



TRACK GEOMETRY TROLLEY

PADS No: 0094/018011

ABT4530 Alignment Trolley

Description

The Abtus ABT4530 Horizontal Alignment Trolley has been developed to provide the maximum degree of measurement from a portable, lightweight apparatus.

Technical Data

Distance	-	Accuracy	±0.25%
		Resolution	0.01m
		Min Interval	0.1m
Gauge	-	Accuracy	±0.8mm
		Resolution	0.1mm
Check Gauge	-	Accuracy	±1.2mm
		Resolution	0.1mm
Flange-way	-	Accuracy	±0.8mm
		Resolution	0.1mm
Super-Elevation	-	Accuracy	±1.2mm
		Resolution	0.1mm
Gradient	-	Accuracy	±0.05°
		Resolution	0.1°
Twist	-	Accuracy	±1.2mm
		Resolution	0.1mm
Horizontal Versine	-	Accuracy	±10mm (@ 20m cord)
		Resolution	1.0mm
Vertical Versine	L-	Accuracy	±10mm (@ 20m cord)
		Resolution	1.0mm
	R-	Accuracy	±10mm (@20m cord)
		Resolution	1.0mm

Specification

Weight	-	On Track	20kg
		In Box	35kg
Physical Dimensions	-	On Track	1750 x 1700 x 1200 (mm)
		Folded	1750 x 1700 x 200 (mm)
		In Box	1800 x 550 x 320 (mm)
Operating Temperature	-		-20°C to + 50°C (-4°F to 122°F)
Environmental Rating	-		IP65
Battery Life	-	Control Unit	5 hours
		Trolley	8 hours
Operating System	-		Microsoft Windows CE



Track Geometry data is transmitted from the trolley via a Bluetooth® link to a weather-resistant, touch screen Control Unit for interpretation, display and user interaction within the Abtus Gauge Interface software. The Control Unit uses the standard MS Windows® operating system found on most mobile devices providing a familiar environment for the user to work in. The equipment requires only a single operator and can be used without track possession (*where local standards allow*).

Geometry data is collected at normal walking speed and displayed in real time both numerically and graphically. Tolerance bands can be applied to each measurement parameter for quick fault identification. Data can be transferred via a Bluetooth® link to a desktop PC or laptop and is in the widely used .CSV file format which is created together with an encrypted .SEC format for auditable recording.

The trolley can be quickly dismantled for convenient carrying to and from site and is supplied with a protective storage case.

