BIS
Department for Business Innovation & Skills

Certificate
Pursuant to section 12 of the Weights and Measures Act 1985

Certification No 2720 revision 1

Valid Until 7 July 2014

In accordance with the provisions of section 12 of the Weights and Measures Act 1985, the Secretary of State for Business, Innovation & Skills hereby certifies as suitable for use for trade a pattern of a automatic catchweight weighing machine, fitted with a dimensional measuring frame, used to determine postal and transport tariffs, as described in the descriptive annex to this Certificate, and having the following characteristics:-

Having a Mettler Toledo CS9000, self-indicating, automatic catchweighing instrument.

Maximum capacity	*Max*	=	*60 kg*
Minimum capacity	*Min*	=	*0.25 kg*
Scale interval	*e*	=	*0.05 kg*
Class		=	*Y(a)"R51"*

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.

Submitted by: **Mettler Toledo Ltd.**
64 Boston Road
Leicester
LE4 1AW
United Kingdom

This revision replaces previous versions of this certificate.

Signatory: G. Glas
for Chief Executive
National Weights & Measures Laboratory
(Part of National Measurement Office)
Department for Business, Innovation & Skills
Stanton Avenue
Teddington
Middlesex TW11 0JZ

Reference No: T1108/0060
Date: 5 November 2009

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ILLUSTRATIONS

Descriptive Annex

1 INTRODUCTION

The CargoScan CS9000 (Figures 1 & 2) is a combined catchweighing and dimensioning measuring instrument, which dynamically weighs and scans parcels. It is permanently installed and operates at a maximum belt speed of 70 m/min, and comprises of several units arranged in an integrated construction.
It incorporates a Metler Toledo JagXtreme Express weigh automatic catchweigher, a Cargoscan CS900 dimensioner and a bar code scanning device.

Note: This certificate only approves the automatic catch weighing part of the system.

2 CONSTRUCTION

2.1 Conveyers

The CS9000 system is built around three conveyers, the outer two infeed and outfeed conveyers are controlled by photo-eyes and used to index the parcels singly across the central weighing conveyer. The whole conveyer system is reversible so that it can cater for both inbound and outbound directions.

2.2 Weighing System

The centre section is the scale conveyer and is built on a framework supported by four load cells, which together with the JagXtreme control terminal form a weighing-in-motion system.

2.3 Load cell

Any load cell may be used that is certified according to OIML R60 C3.

2.4 Dimensioning scanner

The Cargoscan CS900 dimensioner uses a fan shaped laser beam to scan the parcels as they travel across the weighing conveyer. The CS900 system is not approved under this certification but has an OIML approval certificate No: R129/2000-NO-02.02.

2.5 Barcode scanners

The CS9000 uses a DataLogic DX8200 barcode reader, which uses a scanning laser beam to read the parcel barcode as the parcel travels across the weighing conveyer.

2.6 Computer

The computer takes the information from the system components and controls the operation of the whole system. It is also the interface with the operators allowing them to log on and off, set the inbound or outbound direction and record the identity of the vehicle being loaded or unloaded.

2.7 Control Cubicle

This unit houses the electrical distribution system and the plc, which controls the conveyers.

2.8 Software and data communication

The software is stored in the indicator's flash memory. The software version number is JAGX_BO_1104. The version number is displayed, when the indicator is powered up. The main board is equipped with two serial ports. Port No 1 has a RS232, RS422 or RS485 interface. The board also has 1 Ethernet port. There are also two digital I/O blocks on the board. One block for incoming I/O and one block for outgoing I/O.

2.9 Stamping and sealing

2.9.1 A stamping plate is located on the indicator adjacent to the descriptive label. The stamping plate is secured to the indicator either by a screw at either end of the plate which are then sealed with a lead seal, or by any other suitable means which prevent the removal of the stamping plate without it being destroyed.

2.9.2 Sealing of the indicator is done by setting dipswitch no 1 on the main board (Jagextreme control) to ON position. The main board is the top board as shown in Figure 3. Sealing is done by passing a wire through the sealing screws located on the top and bottom of the indicator.

