

Application Solutions

Ultrasonics

70073 EH
June 2007

Ultrasonic testing of rails using the rail testing trolley SPG 3



Fig. 1: Rail testing trolley SPG 3

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 SPG3 is used in the area of stations.

Your Solution

In order to make the rail trolley compatible with the rail inspection-train, a new probe housing has been developed, containing 5 dual-element probes.

The angles are set to **70°, 38°, 0°, -38° and -70°** (refer to Fig. 2).

The probe block is suspended in double gimbals, to follow the contour of the rail easily, see figure 3.

It can be raised by means of a Bowden wire.

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

The SPG 3 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.

Industrial Sector

- Railway

Material

- Steel
-



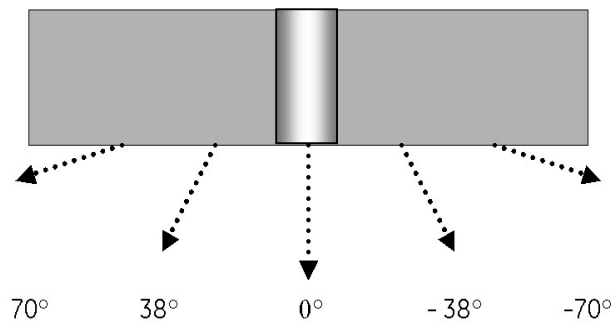


Fig. 2: SPG 3 probe configuration

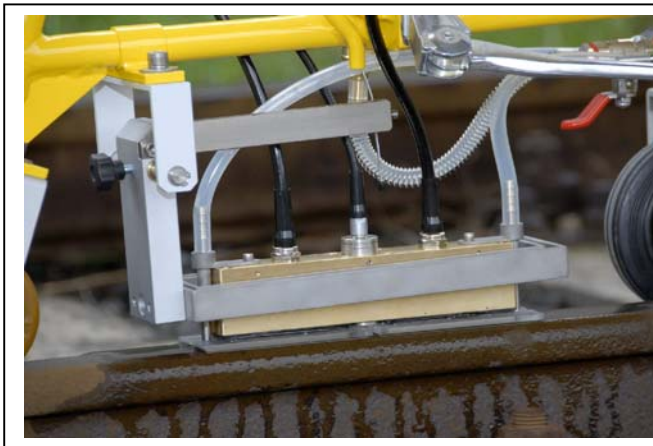


Fig. 3: The 70-38-0-38-70 probe with holder of the SPG 3



Fig. 4: The distribution box of the SPG 3

What you need

- Rail testing trolley SPG 3 [68927]
- Probe Block SESZW 38/70 S1 [68727]
- UT instrument, e.g. USM35 X [36060]

