

**Pursuant to section 12 of
the Weights and Measures Act 1985
Certificate No 2748 Revision 2**

issued by:

The National Measurement Office

In accordance with the provisions of section 12 of the Weights and Measures Act 1985, the Secretary of State for Business, Innovation & Skills has issued this UK national type-approval certificate to:

SureService Ltd
Unit B
Brocks Business Centre
Homefield Road
Haverhill
Suffolk
CB9 8QP
United Kingdom

and hereby certifies as suitable for use for trade the following pattern of an automatic catchweighing measuring instrument, designated the Orion Auto OCM, having the following characteristics:-

Maximum capacity (Max): ≤ 3000 e
Minimum capacity (Min): ≥ 20 e
Accuracy class: Y(a)

The necessary data (principal characteristics, alterations, securing, functioning etc) for identification purposes and conditions (when applicable) are set out in the descriptive annex to this certificate.

Under the provisions of section 12(5) of the said Act, this certificate is subject to the conditions described in the descriptive annex.

Note: This certificate relates to the suitability of the equipment for use for trade only in respect of its metrological characteristics. It does not constitute or imply any guarantee as to the safety of the equipment in use for trade or otherwise.

This revision replaces previous versions of the certificate.

Issue Date: 07 June 2013
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Signatory: P R Dixon
for Chief Executive

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Descriptive Annex

1 INTRODUCTION

This pattern of an automatic catchweighing instrument, designated the Orion Auto OCM, comprises a driven scale conveyor, in-feed conveyor and gating arrangement, a digital weight indicator and data terminal, an out-feed conveyor and an automatic label printer and applicator.

The Orion is used for automatically weighing and labelling cases or trays of food products. The packs are transported onto the weighing conveyor where they are weighed statically. A PLU is selected on the data terminal which transmits the appropriate label data to the printer, and sets the tare and weight limits.

The Orion has the following characteristics:

Maximum capacity (Max):	$\leq 3000 e$
Minimum load (Min):	$\geq 20 e$
Accuracy class:	Y(a)

2 CONSTRUCTION

Figure 1 shows a diagram of the Orion.

2.1 Mechanical

2.1.1 The Orion Auto OCM incorporates a driven scale conveyor which is mounted on top of a weigh platform on a floor mounted stand. A tray sensor is mounted on the frame. The weigh platform incorporates a load cell which is connected to a Herbert IH500 digital weight indicator. A Programmable Logic Controller mounted in a separate enclosure provides overall control of the box or tray regulation on and off the scale conveyor, and the actuation of the label applicator.

2.1.2 The in-feed conveyor provides individual gating of cases or trays onto the scale conveyor. This is achieved either by starting and stopping the in-feed conveyor, or by raising or lowering a pneumatically operated gate. This system ensures that only one case or tray arrives on the scale conveyor at a time and commences discharge before the next tray is released. The case or tray is weighed statically on the scale conveyor.

2.1.3 An automatic label printer and applicator is mounted on the out-feed conveyor. On completion of the weighing operation, the case or tray travels on the out-feed conveyor to the label application position where the label is applied.

2.1.4 An optional barcode scanner and/or reject system allows the physical rejection of cases or trays that are out of weight tolerance, whose barcodes do not scan, or whose labels have not been correctly applied.

2.2 Herbert IH500 digital weight indicator

2.2.1 Technical characteristics

2.2.1.1 The IH500 indicator has the following technical characteristics:

power supply:	110/120 or 220/240 V AC 50/60 Hz
minimum input signal per verification scale interval:	1 μ V
load cell excitation:	10 V DC
minimum input impedance:	80 Ω
fractional error Pi:	0.5

2.2.2 Devices

2.2.2.1 The IH500 indicator provides the following devices:

- self-test sequence and display check during power-up
- determination of the stability of equilibrium
- calibration/set-up access control via engineer password
- initial zero-setting, overall effect $\leq 20\%$
- semi-automatic zero-setting
- automatic zero-setting (set to operate at least once every 10 minutes or 150 packs, whichever is earliest)
- zero-tracking
- indication of stable equilibrium
- preset tare
- semi-automatic subtractive tare (not operable during automatic operation)

2.2.3 Interfaces

2.2.3.1 The IH500 indicator has the following interfaces:

- Communication port (RS232, RS422, RS485)
- Fibre optic port

2.2.4 General

2.2.4.1 The indicator housing is made of steel and incorporates an alphanumeric keyboard and an LCD display.

2.3 Load cell

2.3.1 Any compatible load cell may be used providing the following conditions are met:

- (i) There is a respective OIML Certificate of Conformity (R60) or a test certificate (EN45501) issued for the load cell by a Notified Body responsible for type examination under Directive 2009/23/EC.

- (ii) The certificate contains the load cell types and the necessary load cell data required for the manufacturer's declaration of compatibility of modules (WELMEC 2, Issue 3, 2000, No 11), and any particular installation requirements. A load cell marked NH is allowed only if humidity testing to EN45501 has been conducted on this load cell.
- (iii) The compatibility of the load cells and indicator is established by the manufacturer by means of the compatibility of modules calculation, contained in the above WELMEC 2 document, at the time of verification or declaration of EC conformity of type.
- (iv) The load cell transmission must conform to one of the examples shown in the WELMEC Guide 2.4, "Guide for Load cells".

2.4 PC Touch Screen (PCTS) Terminal

2.4.1 PLUs are selected on the PCTS Terminal which transmits the appropriate label data to the printer, and sets the tare and weight limits. The Terminal receives weight data from the indicator and transmits it to the label printer and applicator.