2.9.3 The junction box to the load cells is sealed by a wire through a hole in the cover and the bottom part of the box (Figure 4).

2.10 Legends

The following legends are legibly and durably marked on a rating plate fixed to the indicator. The rating plate shall either be sealed or shall be of the type that is destroyed when removed.

Manufacturers name:	Cargoscan
Model type:	CS9000
Serial number:	#######
Maximum belt speed:	70 m/min
Voltage:	100-240 VAC
Frequency:	47/63 Hz
Certification number:	2720
Accuracy class:	Y(a) "R51"
Verification scale interval:	e = 0.05 kg
Maximum capacity:	Max =60.00 kg
Minimum capacity:	Min = 0.25 kg

3 OPERATION

To start the data collection process the operator logs onto the system using a supervisor controlled password. The log-on screen will prompt the operator to enter other information such as vehicle registration number, vehicle seal number, inbound or outbound direction and route number. When the operator selects the 'OK' prompt the conveyors will start and parcels will be transferred across the weighing and measuring system. The weight and dimension of each parcel will be recorded against its unique barcode identity and stored in the system.

4 CERTIFICATION NUMBER

4.1 The system bears the Certification No 2720.

5 AUTHORISED ALTERNATIVES

5.1 Having the instrument designated the Pack Master 2700 and marked as shown in Figure 6.

This alternative has been submitted by:

FB Automazione SRL
Via dell'Industria, 10
27020 Torre d'Isola
Pavia (PV)
Italy

CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
Cert 2720	08 July 2004	Type approval first issued.
Cert 2720 revision 1	05 November 2009	Addition of authorised alternative 5.1

