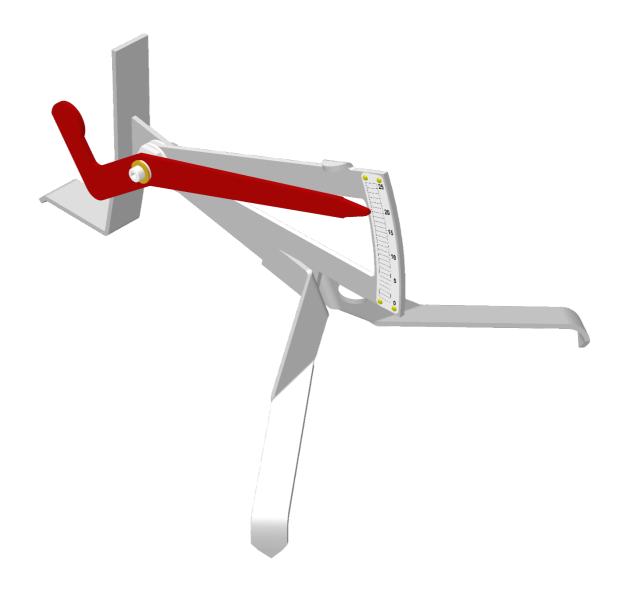


ABT3137
Voidmeter (Scottish type)



**Instruction Manual** 

## 1. Index

1.	Index	2
2.	Specification	2
3.	General Description	3
4.	Use of Gauge	3
5.	Maintenance	3

# 2. Specification

Weight	-	700g
Dimensions	-	320mm x 140mm x 280mm
Measurement		Range: 0-25mm with 3x magnified scale

## 3. General Description

The Abtus ABT3137 Voidmeter has been designed to measure dynamic void 0mm-25mm with 3x magnified scale.

The GRP and Nylon construction is lightweight and electrically non-conductive and the tool may be folded under a minute, to a compact size for carrying and storage.

## 4. Use of Gauge

#### 4.1 How does the Void meter work?

As a train passes over the track the force of the train causes flexure to the rails, compression in the ballast and voiding under the sleepers. What the Void meter does is measure the deflection of the rail as the train passes over it. The Void meter is a simple, robust gauge being made from a rugged steel construction and measures the deflection of the track very easily and accurately. When correctly installed, the unit will accurately monitor the track depression created by passing traffic. The unit reads directly onto a scale calibrated

#### **4.2 Taking Measurements**

Place the Void meter underneath the track between two sleepers and set the scale to read 0. The pointer end should be touching the underside of the rail, so that when the train passes over, the pointer will indicate the amount of deflection as indicated in "Detail A".



Figure 1 - Detail A

### 5. Maintenance

Care should be taken to avoid dirt entering the various tool mechanisms, as this may reduce effectiveness. The tool may be cleaned by wiping with a damp cloth. Thinners must not be used.