

**INVESTIGATION OF USABILITY OF TRANSPARENT GLAZES IN SMOOTH SURFACE
IN SANITARYWARE PRODUCTION**

Aslı Tayçu, Arzu Eker, Mehmet Gula, Nurcan Seyhan

Kaleseramik R&D Center
Kaleseramik Çanakkale Kalebodur Seramik San. A.Ş
17430, Çan-Çanakkale, TURKEY
aslitaycu@kale.com.tr

ABSTRACT

The purpose of this study is to develop surface appearance of sanitaryware glaze which is smoother than the conventional sanitaryware glaze surface, and to evaluate application method for producing smooth surfaces. Three different types of transparent glazes were used in sanitaryware raw glazes and fired under the industrial firing conditions (1210 °C / 12 hours). The sintering behaviour of developed draw glazes was evaluated using a double beam optical non-contact dilatometer. In addition, XRD was used to analyse the phases formed after firing. SEM was also examined in order to observe the microstructural characteristics of selected draw glazes. The surface smoothness of glazes was measured with roughness tester and chromatic coordinates were measured with Minolta instrument colorimeter. The results indicate that possible some raw glazes as an effective smoothness agent in sanitaryware production.

Keywords: Sanitaryware, glaze surface, transparent glaze, smoothness