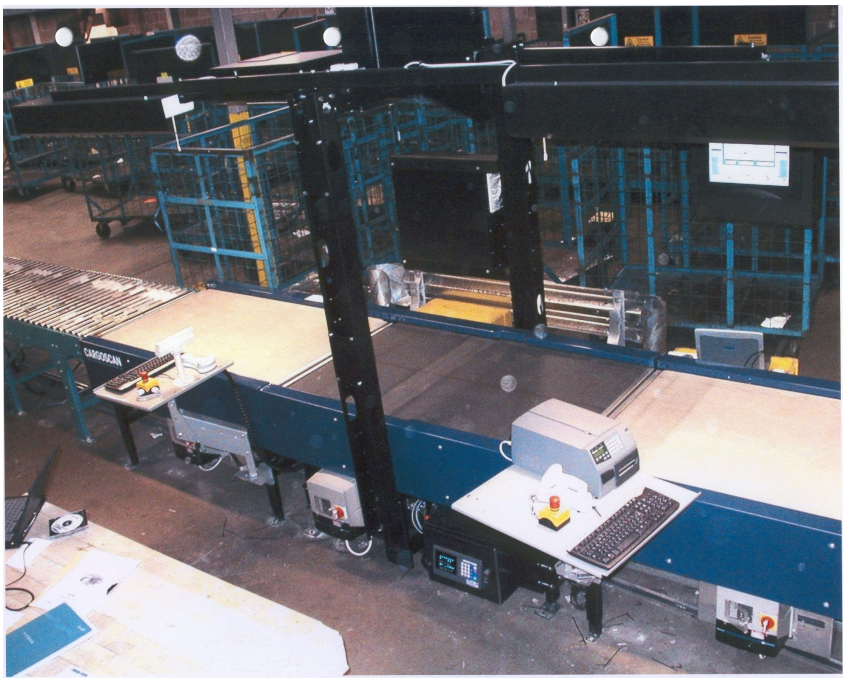

Figure 1 The CS9000 Cargoscan

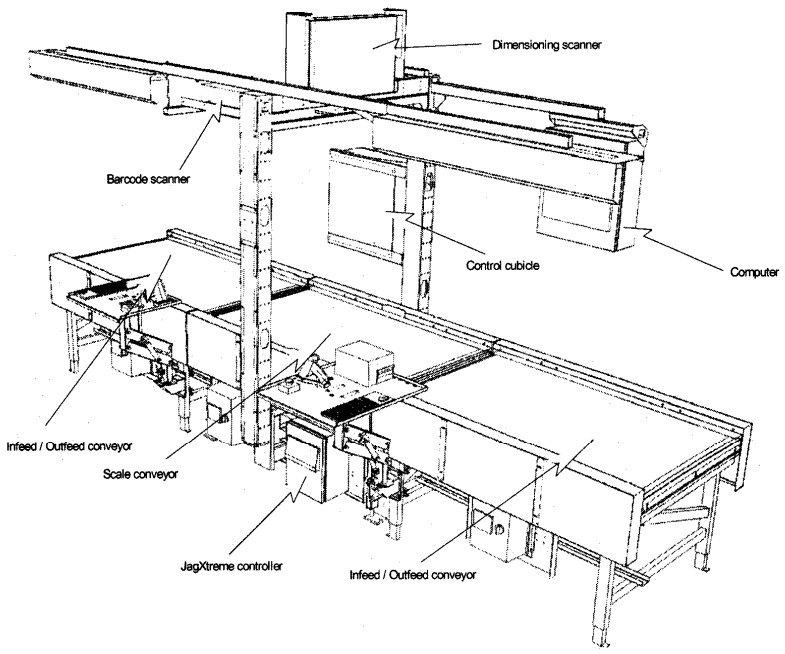

Figure 2 CS9000 Cargoscan Component identification

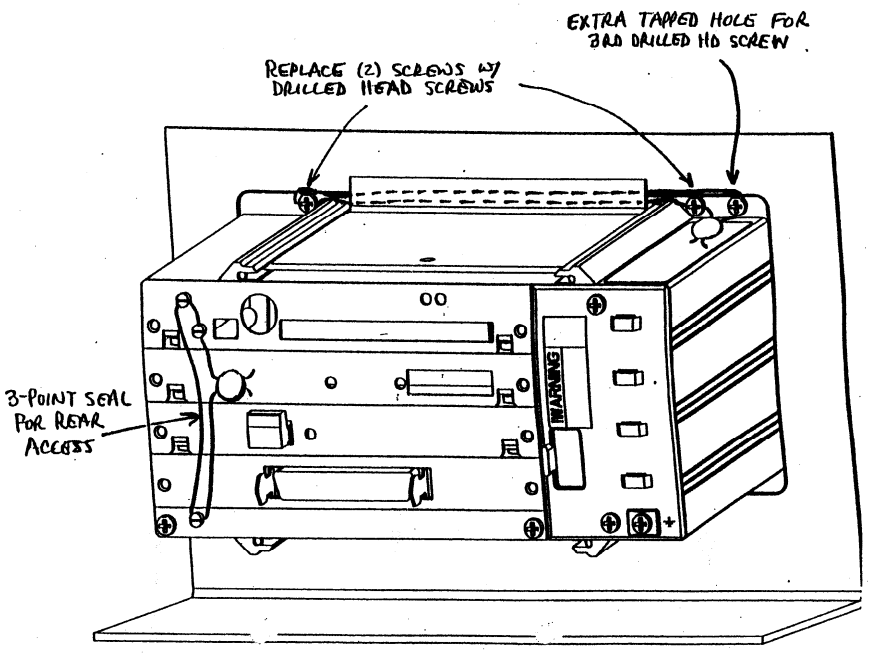

Figure 3 Sealing – panel mount indicator

Figure 4 Sealing of the Junction box

Figure 5 Stamping of indicator

MODEL TYPE	Pack Master 2700	FBA SRL PAVIA - ITALY	
SERIAL NUMBER	********		
MAXIMUM BELT SPEED	70 [m/min]	CERTIFICATION NUMBER	2720
VOLTAGE	100-240 [V] AC	SCALE INTERVAL	0,05 [kg]
FREQUENCY	47-63 [hz]	MAX CAPACITY	60,00 [kg]
ACCURACY CLASS	Y(a) "R51"	MIN CAPACITY	0,25 [kg]

Figure 6 Alternative markings (5.1)