

Rating impact of laser padding on the top layer steel by magnetic methods

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The article presents the problem of quality control the paramagnetic material of weld overlays laser made on X22CrMoV12-1 steel samples [1-3]. To assess the quality of the paramagnetic material and the effect of overheating, in addition to laboratory tests on the Keyence optical microscope, measures of existing magnetization (magnetic field distribution) and electromagnetic properties were used. Examples of research results are presented. It has been found, that is expedient use magnetic methods to assess the quality the microstructure of laser pad welded surface layer (Influence of heat generation, microstructure changes, chemical composition and own stresses).

References:

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