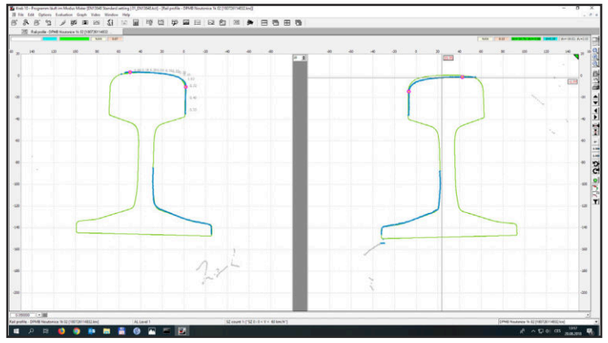
EXTERNAL DIFFERENTIAL GNSS RECEIVER

This option allows to use high-precision satellite navigation receiver with differential RTK corrections. System uses the GPS/GLONASS/ Galileo/BeiDou satellites. It is online connected to server providing differential corrections via Mobile Broadband. Precise location is transferred to KrabDroid computer for logging and further processing.

Comparison of measured data with common GPS (above) and external differential GNSS receiver (below).

RAIL PROFILE MEASUREMENT

3D cameras using triangular principle are applied for non-contact continuous scanning of the rail profile in regular step 0.25m. The rail head wear is calculated and displayed in real time as well as the shape of the rail head. The parameter of equivalent conicity is available in data post-processing. Both rails or only one rail can be measured simultaneously depending on chosen configuration.



Manufacturer:
Komercni zeleznicni vyzkum, spol. s r.o.
U Kaplicky 1199
165 00 PRAGUE
Czech Republic

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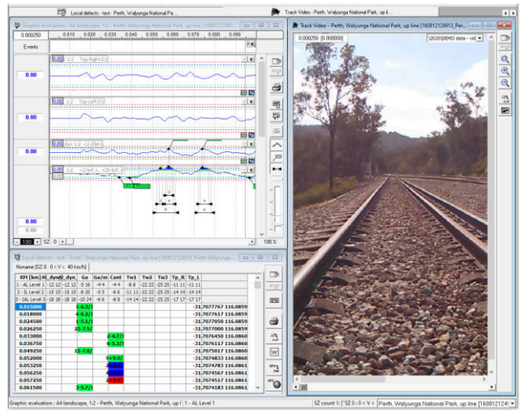
KRAB

additional accessories

The basic Krab S-Light device providing full track geometry parameters can be extended by number of auxiliary accessories covering a wide range of new functionalities. All auxiliary devices are fully integrated under basic track geometry data acquisition.

KRAB CAMERA, IP CAMERA

KrabCamera and IP Camera are an additional systems for Krab measuring trolleys. It allows to take pictures of the track, rails, sleepers or any other objects around measured railway track. Pictures are synchronized with Km position and taken in optional step (typically 1 to 10 m). KrabCamera application runs on a conventional Android smartphone and saves the images to its own memory, while IP Camera stores the images into the measuring smartphone memory.. After the measurement is finished, data from KrabCamera or IP Camera and from KrabDroid measuring software are downloaded to PC. They can be processed by Krab 11 evaluation software.



360° CAMERA

The 360° camera allows to capture the full 360° view around the trolley.

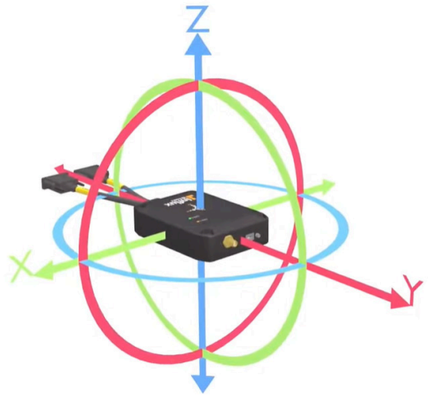
DIMETIX

DIMETIX option serves for operational checking of position. It uses two sensors - laser distance meter + incremental rotary sensor. Using these two sensors the 2-dimensional position of the objects around the track can be detected. Laser distance meter is positioned manually.

Krab-S-Light equipped with DIMETIX option

IMU - Innertial Measuring Unit - option for measuring in D2 waveband

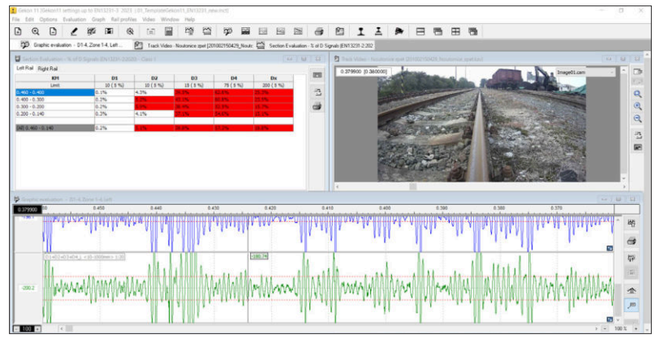
Family of Krab trolleys (Krab84.09, Krab-S-Light, Krab U-Light), can be additionally equiped with an IMU. IMU is designed for continuous and real-time innertial measurement of track geometry quantities Alignment, Top and Cant. The IMU sensors consists of the gyroscopes and acceleromters. Therefore all directions of movement are recorded and used for calculations. The output data can be used for calculations of Real geometry, Chord geometry and D1, D2 or even D3 vawebands.



Additionad corrugation measuring unit

Krab S-Light trolley can be additionally equipped with a corrugation measuring unit. This gives the Krab S-Ligth trolley wide range of measured quantities. The corrugation unit is placed in a box, which is attached to a measuring triangle arm. Data gained with the corrugation measurement unit can be evaluated in Gekon 11 software.

Krab S-Light equipped with additional corrugation measuring unit



Example of corrugation evaluation in Gekon 11 software