

**Pursuant to section 12 of
the Weights and Measures Act 1985
Certificate No 2367 Revision 1**

Issued by:

NMO

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

**Whites Material Handling Ltd
10/12 Dixon Road
Brislington Trading Estate
Bristol
BS4 5QW**

And hereby certifies as suitable for use for trade the following pattern of a brim cubic measure of 0.5 m³ capacity for use with a lifting and tipping mechanism in measuring ballast and agricultural materials.

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: 13 June 2015
Valid Until: 12 June 2025
Reference: STD 7827**



**G Stones
Technical Manager
For and on behalf of the Head of Technical Services**

CONTENTS

CERTIFICATION NO 2367

1 INTRODUCTION

2 CONSTRUCTION

2.1 Mechanical

2.2 Legends

2.3 Stamping

3 AUTHORISED ALTERNATIVES

4 ADDITIONAL INFORMATION

ILLUSTRATIONS

Figure 1 Diagram of the pattern

Figure 2 Diagram of the endplate with dimensions

CERTIFICATION NO 2367

Descriptive Annex

1 INTRODUCTION

This pattern of a brim measure of 0.5 m³ capacity is for use in measuring ballast and agricultural materials. It is designed for use in association with a lifting and tipping mechanism mounted on a vehicle.

2 CONSTRUCTION

2.1 Mechanical

The general arrangement of the measure is as illustrated in Figure 1. The measure is of welded steel construction, the steel plate being of at least 5 mm thickness. The main body is constructed such that the upper and lower sides of the measure are at an angle of 70 degrees to each other and incorporate a truncated section forming the intersection. Two side plates, of 5 mm thickness, are normal to the upper and lower sides of the measure and parallel to each other. The lower front edge of the measure, which comes into contact with the ground during the filling operation, has a reinforcing toeplate of at least 16 mm thickness along its entire length. Two external wear strips of 12 mm thickness are attached behind the toeplate and an external reinforcing side strip of 13 mm thickness is attached to each side plate. A reinforcing box section of size 80 mm x 80 mm and thickness 5 mm is attached to the upper internal side of the measure. 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 tipped in normal use.

2.2 Legends

Conspicuously and durably marked in characters at least 50 mm high and 25 mm wide on the near-side exterior surface of the measure when mounted on a vehicle, is the inscription "0.5 m³", with the symbol "m³" forming no more than one character. The certificate number "2367" is inscribed on a metal identification plate which is firmly attached to the top left-hand corner of the back of the measure.

2.3 Stamping

The inspector's stamp shall be applied to a lead disc mounted within a hexagonal sealing box, which is located adjacent to the nominal capacity legend on the measure.

3 AUTHORISED ALTERNATIVES

Having a brim measure of 0.4 m³ capacity for use in measuring ballast and agricultural materials in association with a lifting and tipping mechanism mounted on a vehicle. This authorised alternative has endplates with the same dimensions as those shown in Figure 2 except that the length between the endplates is reduced to 1.371 m. The cubic capacity inscription is "0.4 m³", with the symbol "m³" forming no more than one character.

4 ADDITIONAL INFORMATION

The following may be used to check the capacity of the measure using the dimensions and angles shown in Figure 2.

Capacity (m ³)	=	Area of endplate x Length between endplates x 10 ⁻⁶
Length between endplates	=	1.713 m
Area of endplate (mm ²)	=	Area (3) - Area (2) - Area (1) - Box section area
Box section area	=	Area of box 80 x 80 mm ²
Area (1)	=	(65 x 65 x TAN 55°)/(4 x SIN 55° x SIN 55°) mm ²
Area (2)	=	(80 x 80)/(2 x TAN 71°) mm ²
Area (3)	=	0.5 x (925 + (65/SIN 70°)) x SIN 70° x (((925 + 65/SIN 70°) x COS 70°) + ((925 + 65/SIN 70°) x SIN 70°)/(TAN 71°)) mm ²

