

Amberg Tamping VMS 1000

The long-chord track survey system for precise track works



Proven measuring principle – optimized for track works

- Long chord method
- Combined survey of inner track geometry and absolute position in one run
- Absolute track accuracy I mm
- Correction data in real-time
- Fully automatic control point measurement
- Best survey performance
- More than 80% cost savings compared to traditional methods

Modular system design – optimized for toughest project conditions

- Flexible system operation: twin-trolley mode or tripod mode
- Modular system upgrading
- Safe digital data handling from measurement to final transfer of correction data
- Easy handling, simple transportation
- Flexible measuring mode
- No geodetic skills required
- LED-lighting for secure work at night

Twin-trolley mode: High performance for long track sections

- Ist choice for measurements during track closures
- Measuring performance up to 2500 m/h
- Length of reference chord of up to 250 m
- Measuring system GRP 1000 consisting of precision sensors for gauge, superelevation and distance, prism column and ruggedized notebook
- Measuring system GRP TSC+ with precision sensors and tachymeter on automatic self-levelling tribrach
- Extendable to two independent single trolley systems (for alternate operation in tripod mode)



Tripod mode: Greatest flexibility under demanding project conditions

- Ideal for shorter track sections, e.g. turnouts, multi-track sections and projects with limited track access
- Length of reference chord of up to 400 m
- Measuring system GRP 1000
- Tachymeter on tripod (optional with automatic self-levelling tribrach)
- Flex-Stop-Function for immediate measurement interruption and track release
- Upgradable with second measuring trolley at any time



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System performance and technical data

Gauge 1000, 1067, 1435, 1520/24, 1600, 1668/76 mm Amberg GRP 1000 -25 to +65 mm For nominal gauges -25 to +65 mm For nominal gauges -25 to +65 mm For nominal gauges -26 mm Weight -260 mm Gauge measuring range -27 kg For nominal gauges -25 to +65 mm For ond all gauges -25 to +65 mm For ond all gauges -25 to +65 mm For ond in a trip on the station -25 to +65 mm For ond in a trip on the station -25 to +65 mm For ond in a trip on the station -25 to +65 mm For ond in a trip on the station -25 to +65 mm For ond in a trip on the station -25 to +65 mm For ond in a trip on the station -25 to +65 mm For on the station -25 to +65 mm F	System configuration	System configuration			
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Gauge measuring range		1600, 1668/76 mm			
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Cross level Stop & Go	Stop & Go mode	+/- I mm			
Stop & Go	Kinematic mode	+/- 3 mm			
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	Track geometry				
Kinamatic mode	Stop & Go mode	< 5 sec/ measurement			
\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Kinematic mode	<7 measurements/sec			

Environmen	tal specificatio	ons		
Working temperatur range Humidity • non-condensing		-10° to +50° <80%		
Typical performance ²⁾				
	accuracy	twin-trolley	tripod	
Mode	track position	mode	mode	
Precision	+/- I mm	1200 m/h	850 m/h	
Performance	+/- 3 mm	1900 m/h	1150 m/h	
Quick	+/- 10 mm	2300 m/h	1250 m/h	
Tamping dat				
Tamping data pramping		< 15 min/500 m		
Tamping data f	Tamping data formats		Plasser WinALC, ALC	
		CGV5		
		Framafer BAO3		
		Matisa	1 atisa	
		Harsco		
System appi	roval			
CE Conformity		EN 61326-1:2013		
		EN 61000-6-2:2005		
			EN 61000-6-4:2007/A1:2011	
		EN 60825-1:2014 EN 13977:2011 Directives 2014/30/EU Directives 2014/35/EU		
		Directives 2011/65/EU		
GRP System F	X	Network Rail / London Under-		
approvals from		ground (UK), Deutsche Bahr		
		(DE), SBB (CH), SNCF (FR)		
		ÖBB (AT), RFI (IT), Adif (ES)		
		ProRail (NL), I	, ,	
Extract of re	ferences			
	ay surveying so	lutions have pr	oven their hig	

¹⁾ Depending on e.g. chord length, atmospheric conditions, control point quality, positioning sensor and project conditions. ²⁾ Typical experience values, may depend on project conditions.

performance all over the world. Demanding projects have been successfully realised in e.g. Germany, Austria, Belgium, the Netherlands, Denmark, France, Italy, Spain, Greece, Turkey, Australia, United Kingdom, Saudi Arabia, UAE, Korea, USA, PR China

