

(2914)

BIS

Department for
Business Innovation
& Skills

III(7)

Certificate

Pursuant to section 12 of the Weights and Measures Act 1985

Certification No 2914

Valid Until 13 September 2021

In accordance with the provisions of section 12 of the Weights and Measures Act 1985, the Secretary of State for Business, Innovation and Skills hereby certifies as suitable for use for trade the following pattern of a vehicle mounted cubic measure as described in the descriptive annex to this Certificate, and having the following characteristics:-

Cubic brim measures of 0.8 m³, 1.0 m³ or 1.2 m³ capacity, fitted to a vehicle with a lifting and tipping mechanism, for measuring ballast and agricultural materials by volume.

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.

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CONTENTS

CERTIFICATION NO 2914

- 1 INTRODUCTION**
- 2 CONSTRUCTION**
 - 2.1 Mechanical
 - 2.2 Legends
 - 2.3 Sealing and stamping
- 3 ADDITIONAL INFORMATION**
- 4 AUTHORISED ALTERNATIVES**
- 5 RECOMMENDED TESTS**
- 6 ILLUSTRATIONS**
- 7 CERTIFICATE HISTORY**

Descriptive Annex

1 INTRODUCTION

This pattern of a brim measure of 0.8 m³, 1.0 m³ or 1.2 m³ capacity is for measuring ballast and agricultural materials by volume. It is designed for use in association with a lifting and tipping mechanism mounted on a vehicle.

2 CONSTRUCTION

2.1 Mechanical (Figure 2)

The general arrangement of the measure is illustrated in Figure 1. The measure is of welded steel construction, the steel plate being of at least 5mm in thickness. The main body is constructed such that the upper and lower sides of the measure are at an angle of 60 degrees to each other. Two side sections, of 5mm thickness, are normal to the upper and lower side of the measure and to one another respectively. The lower front end of the measure, which comes into contact with the ground during the filling operation, has a reinforcing toe plate of at least 20 mm thickness along its entire length. Two side lips of 100mm x 10mm thickness are attached behind the toe plate and to each side section. A reinforcing box section is formed to the upper external side of the measure by a plate, nominally 90 x 107 x 8 mm thick, welded to the top of the rear section and adjoining side sections.

With the exception of the toe plate, no part of the measure projects beyond the plane formed by the upper and lower front edges and the side plates giving a clear strikeable brim, and no part retains material when the measure is discharged in the normal way.

2.2 Legends

The instrument shall bear the following legends which shall be conspicuously and durably marked. The capacity legend shall be in characters at least 25 mm high and 10 mm wide onto the exterior of the measure immediately below the brim on the near side of the vehicle.

The legends may be marked onto a plate, attached immediately below the brim on the near side of the vehicle.

However applied, it shall not be possible to remove any of the following without them being defaced or destroyed.

2.2.1 The number of the certificate of approval preceded by the words 'Certification No', or 'Cert No', legibly and durably marked.

2.2.2 The capacity legend, 0.8 m³, 1.0 m³ or 1.2 m³ - with the symbol m³ being regarded as forming only one character.

2.2.3 The manufacturer's name.

2.3 Sealing and stamping

The inspector's stamp shall be applied to a soft metal plug fitted onto the exterior of the measure immediately below the brim, and adjacent to the measure's capacity legend.

After the inspector's stamp has been applied, it shall not be possible to remove the soft metal plug, or the housing of the plug, without defacing or destroying the inspector's stamp.

3 ADDITIONAL INFORMATION

3.1 The following may be used to check the capacity of the measure, shown in Figure 1, using the internal dimensions as detailed in section 3.2:

Equation (1) - $Sx(((Cx)B) - (Ax)D)) + ((Ex)D) - (Cx)F)) + (Gx)F) + (Jx)K) + ((Ix)H)/2)/2.$

Equation (2) - $2x(Nx((L+M)/2))$

Equation (3) - $2x((Px)(Rx)R)/2) + (2x(Rx)R)/3))$

$$\text{Volume (m}^3\text{)} = [(1) + (2) - (3)] / 1000$$

3.2 Nominal internal dimensions of each measure should be:

Capacity Dimension	0.8 m ³ (m)	1.0 m ³ (m)	1.2 m ³ (m)
A	0.769	0.769	0.769
B	0.817	0.817	0.817
C	0.947	0.947	0.947
D	0.786	0.786	0.786
E	1.309	1.309	1.309
F	0.160	0.160	0.160
G	1.132	1.132	1.132
H	0.026	0.026	0.026
I	0.032	0.032	0.032
J	0.102	0.102	0.102
K	0.005	0.005	0.005
L	1.152	1.152	1.152
M	1.072	1.072	1.072
N	0.040	0.040	0.040
P	0.277	0.277	0.277
Q	0.122	0.122	0.122
R	0.064	0.064	0.064
S	1.310	1.630	1.955
T	0.005	0.005	0.005

4 AUTHORIZED ALTERNATIVES

There are currently no authorised alternatives

5 RECOMMENDED TEST

5.1 The measure(s) shall only be tested if they are clean and complete, and may be tested by any of the following methods:

- (i) by calculation based on the internal measurements (see 3.2); or
- (ii) by transferring chippings or similar material from a brim measure the volume of which has been ascertained by calculation; or
- (iii) by a combination of these methods.

6 ILLUSTRATIONS

Figure 1 Assembly Drawing

Figure 2 Example of the pattern

7 CERTIFICATE HISTORY

CERTIFICATE NUMBER	DATE	DESCRIPTION
2914	14 September 2011	Certificate first issued.