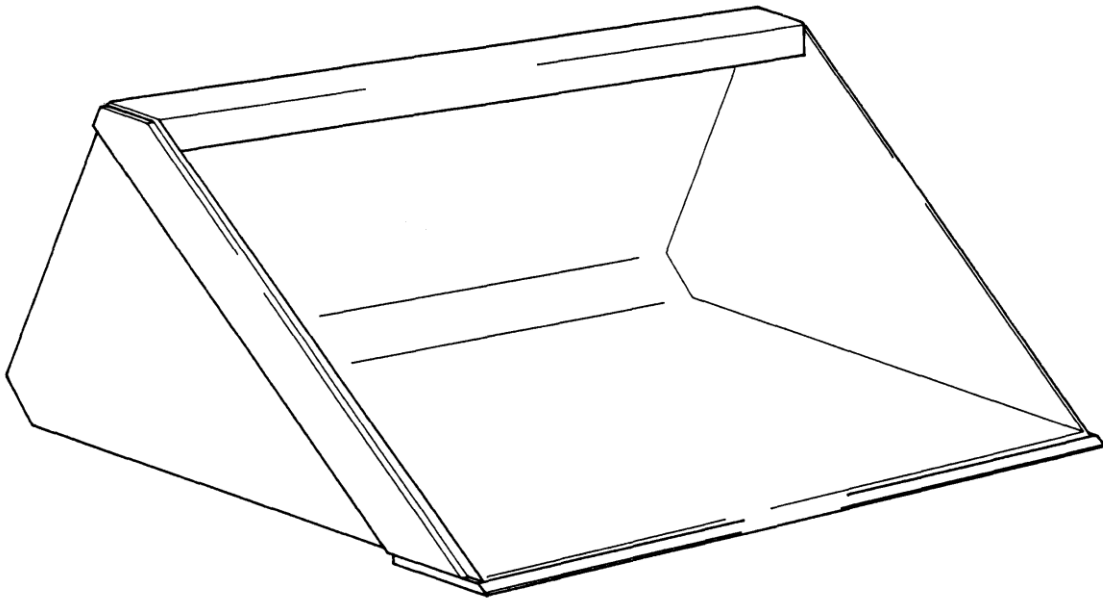


Figure 1 Diagram of the pattern

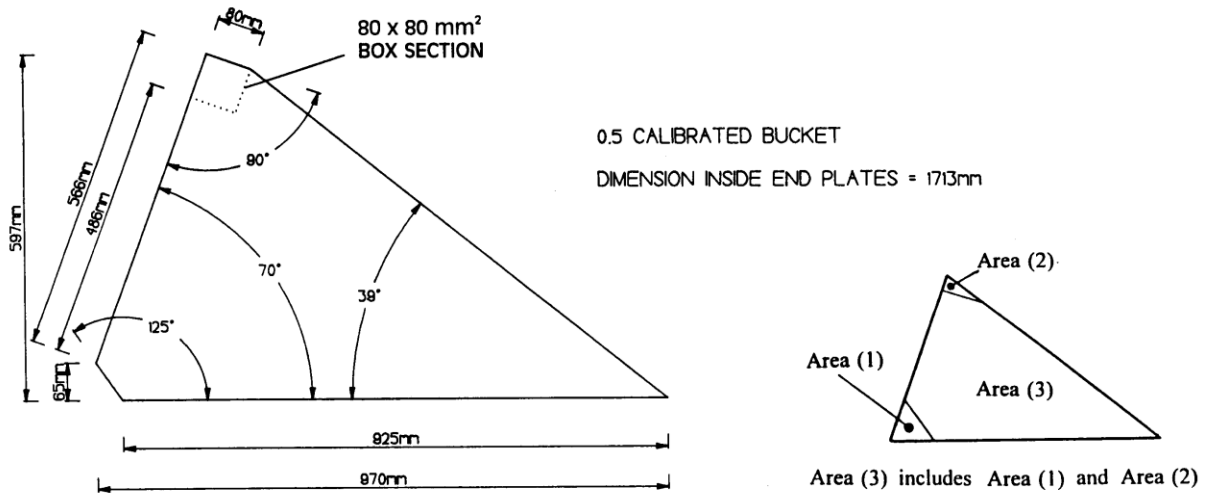


Figure 2 Diagram of the endplate with dimensions

CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
2367	13 June 2005	Certificate first renewed (initial certificate issued on 13 June 1995).
2367 Revision 1	13 June 2015	Certificate renewed for a further 10 years.