

0.6 m/s (36 m/min). For loads above 20000 g, the conveyors automatically slow down to 0.4 m/s (24 m/min). Should the applicable belt speeds be exceeded an error message will appear and the belt speed may be reduced automatically (or manually) until acceptable weighing is

achieved.

(*) Belt speed: Model 9100 or 9120 or 9160 or 9000+ instruments have a

maximum belt speed of 1 m/s (60 m/min) for loads between 100 g to 1000 g. Should the applicable belt speeds be exceeded an error message will appear and the belt speed may be reduced automatically (or manually) until acceptable

weighing is achieved.

15. Description of Variant 14

approved on 5/10/21

The Marel models 9040, 9060, 9100, 9000+, 9120, 9160, 9500, 9500W and 9500+ series instruments without an integral printer/labeller (Figure 9).

The instrument may be connected to a downstream compatible printer/labeller. The data transfers and weighing cycle have been designed to ensure the integrity of identification, weight and incorporate checking facilities in regard to this.

Auxiliary devices used with the instrument shall comply with the requirements of General Supplementary Certificate of Approval No S1/0B.

Any measurement data output from the instrument or its interfaces shall only be used for trade in compliance with General Supplementary Certificate of Approval No S1/0B (in particular in regard to the data and its format).

Please note the Special Condition of Approval regarding printing formats.

16. Description of Variant 15

approved on 08/12/21

The Marel models 9040, 9060, 9100, 9000+, 9120 and 9160 series instruments having an alternative Fujitsu/Kontron model D3713 embedded board in the touchscreen display unit.

TEST PROCEDURE No 6/14G/17

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures.

The instrument shall not be adjusted to anything other than as close as practical to zero error, even when these values are within the maximum permissible errors.

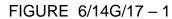
Maximum Permissible Errors

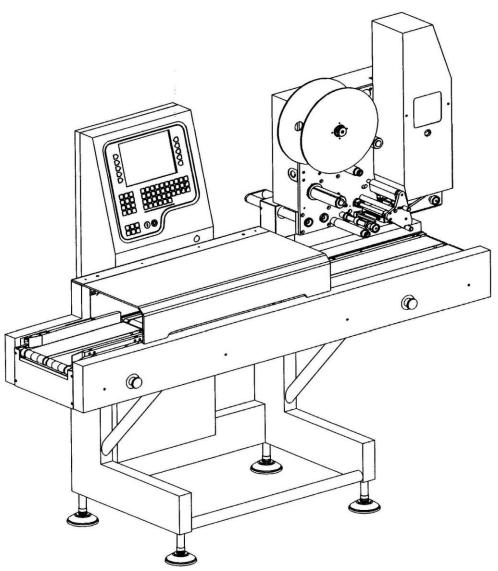
The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

Tests

For multi-interval and multiple range instruments with verification scale intervals of e_1 , e_2 ..., apply e_1 for zero adjustment, and maximum permissible errors apply e_1 , e_2 ..., as applicable for the load.

Ensure that instruments are only being used within the special temperature limits stated elsewhere in this Technical Schedule.





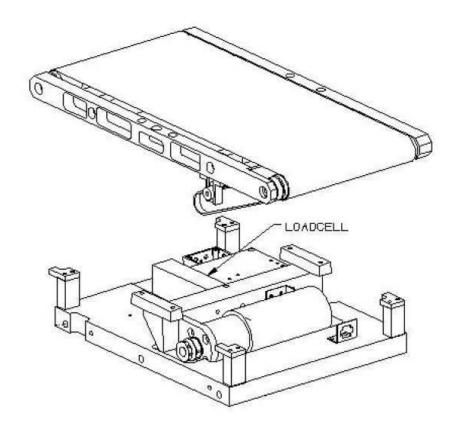
Delford Model 8060 Automatic Catchweighing Instrument