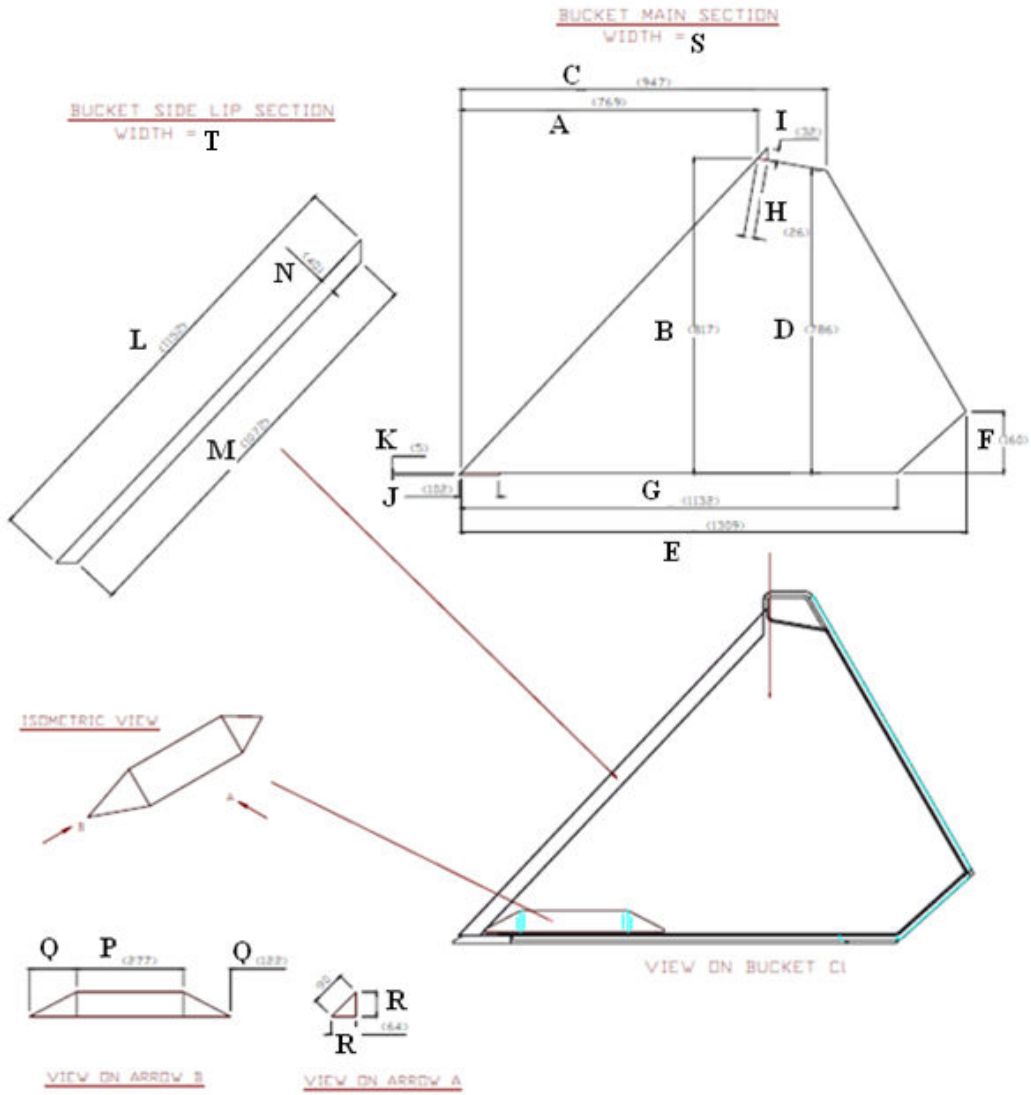


Figure 1 Assembly Drawing

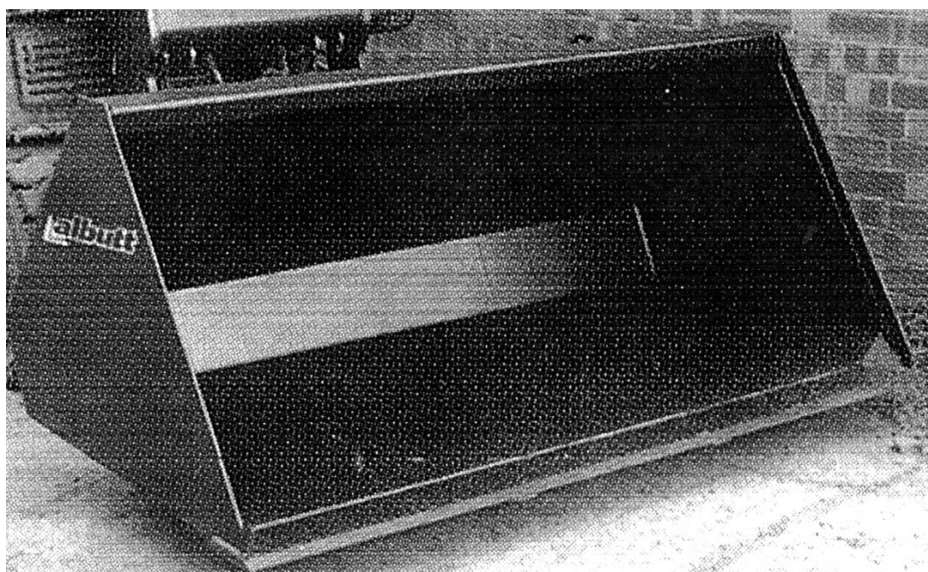


Figure 2 Example of the pattern