

Title : CASTING SLIP DEVELOPMENT OF SURIN CLAY
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Casting slip development of Surin clay aimed at testing physical properties and chemical analysis testing of Ban-Mai Surin clay and Ban-Namkhlam Surin clay. The Ingredients of stoneware were tested by purposive sampling from Triaxial blending. Raw materials used were thirty – six samples of Surin clay, Ranong clay and Feldspar. They were fired at 1,250 degrees Celsius. After that the most appropriate ingredients of each clay were picked and choosed for Casting slip Shrinked 6 – 7 percent, with Modulus of Rupture $23.37 - 25.58 \text{ kg/cm}^2$. After firing, the bodies had much Shrinkage and high Melting point due to containing the igredients of much Alumina. The results of chemical analysis of Ban – Mai Surin Clay were as follows : SiO_2 60.0, Al_2O_3 19.0, Fe_2O_3 6.8, CaO 0.6, MgO 0.5, K_2O 1.4, Na_2O 0.3, L.O.I. 9.0 While the results of chemical analysis of Ban – Namkhlam Surin clay were as follows : SiO_2 57.0, Al_2O_3 24.4, Fe_2O_3 4.3, CaO 0.4, MgO 0.5, K_2O 0.5, Na_2O 0.4, L.O.I. 12.5. The results of the experiment were found that Surin clay of Ban-Mai which was the most appropriate for Casting slip composed of the following ingredientd : 30 percent of Ban-Mai Surin clay, 50 percent of Ranong clay and 20 percent of Feldspar which made the body of the product had good support and untwisted while Casting slip. After firing the body of the product was tenacious, red - brown and appropriate with transparent glaze. The results of the experiment were found that Surin clay of Ban-Namkhlam which was the most appropriate for Casting slip with following ingredients : 40 percent of Ban-Namkhlam Surin clay, 30 percent of Ranong clay and 30 percent of Feldspar . After firing, the body of the product was tenacious and white-gray and it was appropriate for transparent glaze.