

B 1 Pad Printing Media for Ceramic Decoration

Description of procedure for the pad printing process

Printing equipment for the direct printing process is ideally suited for the automatic decoration of flatware or slightly curved articles such as plates. With machines of this type it is possible to print one or more colors (4-color set).

Printing is carried out using thermoplastic pastes on metal or plastic-coated engraved plates. The printing stations consist of heated printing benches, vacuum – article feeding bench with centering.

Procedure

The color application cycle is as follows: the heated engraved plate is loaded with paste and positioned at the doctor blade. While the engraved plate is fed under the printing pad, the doctor blade is lowered and scrapes off any excess paste; the printing pad descends, takes up paste from the engraving and, once the engraved plate has returned to its former position, prints it onto the ware beneath which is held in a centered position by vacuum. The printing pad must be pliable, allowing its shape to be easily formed, and thus ensuring that the print is transferred without any distortion. Due to the thermoplastic nature of the pastes, it is possible to print multicolor decals with the pad printing process, without interim drying.

Pad Printing Media

Product-number	Appli-cation	Viscosity [mPa*s] D=1250 1/s at 65°C, approx.	Consistency	nvp[%] approx.	Pasting ratios printing paste	Decoration of
80 4084	pad printing underglaze onglaze	430	thixotropic	100	100 : 50 to 100 : 70	porcelain vitro porcelain bone china
80 4085	pad printing thinning medium	140	wax-like	100	100 : 50 to 100 : 70	porcelain vitro porcelain bone china

The technical data sheets of the individual products can be found in the Resource Center.

Limitation of Warranty and Liability

Ferro believes that the information contained in this document is accurate at the time of its publication. Ferro makes no warranty with respect to the information contained in this document. The information in this document is not a product specification, either in whole or in part. Your use of the information contained in this document and your purchase and use of this Ferro product are at your sole discretion. Downstream users are responsible for determination of the suitability of this product and for testing in specific applications. Nothing in this document shall be construed as a license for use that infringes upon any property rights of any third party. Please refer to the Safety Data Sheet (SDS) for safe use, handling and disposal information. All sales by Ferro to you are subject to Ferro's Terms and Conditions of Sale, as amended from time to time and available at www.ferro.com. In the event this document conflicts with Ferro's Terms and Conditions of Sale, Ferro's Terms and Conditions of Sale shall control.