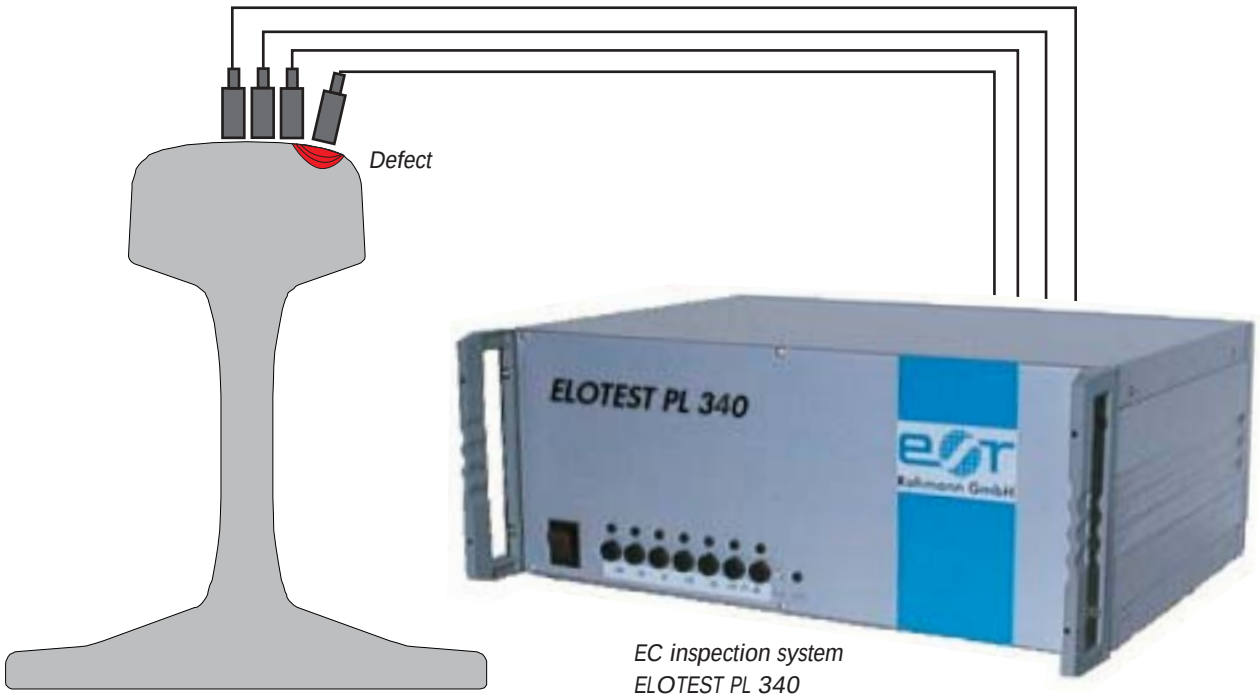
EC TrackScan® -

Automated Eddy Current Inspection System for Head checks



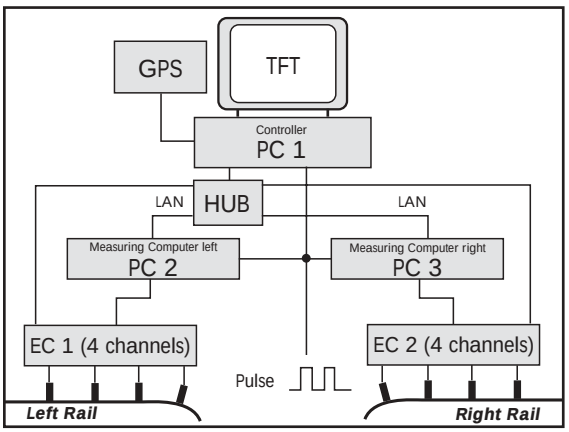
EC inspection system
ELOTEST PL 340

DB rail-inspection train

Also suitable for:

- **Corrugation**
- **Chatter marks**
- **Skid marks**
- **Weld seams**
- **And other defects**

Sliding probe holder



System concept

EC TrackScan®

Rohmann ENGINEERING

General Description

The test system is typically designed for the detection and evaluation of defects on or just below the surface of rails. In addition to defects along the guiding surface of rails (head checks) other inhomogenities such as corrugation, chatter marks, skid marks and weld seams can be found. Thus it is possible to track the development of damages along the surface, optimally plan the repair and monitor its success.

The measuring system consists of a multi-channel eddy current test instrument and a computer evaluation and analysis network for the inspection of defects on or just below the surface of rails. It is to be integrated in a rail-inspection train. Four test channels are available per rail i. e. there is a total of eight channels for both rails.

The measuring data of all channels are guided through an A/D converter and are forwarded to a measuring computer for each rail. A LAN in the inspection train forwards the measuring data to a control computer where they are merged with GPS and UT-data. Here a special evaluation software provides a preliminary selection of incidents where the rail surface is damaged. All measuring data are subject to an immediate evaluation.The evaluation software can be modified to meet the requirements of the end user.

Delivery and Performance Specifications (short version)

Eddy Current Inspection System

- ROHMANN eddy current inspection system, version SPZ, 2 x 4 channel
- 2 SPZ-probe holder, to receive and guide the probe along the rail
- 8/4 probes (BAM) to be integrated into the probe holder/spares
- 2 sets of connector cables with connector box and jacks

Evaluation System

- 2 + 1 industrial PC (NT), acquisition of measuring data for each side & data management
- 2 measuring value-A/D converter
- GPS system, satellite-guided positioning system
- HUB, network data controller (DB LAN)
- 3 TFT-flat screen
- USV, no-break power supply
- Air conditioning
- 19”-cabinet, main switch and fuses, heated with lockable front and back door and plexiglass insert
- Data acquisition and evaluation software (BAM)

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