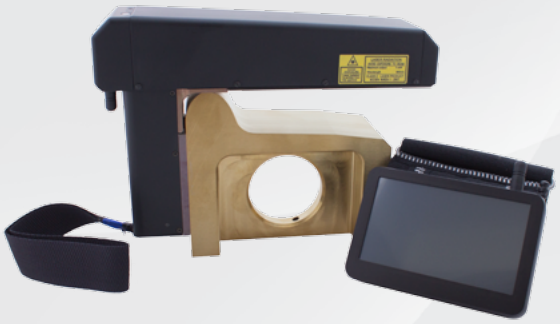
RAILWAY WHEEL PROFILE GAUGE
IKP SERIES



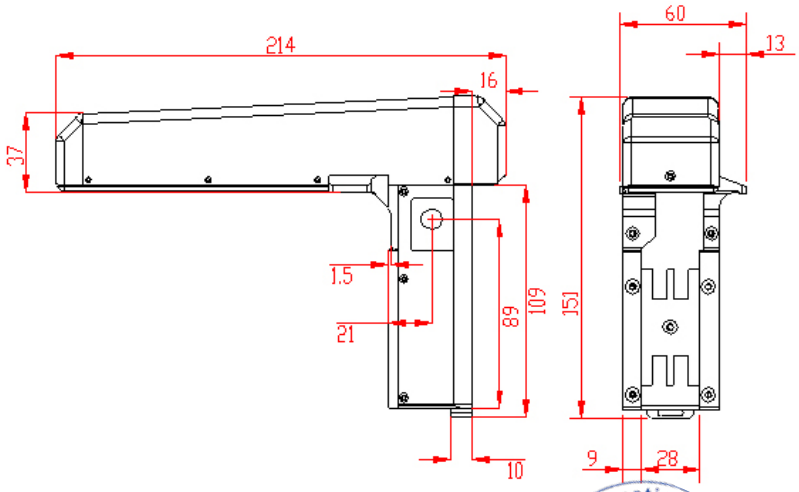
The laser profilometer is employed for measuring geometrical parameters of the rail wheel flange (thickness, slope, height), rim/tire thickness and for taking full profile of the wheel roll surface.

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	20…45
-"- flange thickness, mm	20…40
-"- flange slope, mm	1…15
-"- rim thickness* , mm	36…100
Measurement error for the flange height, mm	± 0,1
-"- flange thickness, mm	± 0,1
-"- flange slope, mm	± 0,2
-"- rim thickness , mm	± 0,5
Discreteness of indication of the flange height, mm	0,01
-"- 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, mm	0,1
Power supply – rechargeable battery	4.8V
The number of measurements that can be taken before battery recharge is not less than	1000
PDA memory capacity, no less	1000 measurements
Interface to PC	USB, Bluetooth

OVERALL DIMENSIONS



Certified according to ISO 9001:2008

OPERATION PRINCIPLE

Operator mounts the laser scanning module onto the wheel to be measured. Having received a command from PDA or PC, the laser module performs non-contact scanning of the wheel surface. Measurement results (geometric parameters and profile of the surface) are displayed on PDA, can be saved in the PDA memory, and transferred to the PC database. Simultaneously, additional parameters can be saved: operator number, side identifier (left or right wheel), axis number, locomotive (carriage) number, wheel pair number, etc.

EXAMPLE OF DESIGNATION WHEN ORDERING

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

Symbol	Description
X	Wheel tire width, mm Options: - 85 /105 (tram) ; 140 (car / locomotive)
Y	Measuring range, mm Options: - 55/67 (car / locomotive) ; 65 (tram)
B	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.
M	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.
T	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 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

Railway Wheel Profile Gauge, IKP Series

Wheel Diameter Measuring Gauge, IDK & IDK-BT Series

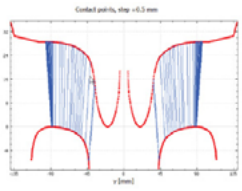
Back-to-Back Distance Measuring Gauge, IMR-L Series

Real Time Wheel Geometry Measurement System, 3DWheel

Back-to-Back Distance Measuring Gauge, IMR Series

Disc Brakes Profile Gauge, IKD Series

Rail Profile Measurement Gauge, PRP Series



Equivalent Conicity Calculation Program

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