

The invention relates to the nondestructive testing by ultrasonic (US) methods, particularly at the high-speed ultrasonic testing of rails.

The process for tracing the longitudinal axis of rail at the high-speed US testing consists in that before the waggon-flaw detector begins to move it is articulately mounted on its flaw detector carriage a tracing device, containing tracing skis with blocks of US transducers installed therein, the axis of symmetry of which coincide with the longitudinal axis of rail, the tracing skis are pressed by means of a pneumatic system against the rail, afterwards the waggon-flaw detector begins to move on the railway. The contactless tracing of the longitudinal axis of rail by means of tracing skis with blocks of US transducers is carried out with the help of magnetic assemblies with which it is additionally equipped the tracing device.

The device for tracing the longitudinal axis of rail at the high-speed US testing comprises a tracing mechanism, made in the form of tracing skis, installed on beams, articulately mounted on the frame of the flaw detector carriage of the waggon-flaw detector with the help of bearing supports. The skis are equipped with blocks of US transducers, and the tracing mechanism is provided with a pneumatic system. The tracing mechanism is additionally equipped with magnetic assemblies, fixed on its beams and placed on the same axis with the tracing skis.

Claims: 5

Fig.: 5