

# ECS setting the standards in pressroom solutions

## ECS Duct Emulsion Instruction Sheet

The W600 range has been specifically formulated for application via the ink ducts on both sheet-fed and heat-set presses. These coatings benefit from all of the properties of conventional Waterbased emulsions, but do not require a dedicated coater for their application.

Waterbased emulsions suitable for application via ink ducts are substantially different from emulsions designed for dedicated coaters, with the main differences being found in their viscosity and stability. Viscosities of duct emulsions need to be relatively high, ensuring the product is unable to flow uncontrollably through the ink roller train. Stability is very important, as the product is required to pass through many small rollers prior to reaching the substrate. (*Emulsions designed for application via dedicated coaters will pass through 3-4 very large rollers and can therefore afford to be substantially faster drying*).

The W600 product range dries by means of evaporation and penetration. Optimum drying conditions being created by the use of IR lamps and hot/cold air knives. Extraction in delivery will also ensure that the job is a success. The preferred stack temperature when coating with duct emulsions is between 28 and 30°C.

It is recommended that a small application of medium sized spray powder be applied to the printed sheet.

Our duct emulsions can be applied as a dry solid using a rough grained aluminum plate. Spot application can be made using either a stripping blanket or using a photo polymer relief plate. For both methods it is important that the blanket is either stripped or packed to 3-5mm inside the sheet size. This will ensure clean running and avoid any build up of coating on the impression cylinder.

Pressure settings between plate/blanket/substrate should be kept to a minimum.

On start-up apply a high film weight to ensure clean running, this may then be reduced as required. During a machine stop the plate and blanket should be cleaned with water. On restarting the rollers should be sprayed with our Fresh Start Retarder, therefore ensuring a clean re-start.

Plates, blankets, and rollers can be cleaned using water. Any stubborn pieces of dried coating can be removed using C701 wash up.