

Małgorzata Ostromęcka: Rail Flash Butt Weld – Testing and Quality Control

The article presents the issues of control and quality assurance in rail welding. The methodology performed at the Railway Research Institute based on the requirements contained in PN-EN standards, qualification tests of welded rail joints has been described. Different types of weld tests have been outlined, including: visual tests, geometric measurements of roughness, magnetic particle and penetrant examination of welds, tests of breaking, micro- and macrostructures observations, hardness tests, fatigue strength tests. Requirements for respective tests and technical conditions for track welding have been presented.

Keywords: rail joints, approval tests, flash butt welding