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Electro-Erosive Wire Cutting of Aluminum Foam

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This contribution deals with experimental cutting of samples made of special Alporas aluminum foam. This foam has been made by a powder metallurgy method and the foam resulting structure features very diverse material porosity. Test cuts through the aluminum foil were done using an non-conventional WEDM wire electro-erosive cutting technology. Monitoring and analysis of effects of proposed processing parameters on the resulting cut quality was done as a follow-up. Achieved accurracy of individual samples and its repeatability was also evaluated. At the end of the contribution wire cutting of aluminum foam technology findings are summarized and possible recommendations for practice are presented.

Key words: wire cutting, aluminium foam, powder metallurgy, non-conventional technology

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