

Engoglaze Development for the Production of Glazed Porcelain Tiles

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Abstract : Improvement of the digital tile application, lots of process revolutions have occurred in the tile production. In order to create unique and inimitable designs, all the competitors start to try different applications. Both European and domestic ceramic producers focus on the deep and realistic surfaces. In this study, the trend of engoglaze, which is becoming widespread in glaze porcelain tile designs to create the most intensive colours, were investigated. The aim of the study is to develop engoglaze formulation that supports digital ink activation. Thermal expansion coefficient values were determined by a dilatometer. Chemical analyses and sintering behaviors of engoglazes were made by X-ray diffraction and heat microscopy analysis. According to these glaze formulation studies, it has been reported that using engoglaze could easily reduce the digital ink consumption of the design. On the other hand, the advantage of the production cost is gained, and deepness of the design is provided.

Keywords : ceramic, engoglaze, digital ink activation, glazed porcelain tile

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