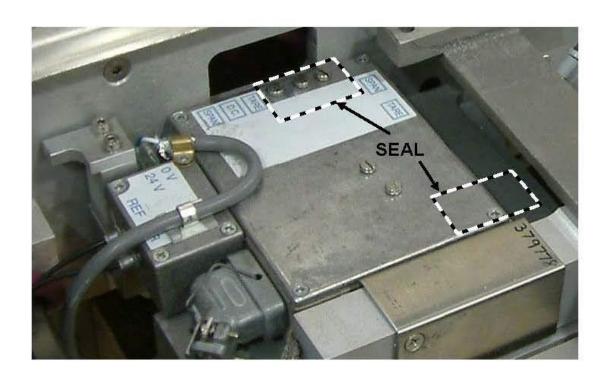


Typical Conveyor Arrangement

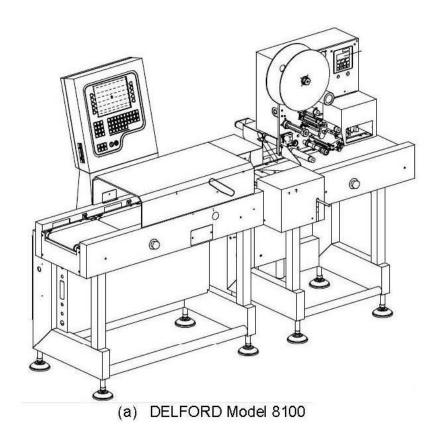
Delford Model 8060 Automatic Catchweighing Instrument (Pattern)

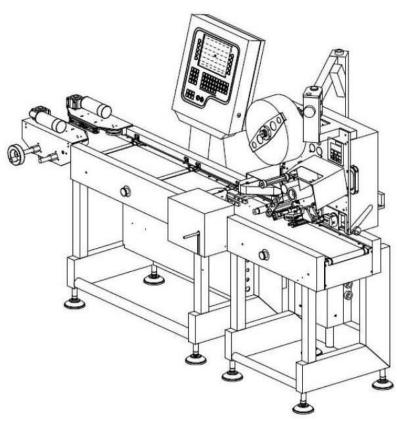






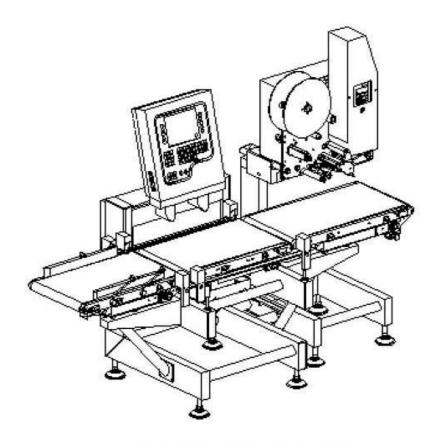
Typical Sealing of Diecast Box Beneath Platter



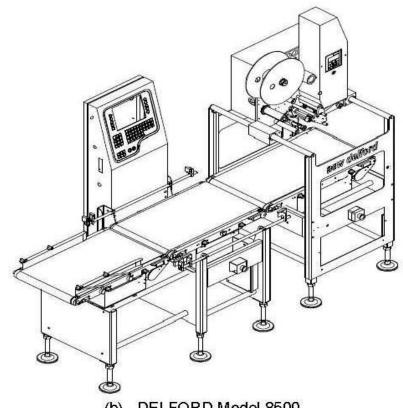


(b) DELFORD Model 8160

Delford Models 8100 and 8160 (Variant 4)



(a) DELFORD Model 8060HP



DELFORD Model 8500

Delford Models 8060HP and 8500 (Variant 4)





Model 9040









Model 9160



Model 9500

Typical Marel 9000 Series Instruments (Variant 7)



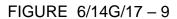
(a) Marel Model 9000 Display and Operating Terminal



(b) USB Access Port and Marel Dongle



Marel 9500W Series





~ End of Document ~