

(UK/0126/0085)



MI-006

United Kingdom of Great Britain and Northern Ireland

Certificate of EC type-examination of a measuring instrument

Number: UK/0126/0085

issued by the Secretary of State for Business, Innovation and Skills
Notified Body Number 0126

In accordance with the requirements of the Measuring Instruments (Non-Prescribed Instruments) Regulations 2006 which implement, in the United Kingdom, Council Directive 2004/22/EC, this certificate of EC type-examination has been issued to:

**Saimo Technology UK Ltd
Unit 15 Meadowcroft Way
Leigh Commerce Park
Leigh WN7 3XZ
United Kingdom**

in respect of a family of automatic checkweighers designated the SCW30A and having the following characteristics:

Maximum capacity	Max \leq 50 kg
Minimum capacity	Min \geq 100 g
Scale interval	e \geq 2 g
Number of scale intervals	n \leq 1500
Conveyor speed range	20 to 36 m/min
Accuracy class	XIII(1)

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.

Signatory: P R Dixon
for Chief Executive
National Weights & Measures Laboratory
(Part of the National Measurement Office)
Department for Business, Innovation & Skills
Stanton Avenue
Teddington
Middlesex TW11 0JZ
United Kingdom

Issue Date: 28 September 2010
Valid Until: 27 September 2010
Reference No: T1108/0042

Descriptive Annex

1 INTRODUCTION

This family of automatic weighing instruments, designated the SCW30A, operate as automatic checkweighers (Category X).

The instruments comprise a cabinet with user interface, weighing device, mechanical handling facilities and reject device. The instruments are designed to weigh packs dynamically.

2 FUNCTIONAL DESCRIPTION

2.1 Mechanical

2.1.1 The instrument (Figure 1) is constructed in stainless steel. The framework is a fabricated floor standing stainless steel frames on adjustable feet. On one frame are mounted the modular conveyor sections (in-feed and weigh platform) and the main cabinet with user interface. The out-feed conveyor is fitted on a separate frame and can be equipped with one of a number of reject devices. The instrument is designed to be permanently installed, a level indicator is located on the lower support beam (main frame), below the load cell mounting.

2.1.2 The control cabinet, situated behind the conveyors, houses the electrical hardware. A panel computer at the top of the control cabinet contains a touch screen display. Photocells mounted at either end and either side of the conveyor are used for pack detection.

2.1.3 Weigh platform unit

2.1.3.1 The weighing device comprises a strain gauge load cell located below the centre of the weigh conveyor (Figure 3).

The load cell type may be as follows: HBM type PW15A C3, capacity according to section 3.1 of this certificate.

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

- 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.
- 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 5, 2009, 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.
- It is not a load cell with digital output
- The characteristics of the replacement load cell such as nlc, Y, Z are the same or better than the load cell tested dynamically (HBM type PW15A C3, capacity 15 kg)
- The design of the load cells and the material are the same
- No oil damper is used

2.1.3.2 Packs are weighed as they pass over the weigh head conveyor which runs continuously at the speed of the in-feed and out-feed conveyors.

2.2 Electrical

2.2.1 The control cabinet is accessed from a door at the back. Inside are the main board, load cell module, filters, circuit breakers, power supplies, motor drive cards and appropriate input/output modules for external electrical interfaces such as the out-feed mechanisms and external peripherals.

2.2.2 The analogue output from the load cell is converted to a digital signal and sent to the panel PC for processing, weight and batch information is shown on the instrument's display.

2.2.3 The control and display interface comprises a panel computer running Microsoft XP. It consists of a touch screen type PPC-3712GS with colour backlit LCD touch screen display, and allows configuration of the system and its monitoring.

2.5 Devices

2.5.1 The instrument has the following devices:

- Initial zero-setting ($\leq 20\%$ Max)
- Semi-automatic zero-setting ($\leq 4\%$ Max)
- Zero-tracking ($\leq 4\%$ Max)
- Automatic alarm device active during automatic operation (requests a zero setting at least every 12 min)
- Pre-set tare device (subtractive)
- Static calibration not accessible to the user
- Dynamic calibration accessible to the user, correction factor recorded in batch statistics
- Internal memory for storage of batch reports
- Device that acts upon significant faults
- Screen check at power-up

3 TECHNICAL DATA

3.1 The SCW30 family of instruments has the following technical characteristics.

Maximum capacity (Max):	3000 g	6000g	10000g	15000g	25000 g	50000 g
Minimum capacity (Min):	100 g	250 g	500 g	500g	1000 g	2500 g
Scale interval (e =):	2 g	5 g	10 g	10 g	20 g	50 g
Maximum number of scale intervals (n):	1500					
Tare (T):	- Max/3					
Load cell E_{max} :	15 kg	15kg	25kg	30 kg	50 kg	100 kg
Excitation voltage	10 VDC					
Belt speed range	20 to 36 m/min					
Power supply	240 Va.c. 50 Hz					
Accuracy class	XIII(1)					

