Railway Wheel Profile Gauge



The laser profilometer is employed for measuring geometrical parameters of the rail wheel flange (thickness, slope, height), rim/tire thickness and for taking full profile of the wheel roll surface.

The device is supplied with database and software package for wheel sets wear data storage and processing.



Basic Technical Data

Name of parameter	Value
Measurement range for the flange height, mm	2045
-"- flange thickness, mm	2040
-"- flange slope, mm	115
-"- rim thickness*, mm	3090
Measurement error for the flange height, mm ± 0	
-"- flange thickness, mm	± 0,1
-"- flange slope, mm	± 0,2
-"- rim thickness , mm	± 0,1
Discreteness of indication of the flange height, mm 0,0	
-"- flange thickness, mm	0,01
-"- flange slope, mm	0,01
-"- rim thickness, mm	0,01
Profile measurement range – the whole profile between of the wheel tire faces (145 mm maximum)	
Discreteness of the profile formation, not worse than,	0.1
mm	0,1
Power supply – rechargeable battery	4.8V
The number of measurements that can be taken	
before battery recharge is not less than	
PDA memory capacity, no less	1000 measurements
Interface to PC USB, Blueto	

Overall dimension



IKP-X/Y-B/M/S-T

Symbol	Description
Х	Wheel tire width, mm Options: - 85 /105 (tram) ; 140 (car / locomotive)
Y	Measuring range, mm Options: - 55/67 (car / locomotive) ; 65 (tram)
В	Variants of profilometer mounting: F – flange, standard mounting method for car/locomotive wheels. Supports are based on the flange of the profile; T – tire, the variant of mounting for tram wheels. Mounting on the tire using the "horn" on the profilometer rod.
М	Variants of magnets for mounting profilometer on the inner/outer tire face: S – standard, standard magnets; F – forced, reinforced magnets.
S	Variants of the support plates. D – direct, standard support plates, profilometer is mounted on the inner face of the tire; I – invert, non-standard support plates, profilometer is mounted on the outer face of the tire.
Т	Presence of the tire thickness measurement rod (Y = 67)
IKP5-140/55-F/S/D. Measuring tire width 140 mm; measuring range 55 mm; F - standard mounting method for car/locomotive	

IRP5-140/55-F/S/D. Measuring tire width 140 mm; measuring range 55 mm; F - standard mounting method for car/locomotive wheels; S – standard magnets; D - standard support plates.

IKP5R-140/67-F/F/D-T. Profilometer with tire thickness measurement rod. Measuring tire width 140 mm, measuring range 67 mm; F - standard mounting method for car/locomotive wheels; F - reinforced magnets; D - standard support plates; T - presence of the tire thickness measurement rod.

IKP5T-105/65-F/F/D. Tram profilometer. Measuring tire width 105 mm, measuring range 65 mm; F - standard mounting method for car/locomotive wheels; F - reinforced magnets; D - standard support plates.

Measurement Instruments for Railway Transport



Contacts



RIFTEK Ltd. 22-311, Logoisky tract, 220090, Minsk, Republic of Belarus Tel/Fax: +375 17 281-35-13 Email: info@riftek.com sales@riftek.com Site: www.riftek.com