

The study the erosion of the electrodes under the influence moving electric arc

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Abstract

© Published under licence by IOP Publishing Ltd. The paper presents the results of experimental study of the processes of interaction of a moving arc with electrodes pulsed plasma generator in the range of parameters $I = 60 \div 500$ A, $U 30 \div 70$ V, $G 0 \div 155$ l/min, $dE 4 \div 14$ mm and $LE 2 \div 20$ mm. In this article the results of the study traces left by moving arc on the electrode surfaces are described, and the impact velocity of the arc on the form and sizes these traces, ranging $VD 7 \div 130$ m / s. We show the research results of the heating and erosion of the electrodes under the influence of high-current arc moving.

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