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## Repairing imperfections of air bubble, stain and piece which are arising from the first firing by way of laser sintering method without need of second firing in sanitary ware

**Merve OZCAN**

ECE BANYO Gereçleri San. ve Tic. A.S., Turkey

The various parameters such as capacity increase, product development and design played an important role to improve the productivity in the sanitaryware industry. High costs of energy and labour made process of product development /improvement important with technological infrastructure and possibilities. This study involve that regional repair at the finished products have defects glaze which affect directly the product quality using low-temperature frit with Laser (Light Amplification by Stimulated Emission of Radiation) that product of applied physics and material science. One of the most important characteristics of Lasers based on the stimulated emission theory of radiation is that photons can move in one direction in the form of coherent beam. This means that the photon energy ( $E=h\nu$ ) can easily focus on a region. The porous structure of the glaze, released gases from the component of the glazes cause air bubbles, piece and stain in the melting phase. The glaze defects is observed at the finished products take part in the first region must be needed to the second firing. Thereby its possible to get products have a deformation such as shock. The laser sintering method brings on technological infrastructure in contrast with conventional/traditional methods. Additional to targeted decrease in costs of energy and labour which have an important share in the total cost is among the most remarkable project results.

merveozcan@ece.com.tr