



# NMO

UK 2945

V(0)a

## EU-type examination certificate UK 2945 Revision 1

Issued by:

**NMO**

**Notified Body Number 0126**

In accordance with the requirements of Council Directive 2014/31/EU, this EU-type examination certificate has been issued to:

**Dini Argeo S.r.l.**  
**Via della Fisica 20**  
**41042 Spezzano di Fiorano**  
**Modena**  
**Italy**

In respect of single-interval or multi-interval an Non-Automatic Weighing Instrument designated the TPWaa-X, ELWX, (aa and X's denotes alternative approved models) series and having the following characteristics:

$600 \text{ kg} \leq \text{Maximum capacity} \leq 5000 \text{ kg}$

$e \geq 0.2 \text{ kg}$

$n \leq 3,000$  per partial weighing range, with a maximum of two weighing ranges

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.

This revision replaces previous versions of the certificate.

**Issue Date: 13 June 2016**

**Valid Until: 30 July 2023**

**Reference No: TS1201/0055**

**Grégory Glas**

**Technical Manager**

*For and on behalf of the Head of Certification Body*



0135

# Descriptive Annex

## 1 NAME AND TYPE OF INSTRUMENT

The weighing instrument is designated the TPWaa-X and ELWX, Pallet Truck Scale System. It is a Pallet Truck scale consisting of four or six load cells in the fork shaped load receptor. The Pallet Truck scale may have a built-in printer (optional). The instrument is a Class III or IIII, self-indicating weighing instrument with single-interval, multi-interval or multi-range, an external AC mains adapter, and an internal rechargeable battery.

The indicator consists of analogue to digital conversion circuitry, microprocessor control circuitry, power supply, keyboard, non-volatile memory for storage of calibration and setup data, and a weight display contained within a single enclosure.

## 2 FUNCTIONAL DESCRIPTION

### 2.1 Construction and devices

The TPWaa-X and ELWX Pallet Truck Scale digital weight indicators are fully described in Parts (Test) Certificate GB-1461.

#### 2.1.1 Load Receptor for TPWaa-X Pallet Truck

The TPWaa-X Pallet Truck Scale System consists of a load receptor which is modified to be mounted below the forks of two or more load cells as, described in 2.2 below. The column supports the indicator where the load cells are connected.

#### 2.1.2 Load Receptor for ELWX Electronic Pallet Truck

The ELWX Pallet Truck Scale System is an electric pallet truck consisting of a load receptor which is modified to be mounted below the forks of two or more load cells as, described in 2.2 below. The column supports the indicator where the load cells are connected.

### 2.2 Load cell

The fork lift trucks approved under this certificate may only use the following approved load cells.

Manufacturer	Model	Test Certificate	Issued by
Dini Argeo srl	SBX-1K	TC7451	NMi
Dini Argeo srl	SBX	TC7451	NMi
Dini Argeo srl	SBK-1K	TC7451	NMi
Dini Argeo srl	SBK	TC7451	NMi
Dini Argeo srl	SBZ-SBU	TC7644	NMi
Cibe srl	SBK-1K	TC6481	NMi
Cibe srl	SBK	TC6481	NMi
Cibe srl	SBX	UCM 08/001-A	Ministero dello sviluppo Economico

## 2.3 Metrological characteristics

### 2.3.1 TPWaa-X

Max ≤	600 / 1500 kg	1000 / 2000 kg	2000/3000 kg
Min	20 e	20 e	20 e
e ≥	0.2 / 0.5 kg	0.5 / 1 kg	1 / 2 kg
Maximum Tare	- 1499 kg	- 1999 kg	- 2999 kg
Load cell certificate number	TC7451 TC7644 TC6481	TC7451 TC7644 TC6481	UCM 08/001-A
Nº of load cells	4	4	4
E <sub>max</sub>	2000kg	2000 kg	3000 kg

### 2.3.2 ELWX

Max ≤	600 / 1500 kg	1000 / 2000 kg
Min	20 e	20 e
e ≥	0.2 / 0.5 kg	0.5 / 1 kg
Maximum Tare	- 1499 kg	- 1999 kg
Load cell certificate number	TC7451 TC7644 TC6481	TC7451 TC7644 TC6481
Nº of load cells	4	4
E <sub>max</sub>	2000 kg	2000 kg