Climatic environment	0 °C to +40 °C Non-condensing (closed)
Electromagnetic classifications	E1 and E2

3.2 Documentation and drawings

Description	Drawing / Document number
User/Service Manual	SCW30A User's Guide for NWML approval
Dimensional drawings	SCW30A-00,
Mechanical assembly drawings	SSJ400x250-00
Electrical schematics	SCW30AE-00 to SCW30AE-04
PCB drawings	Checkweigher A/D board VER090603, PPC-3712GS

3.3 Software

3.3.1 The general software is designated SM6603, version V5.x.y with x and y reflecting changes to the non-legally relevant part of the software. The software information is shown in D:/Checkweigher-can. The software is embedded in the EPROM, which is sealed according to section 6.2.

3.3.2 Security

Most legally relevant parameters are embedded and therefore non-editable. Access to the editable, legally relevant parameters is protected by a non-editable counter designated "E-seal counter", which increments every time access to legally relevant parameters is given. This counter gives access to maximum capacity, speed correction, spanning (zero-span calibration), scale interval, filtering), and can be accessed via the menu: management / switch user / e seal. The counter's value after verification must be durably marked on a tamper-evident label located on or near the rating plate.

4 PERIPHERAL DEVICES AND INTERFACES

4.1 Interfaces

4.1.1 The instrument may have a number of the following interfaces:

- USB

4.2 Peripheral devices

4.2.1 The instrument may be connected to any peripheral device that has been issued with a parts (test) certificate by a Notified Body responsible for Annex B (MI-006) under Directive 2004/22/EC in any Member State and bears the CE marking of conformity to the relevant directives; or

A peripheral device without a parts (test) certificate may be connected under the following conditions:

- it bears the CE marking for conformity to the EMC Directive;
- it is not capable of transmitting any data or instruction into the weighing instrument, other than to release a printout, checking for correct data transmission or validation;
- it prints weighing results and other data as received from the weighing instrument without any modification or further processing; and
- it complies with the applicable requirements of Paragraph 8.1 of Annex I.

5 APPROVAL CONDITIONS

The certificate is issued subject to the following conditions:

5.1 Legends and inscriptions

5.1.1 The instrument bears the following legends (Figure 4):

‘CE’ marking
Supplementary metrology marking
Notified body identification number
Accuracy class
Serial number
Manufacturers mark or name
Certificate number
Temperature

6 LOCATION OF SEALS AND VERIFICATION MARKS

6.1 The ‘CE’ marking, supplementary metrology marking and certificate number are located on the side of the control cabinet. The CE mark shall be impossible to remove without damaging it. The data plate shall be impossible to remove without it being destroyed.

The markings and inscriptions shall fulfil the requirements of Paragraph 9 of Annex I of the Directive 2004/22/EC.

6.2 Components that may not be dismantled or adjusted by the user (load cell, EPROM) will be secured by either a wire and seal or tamper evident label and securing mark.

The securing mark may be either:

- a mark of the manufacturer and/or manufacturer’s representative, or
- an official mark of a verification officer.

7 ALTERNATIVES

7.1 There are currently no alternatives.

8 ILLUSTRATIONS

- Figure 1 SCW30A checkweigher
- Figure 2 Control and display console (“Run” screen)
- Figure 3 Rating plate

9 CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
UK/0126/0085	28 September 2010	Type examination certificate first issued.
-	-	No revisions have been issued.



