

# ELEKTROLUČNO NAVARIVANJE OBLOŽENOM ELEKTRODOM ELEMENATA MALE ŠIRINE PRIMENOM ŠAMOTNIH OGRANIČIVAČA RASTOPA

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*U radu je korišten vatrostalni keramički materijal – šamotni ograničavači rastopa (umesto bakarnih sa vodenim hlađenjem) u cilju sprečavanja preliivanja i brzog hlađenja rastopa a samim tim i pojave prslina pri navarivanju na elemente male širine. Promenom položaja radnog komada u šamotnim ograničavačima postignut je najpovoljniji oblik i dimenzije navara koji su pogodni za izradu noža za ceđenje ulja. Napravljena je metalografska analiza (makro i mikro) na šest karakterističnih uzoraka za koje se daje geometrija navara (dubina navara, nadvišenje navara, debljina navara i dubina ZUT-a). Na kraju je urađena analiza dobijenih rezultata iz koje se vide prednosti korišćenja šamotnih ograničavača i daju prednosti ove tehnologije.*

**Ključne reči:**

*elektrolučno navarivanje; obložena elektroda; šamotni ograničavač rastopa; navar*

## ELECTRIC ARC HARDFACING BY COATED ELECTRODE APPLIED TO SMALL WIDTH ELEMENTS BY USING SOLUTION LIMITERS MADE OF FIRE CLAY

*The fireproof ceramic material – the solution limiters made of fire clay (instead of copper ones with water cooling) was used in order to prevent the solution overflow and rapid cooling, and thereby to prevent cracks during hardfacing of small width elements. By changing the position of the working element in the fire clay limiters, the most appropriate shape and dimensions of welds were achieved, suitable for manufacture of oil pressing cutters. A metallographic (macro and micro) analysis was performed on six characteristic samples for which the weld geometry is given (depth, protuberance and thickness of the weld and HAZ depth). Finally, the analysis of the obtained results was performed showing the advantages of the fire clay limiters and this technology.*

**Key words:**

*electric arc hardfacing; coated electrode; chamotte limiters of cast; hardfacing*