Examining the Effects of Advanced Cutting Methods on Surface Porosity of Aluminum Foam Material

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***Abstract*—In this study, the aluminum foam material having two different pore structures was obtained. These materials were cut using advanced cutting methods (waterjet and wire erosion). And then, the porosity levels of the cut surfaces were examined depending on the cutting method applied. In order to ensure the equal measurement, the rate of feed was set to 40m/min. The porosity measurements were repeated for 6 times in parallel and vertical to cutting surface, and the mean value of those measurements was calculated. There were also problems with the two cutting methods. Both methods require additional processing. In terms of continuity of the cutting process, water jet is more advantageous. Water jetting in high and medium pore specimens yielded better results in places parallel to the cutting surface. It was the result of water jetting better at places that are perpendicular to the cutting surface.**

Key words: **Aluminumfoammaterial, Advanced cuttingtechniques, Pore, Surfaceroughness.**