

Application Solutions

Ultrasonics

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Ultrasonic testing of rails using the rail testing trolley SPG 2



Fig. 1: Rail testing trolley SPG 2

Industrial Sector

- Railway

Material

- Steel
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Application

In order to assure safety in rail transport, rails in track must be tested regularly. Whilst rail inspection trains test the lines at high speed, the rail testing trolley SPG2 is used in the area of stations.

Your Solution

In order to detect cracks in the rail head and web the trolley is equipped with 3 dual-element probes.

The angles are set to **70°** and **-70°** in one block and **0°** in a second block (refer to Fig. 2).

The two probe blocks are suspended in gimbals, to follow the contour of the rail easily, see figure 3.

It can be raised by means of two Bowden wires.

The rollers are designed to enable both, rolling on rails as well as on the ground.

The SPG 2 can be equipped with different portable UT instruments, for example with the USM 35 X.

The operation of an individual probe can be selected by the switches on the distribution box (Fig. 4).

Normally the rail testing is done with all transducers activated at the same time. However, when an echo indication occurs, the operator has the option of locating the flaw by individually switching the probes.



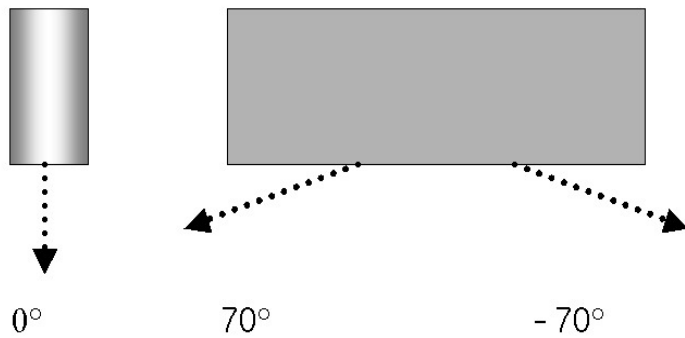


Fig. 2: SPG 2 probe configuration

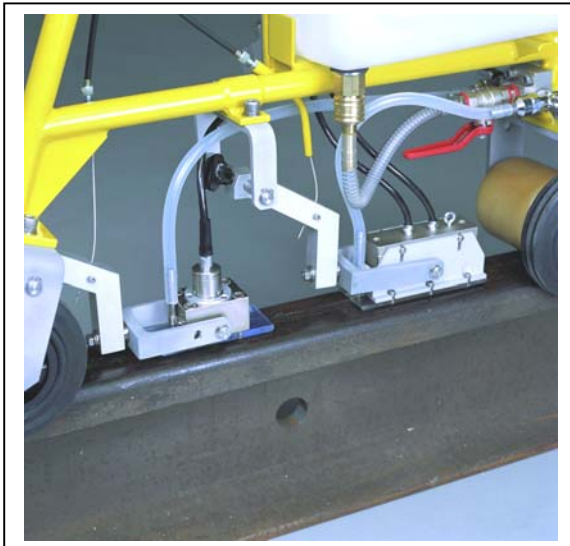


Fig. 3: The two probe holders of the SPG 2



Fig. 4: The distribution box of the SPG 2

What you need

- Rail testing trolley SPG 2 [35344]
- Angle beam probe SESZW-NW [59749]
- Straight beam probe SESZS 65 W [59750]
- UT instrument, e.g. USM 35 X [36060]

