

Pengaruh Variasi Penggunaan Film WTPF Terhadap Tingkat Kelekatan dan Ketahanan Panas pada Bodi Kendaraan Berbahan ABS (*The Effect of WTPF Film Usage Variations on the Levels of Adhesion And Heat Resistance in ABS Vehicle Bodies*). Supervisor by Dicky Adi Tyagita, S.T. M.T)

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ABSTRACT

Water Transfer Printing was an innovation and development in the painted process to relieve human work because it did not need an oven place, not required paint mixture, could reach narrow corners, and no need long time period. This research used experimental method by examine the level of adhesion and resistance to heat with variations in the use of WTPF films which was applied to the body of ABS vehicles. This research was placed in Automotive Machine Laboratory in State Polytechnic of Jember. The highest paint adhesion test results were in legato brand films with an average entry in the class of 5B and for the lowest level of paint adhesion was in aurora brand films with an average entry into the 3B class with the highest amount of peeled paint due to the low adhesion power between paint and specimen. The highest heat resistance test results were in legato brand films with the absence of paint color that was under lightness and for the lowest heat resistance is in aurora brand films with the most amount of paint experienced by the low level of resistance of the paint to high temperatures, the absence of finishing or clear gloss that serves to gave gloss to the top coat and protect the top coat to be stronger and the color on the top coat did not fade quickly.

Keywords : *water tranfer printing*, film, *acrylonitril butadiena stiren*(ABS).