### 2.3.3 Metrological characteristics for ELWX up to 2500 kg

TC Number	TC7451	TC7644	TC6481
Max ≤	2500 kg	2500 kg	2500 kg
Min =	20 e	20 e	20 e
e ≥	0.5 kg	0.5 kg	0.5 kg
T	- 2499 kg	- 2499 kg	- 2499 kg
Nº of L/C	2	2	2
E <sub>max</sub>	2000 kg	2000 kg	2000 kg

## 2.4 Level indicator

**2.4.1** A level indicator in the form of a level bubble is placed on the frame of the pallet truck. The levelling device is accurate up to 2% inclination longitudinal (forward or back) tilt and up to 2% transverse (left or right) tilt. When these angles are exceeded, the pallet truck should not be used for weighing.

**2.4.2** A level indicator in the form of a digital inclinometer is put in the column and connected to the indicator. The levelling device is accurate up to 2% inclination longitudinal (forward and backwards) tilt and up to 2% transverse (left and right) tilt. When these angles are exceeded, the display will show an error code with the word 'TILT' on the display and weighing will not be possible.

### **3 TECHNICAL DATA**

**3.1** Technical data for the digital indicators are provided in Parts (Test) Certificate GB-1461.

### **4 PERIPHERAL DEVICES AND INTERFACES**

#### **4.1 Interfaces**

**4.1.1** The interfaces for the digital indicators are provided in Parts (Test) Certificate GB-1461.

#### **4.2 Peripheral devices**

**4.2.1** The following peripheral devices may be connected to the interfaces provided:

- Peripheral devices that have been issued with a test certificate by a Notified Body responsible for type approval under Directive 2014/31/EU; or
- Peripheral devices without a test certificate 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;
  - it complies with the applicable requirements of EN45501, i.e. 4.2, 4.4, 4.6 and 4.7.

A printing device may print additional information such as date or number to identify the printed weighing result(s) or sets of weighing results.

### **5 APPROVAL CONDITIONS**

This certificate is issued subject to the following conditions:

**5.1** The forks used in the TPWaa-X and ELWX Pallet Truck Scale System shall be limited to the following dimensions:

- Maximum length of 1800 mm
- Maximum width of 680 mm

#### **5.2 Legends and inscriptions**

**5.2.1** The remote display bears the following legends on or near the display:

Max  
Min  
e =

**5.2.2** The instrument shall bear the following legends:

Accuracy class  
CE marking

Supplementary metrology marking  
 Serial number  
 Manufacturer's mark or name and postal address  
 Certificate number  
 T = - XX (where "XX" is the value, if T ≠ - Max)  
 [any other relevant markings, e.g. temperature]

The markings and inscriptions shall fulfil the requirements of Article 6, Article 16 and Point 1 of Annex III of Directive 2014/31/EU.

## 6 LOCATION OF SEALS AND VERIFICATION MARKS

**6.1** The data plate is secured, either by sealing or by being of a form such that it is destroyed when removed.

**6.2** Components that may not be dismantled or adjusted by the user must be secured. Common serial numbers, a wire and seal solution or a suitable mark may be used. The securing mark may be either:

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

**6.3** Verification marks and CE-marking shall be grouped together.

**6.4** When software sealing is used, the CONFIG and CAL counters' values shall be written on a tamper-evident label on or near the rating plate.

## 7 ALTERNATIVES

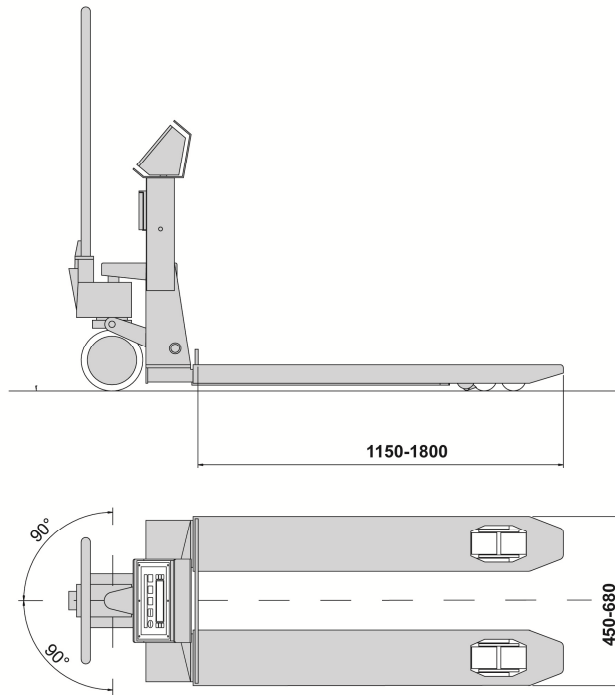
There are currently no authorised alternatives.