2.5 Legends

2.5.1 The following legends are durably and legibly marked on a rating plate fixed to the side of the console:

Manufacturers name:	
Model type:	
Serial number:	
Voltage:	
Frequency:	
Certification number:	2748
Accuracy class:	Y(a) "R51"
Verification scale interval:	e =
Maximum capacity:	Max =
Minimum capacity:	Min =
Maximum subtractive tare:	T = -

2.6 Stamping

2.6.1 A stamping plug is securely fixed to the instrument by a screw which has its head sealed over by the lead of the stamping plug.

2.7 Sealing and security

2.7.1 The rating plate is secured against removal by sealing or will be destroyed if removed.

2.7.2 To secure components that may not be dismantled or adjusted by the user, the indicator is secured by means of a "tamper-evident" label over the lid retention screw on the housing.

3 OPERATION

3.1 The operator selects a PLU on the PCTS Terminal. The PLU contains the tare and weight limits and the format for the label. A case or tray is transported onto the scale conveyor. The gating on the in-feed conveyor ensures that only one case or tray arrives on the scale conveyor at a time.

3.2 When the case or tray is on the scale conveyor, the conveyor stops to allow a static weighing operation to occur. Only when the weight indicator determines that the weight is stable is the weight value then transmitted from the weight indicator to the PCTS Terminal. The PCTS Terminal then transmits the weight data and label format information to the label printer and applicator.

3.3 Upon receipt of the weight stable signal, the case or tray is transported off the scale conveyor onto the out-feed conveyor. When the case or tray is in the label application position a label is automatically applied.

4 CERTIFICATION NUMBER

4.1 The system bears the Certification No 2748.

5 CONDITIONS

In accordance with the provisions of section 12(5) of the said Act this Certification is granted subject to the following conditions:

5.1 The instrument shall be permanently installed unless it is provided with a level indicator.

5.2 Use of the instrument as a non-automatic weighing instrument is permitted only on the provision that the instrument has been type approved and verified in accordance with Directive 2009/23/EC.

6 LOCATION OF CE MARKING

The CE marking is located on the data plates.

7 ALTERNATIVES

7.1 The instrument may bear the following alternative manufacturers name:

- Herbert Industrial Ltd.
- SureService Ltd.

8 ILLUSTRATIONS

Figure 1 Diagram of the Orion Auto OCM

ISSUE No.	DATE	DESCRIPTION
2748	17 January 2005	Certificate first issued
2748 Revision 1	28 September 2010	Company name changed from Herbert Industrial Ltd to Herbert Partnering Solutions Ltd.
2748 Revision 2	07 June 2013	Company name changed from Herbert Partnering Solutions Ltd. to SureService Ltd Addition of the following text in section 7.1 : <ul style="list-style-type: none">• SureService Ltd

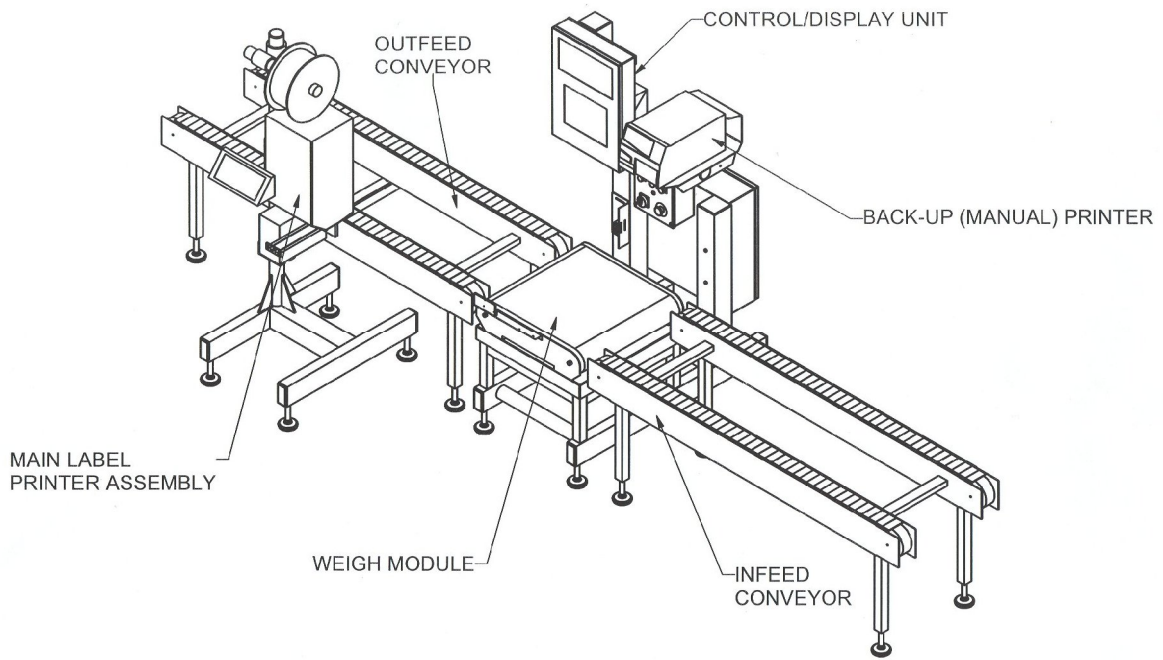


Figure 1 **Diagram of the Orion Auto OCM**