

Automated Train Wheel Inspection



Code Compliance

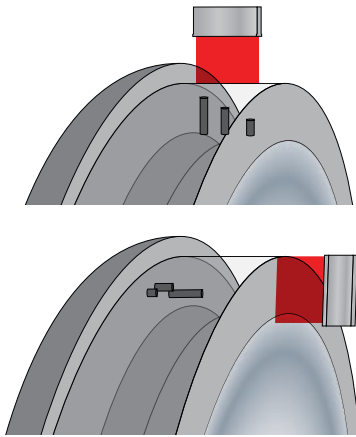
- ISO 5948
- NF EN 13262
- AAR

Train Wheel Inspection

AAR, ISO, and EN Compliant

Railway transport continues to play an important role in the transport industry due in large part to its speed, reliability and affordability. Integrity is key to maintain this viability and ensure train safety. Stringent regulations are imposed on the inspection of train wheels and axles in both the manufacturing and service sectors. To meet and exceed these strict criteria, Olympus provides the power and flexibility of its FOCUS PX/FocusPC™ package to experienced and knowledgeable integrators, who are then able to deliver fully code-compliant inspection systems.

Manufacturing Inspection



Requirements

Radial Defects:

- 2.0 mm FBH for high speed train wheels.
- 3.2 mm FBH for freight train wheels.
- Various depths from tread surface.

Axial Defects:

- 2.0 mm FBH for high speed train wheels.
- 3.2 mm FBH for freight train wheels.
- Various depths from rim surface.

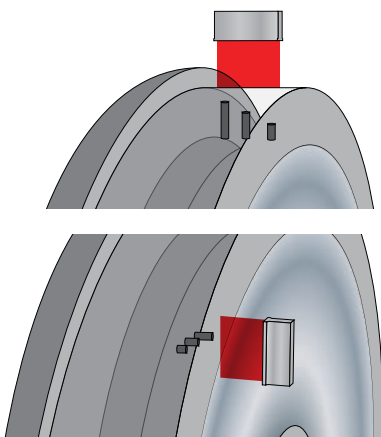
Performance

- Inspection time down to 30 s/wheel for freight train wheels.
 - Complete tread and rim areas coverage.
- Inspection time down to 3 min./wheel for high speed train wheels.
 - In-depth tread, rim, hub and flange coverage.

Code Compliance

- EN 13262
- ISO 5948
- AFNOR 09-340

In-Service Inspection



Requirements

Radial Defects:

- 1.0 mm FBH for high speed train wheels.
- 2.0 to 3.2 mm FBH for freight train wheels.
- Various depths from tread surface.

Axial Defects:

- 3.0 or 5.0 mm FBH in the web section.
- Up to 3 defects at different depths.

Performance

- Inspection time down to 30 s/wheel for freight train wheels.
 - Complete tread and rim areas coverage.
- Inspection time down to 3 min./wheel for high speed train wheels.
 - In-depth tread, rim, hub, and flange coverage.

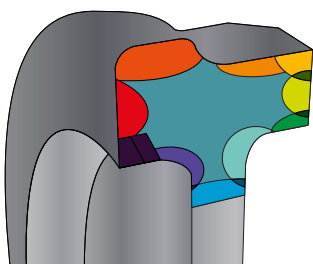
Code Compliance

- ESR 0331
- EN 13262
- AAR M107-84

Optional High Speed Train Inspection Requirements

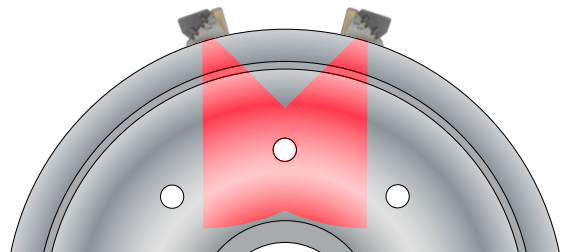
Multizone Coverage

Specific code requirements subdivide the rim area into zones requiring additional coverage.



Sub Bore-Hole Area Inspection

Some codes require the inspection of the area under the bore holes, which is achieved with a Pitch-Catch configuration.



High-Performance Package

Experience the power of the FOCUS PX™ acquisition unit, the flexibility of the FocusPC software, and the customization capability provided by the software development kits (SDK). These three components work in unison to maximize the performance of train wheel inspection systems.

FOCUS PX

Use the FOCUS PX to build fast and efficient inspection systems by benefiting from the high end specifications of this powerful acquisition unit.



Up to
30 MB/s
data throughput
per FOCUS PX

Up to
12 dB
SNR
improvements

Up to
4
FOCUS PX
in parallel

Automation and Customization

Fully automate your inspection system to reduce the cycle time per wheel and enhance detectability.

Customizable User Interface

Create your own specially designed user interface that optimizes and streamlines your system's performance.

FocusPC and SDK Features



Custom application

FOCUS PX

Probes and integration

- Advanced multiprobe and multigroup management for in-depth tread, rim, hub, and flange coverage.
- Dedicated user interface based on train wheel inspection requirements.
- External data retrieval capability for customized data presentation and processing.
- Fully automated and operator-free inspection systems using the SDKs.



Photo courtesy of SCLEAD.

Worldwide Partners

Olympus has a wide network of trusted partners that can provide you with a high-end solution for your inspection needs.



Developing a new solution?

Contact Olympus at: Info.IntegratedInstruments@olympus-ossa.com for special Integration Packages including the FOCUS PX, FocusPC, FocusControl and FocusData SDK along with customized training sessions and support.

Manual Inspection

Olympus offers an extensive portfolio of manual inspection products that can be used for prove-up testing to complement your automated inspection solution.



OmniScan MX2



OmniScan SX



EPOCH 650

OLYMPUS SCIENTIFIC SOLUTIONS AMERICAS CORP.
is certified to ISO 9001, ISO 14001, and OHSAS 18001.

*All specifications are subject to change without notice.

All brands are trademarks or registered trademarks of their respective owners and third party entities.
Copyright © 2016 by Olympus.

www.olympus-ims.com

OLYMPUS[®]

OLYMPUS SCIENTIFIC SOLUTIONS AMERICAS CORP.

48 Woerd Avenue, Waltham, MA 02453, USA, Tel.: (1) 781-419-9300
12569 Gulf Freeway, Houston, TX 77034, USA, Tel.: (1) 281-922-9300

OLYMPUS NDT CANADA INC.

505, boul. du Parc-Technologique, Québec (Québec) G1P 4S9, Tel.: (1) 418-872-1155
1109 78 Ave, Edmonton (Alberta) T6P 1L8

For enquiries - contact
www.olympus-ims.com/contact-us