## 8 ILLUSTRATIONS

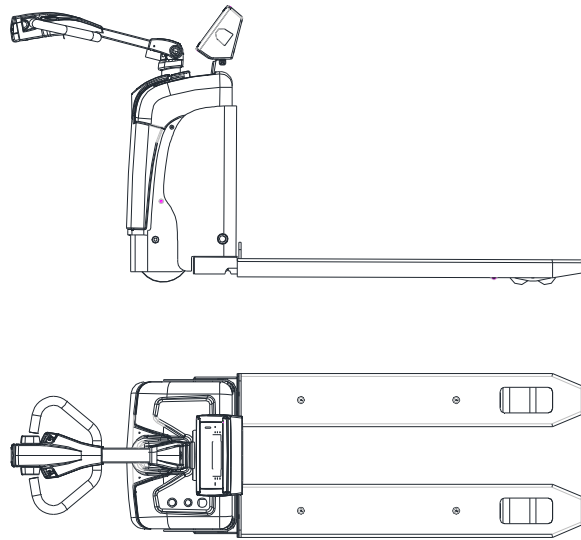
Figure 1 TPWaa-X Pallet Truck Scale  
 Figure 2 ELWX Pallet Truck Scale  
 Figure 3 TPWaa-X and ELWX Pallet Truck sealing and levelling device

## 9 CERTIFICATE HISTORY

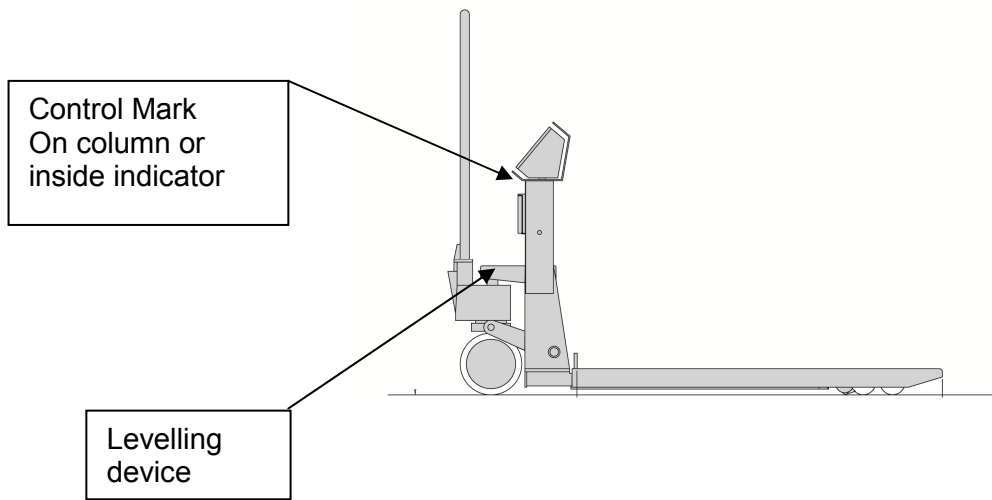
Issue №.	Date	Description
UK 2945	31 July 2013	Type approval first issued.
UK 2945 Revision 1	13 June 2016	Sections 2.3.1, 2.3.2 and 2.3.3: Tare values corrected. Section 5.2.2: Green M replaced by Supplementary metrology marking, postal address added. References to 2009/23/EC replaced by 2014/31/EU.



**Figure 1 TPWaa-X Pallet Truck Scale**



**Figure 2 ELWX Pallet Truck Scale**



**Figure 3** TPWaa-X and ELWX Pallet Truck sealing and levelling device