

# MECHANIZED MAG-M WELDING WITH STANDARD AND ECOLOGICAL METAL POWDER CORED WIRE

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## ABSTRACT

*The paper focuses on experimental research regarding the welding of D 32 steel grade sheets 13,4 mm thick by mechanized MAG-M welding process. Metal powder cored wires (standard - T 46 2 MM 1 H5 and low fume emissions - T 42 3 MM 1 H5) with diameters of 1.2 mm and shielding gas mixture M21 (Corgon 18) are used in the investigations. The samples have been butt welded on flat ceramic support, applying the vertical ascending position PF (BW) welding procedure. The welding procedures specifications and results of testing of welded samples are presented and discussed in this paper. Several conclusions on the results achieved within the experimental research program are emphasized at the end of the paper.*

**KEY WORDS:** MAG-M welding, metal powder cored wires, shielding gas mixture

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