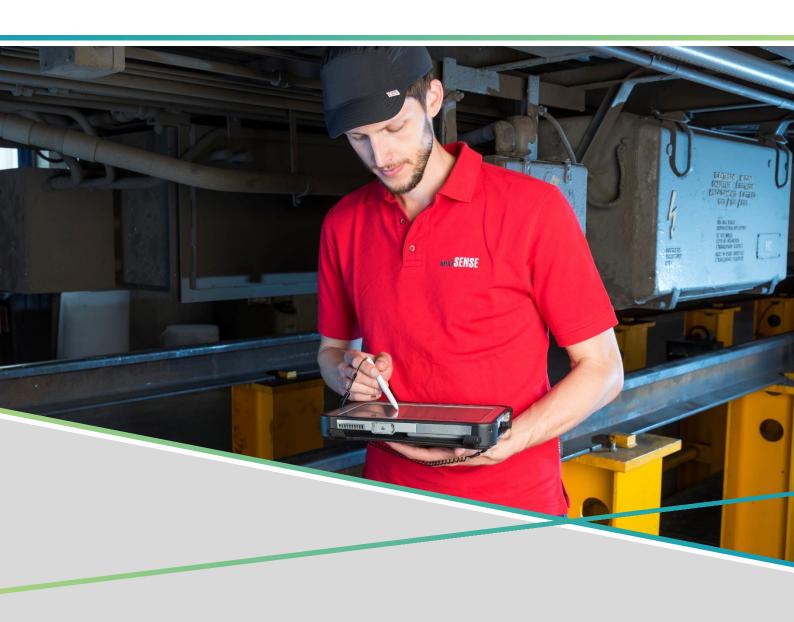




Data Sheet

Measurement module "Equivalent Conicity"



Doc. ID: CMM1011 Rev. No: 01

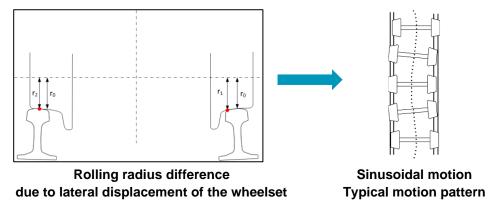
Date 2022-08-08





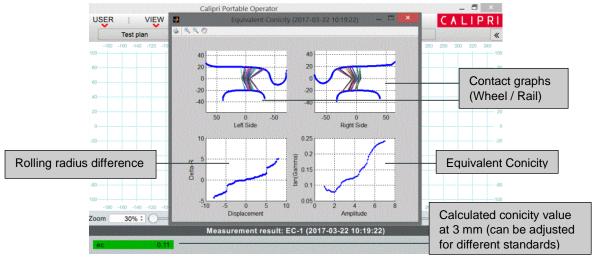
1 APPLICATION

The measurement module "Equivalent Conicity" allows for the precise analysis of the wheel rail interface. This measurement module provides the basis for the determination of possible vibrations and irregularities in vehicle dynamics as well as critical speed of railway vehicles. The conicity value (EC), calculated according to UIC 519 norm and EN 15302 norm, describes the railway vehicle motion pattern, which in turn permits drawing conclusions on the driving comfort and safety. The equivalent conicity results from geometry and profile of the wheel and rail.



The dimensions, required for the calculation of the equivalent conicity can be measured directly with CALIPRI C40/C41/C42 or entered manually (see technical data). After filling in the necessary input data, the calculation proceeds automatically. The EC value will be displayed on the sensor and tablet PC. This value can be compared automatically with your reference data. Additionally, four graphs will be displayed on the tablet PC for further analysis.

Measured variable:



Measurement method "EquivalentConicity"



2 TECHNICAL DATA

Compatibility	CALIPRI C41, CALIPRI C42
Accuracy	Complies with UIC 519 and EN 15302
Field of application	For all common heavy and light rail wheel and rail profiles
System requirement	Licensed measurement module "Wheel profil" or "Rail"
Necessary Input Data	 Wheel profile (measured or chosen from standard profiles) Wheel diameter and wheel back-to-back distance (measured or manual input) Rail profile (measured or chosen from standard profiles) Track width and rail inclination (manual input)
Product ID	CMM1011

3 SCOPE OF SUPPLY AND SERVICES

- Software license measurement module "Equivalent Conicity"
 - 1 measurement method (EquivalentConicity)
 - In case of system extension (supplementary order): activation via remote access



4 MEASUREMENT PROCESS



AND/ OR



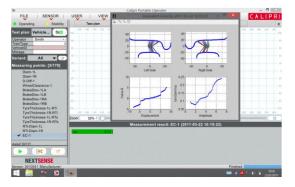


Enter input data

Measurement of wheel and/or rail profile



AND



Measurement result (sensor)

Measurement result (tablet PC)

Offer & Live demonstrations:

sales@nextsense-worldwide.com

