



Research on Ultrasonic Method for Online Monitoring of Corrosion Status in High-Speed Train C-Type Grooves

JIN Junjun

CRRC Qingdao Sifang Co.,Ltd.

The corrosion thickness detection system of C-type groove of high-speed train realizes the real-time online detection of the corrosion thickness of C-type groove by laying a multi-channel ultrasonic transducer array on the C-type groove structure, using the ultrasonic signal propagation characteristics to measure the thickness, and combining the functions of signal acquisition, digital processing, corrosion judgment, data transmission and alarm prompt. The system has the characteristics of high precision, high reliability, strong anti-interference, visual monitoring and intelligent analysis, and can be widely used in the safety inspection of high-speed trains and rail transit vehicles