Figure 1 SCW30A checkweigher

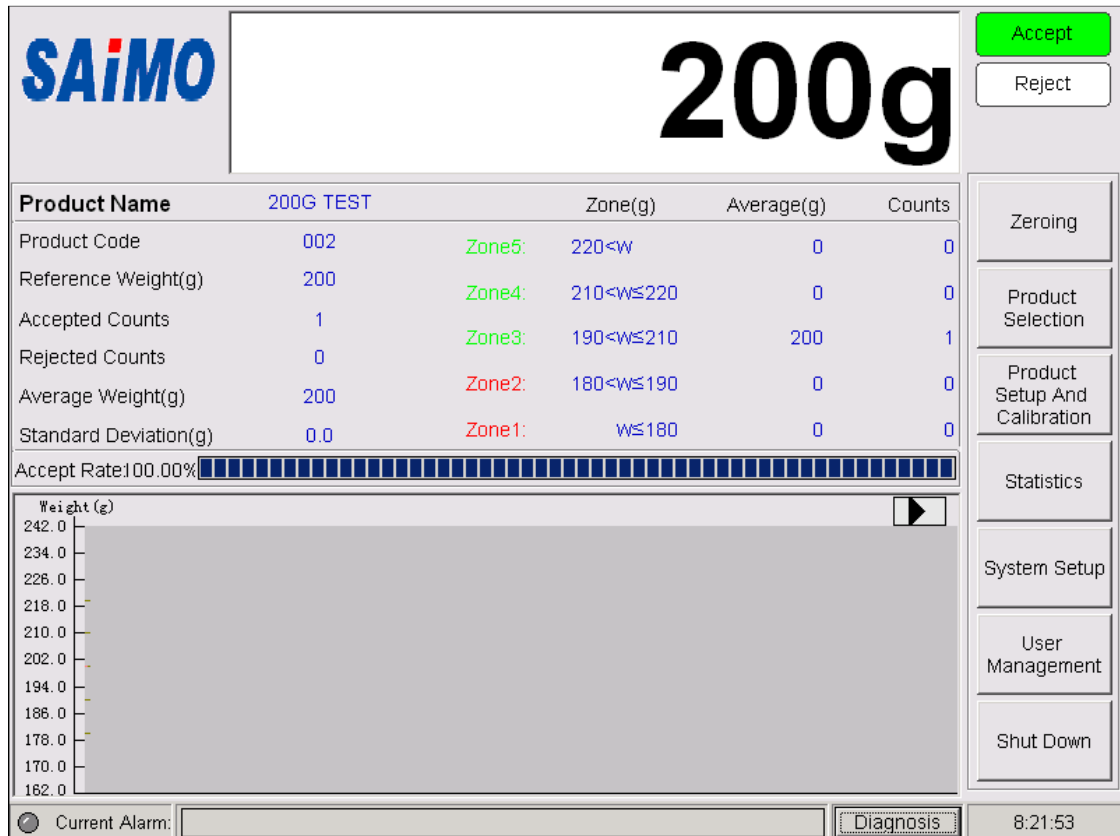


Figure 2 Control and display panel (“Run” screen)

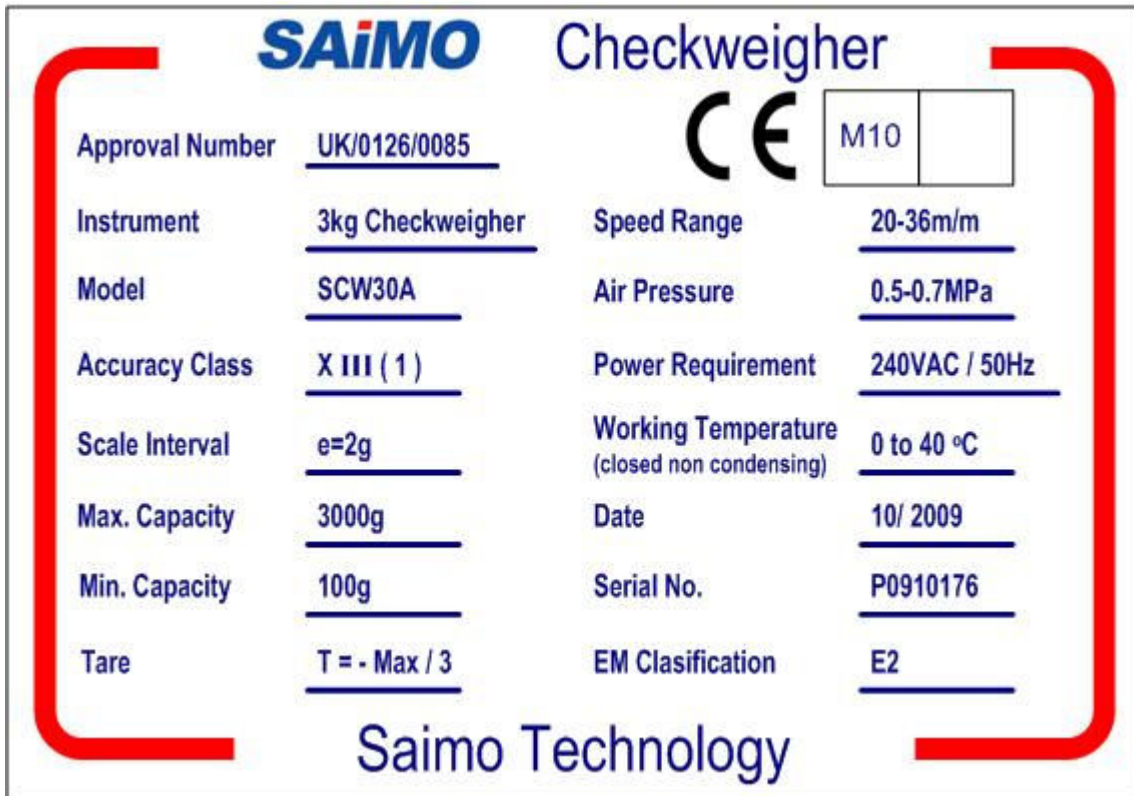


Figure 3 Rating plate