

Tough Tex

■ Properties

Tough Tex inks have been formulated to dry very fast by oxidation and contain special varnishes that will bind the ink to a wide variety of non-porous stocks. Tough Tex inks do not contain mineral oil or any solvent nor are they aggressive, which could harm e.g. inkrollers, rubberblankets or the surface of the substrate.

■ Printing Presses

Tough Tex inks are suitable for single- and multi-colour offset presses, with a separated ink/dampening system.

■ Plates

Tough Tex inks are best used with metal plates, to avoid an excess of fountain water, which could influence the drying time of the ink.

■ Fountain Solution

Use of fountain solution has to be minimised as much as possible, due to the lack of absorption capacity of the substrate, especially during makeready activities on the press. Otherwise a too high a degree of emulsification will disturb the drying properties of the first couple of hundred sheets.

Printing non-absorbing substrates does not require the use of fountain solution which is prepared as an "anti-piling solution" for paper fibres. The anti-piling additives will remain in the ink-layer after printing and will disturb the drying process.

Also alcohol-substitution additives have a negative influence on the drying speed. Adding isopropyl alcohol to the fountain solution mixture, with a buffering capacity of pH 4.8 to 5.5, will optimize the wetting capacity of the fountain solution on the plate. It will stimulate the evaporation time of the water out of the ink-layer and will offer the highest contribution in reduction of the drying time of the inks.

■ Drying

NOTE: Tough Tex inks dry very fast by oxidation. If a press stop is longer than half an hour, the ink-rollers and blankets need to be cleaned! If ink refreshment on the rollers is very low, stronger emulsification of the ink is possible and drying speed can decrease. If drying of the ink-film must be accelerated, adding 3-4% Multidrier (V4210/V4215) is recommended, as well as the use of Anti Set-Off Powder. If Multidrier is not properly mixed with the ink before filling the ink-duct, the functionality of the drier is insufficient, causing a negative result.

Due to the enormous number of different types of substrates in the market, as well as the possible deviations in production quality of these materials, it is always necessary to check the drying affinity between substrate and ink before using the actual stock. A simple method is to fingertip a small amount of ink on the substrate and let it dry in the pile. Drying and anchoring of the ink must be completed after one working day.

Accelerated drying by means of IR- or UV-equipment is not recommended, as the accumulated heat in the pile will slowdown the drying time.

■ Substrates

Tough Tex inks have been formulated for printing on offset-prepared, non absorbent materials, such as metal damped foils, self-adhesive vinyl materials, plastics, transparents and likewise.

Deformation of the substrate can occur. At all times this has to be tested out, specially before using unknown substrates. Tough Tex inks can also be used on chromolux and conventional coated paperstocks, when drying properties are insufficient, using normal quickset inks.

■ Colour Range

Colours from the PANTONE® colour guide or special matches are available through the Van Son Special Colour Service department.

Tough Tex Process & PANTONE colours

Tough Tex	Tin 1 kg	Lightfastness	Alcohol Resistance	Alkaline Resistance	Nitro Cellulose Varnish	Soap Resistance	UV Varnish Ability	Foil Lamination Ability	Calendering Ability	Press Varnish	Aqueous Coating Ability
Process Yellow	VS496	5	+	+	+	+	-	+	+	+	+
Process Magenta	VS497	5	+	-	+	+	-	-	+	+	-
Process Cyan	VS498	8	+	+	+	+	-	+	+	+	+
Process Black	VS499	8	-	-	-	-	-	-	-	-	+
Universal Black	VS494	8	-	-	-	-	-	-	-	-	+
PANTONE Colours											
Yellow	VS44100	5	+	+	+	+	-	+	+	+	+
Warm Red	VS44101	3	+	-	-	-	-	-	-	-	+
Rubine Red	VS44102	5	+	-	+	-	-	+	+	+	+
Rhodamine Red	VS44103	4	-	-	-	-	-	-	-	-	+
Purple	VS44104	4	-	-	-	-	-	-	-	-	+
Reflex Blue	VS44105	3	-	+	-	-	-	-	-	-	+/-
Process Blue	VS44106	8	+	+	+	+	-	+	+	+	+
Green	VS44107	8	+	+	+	+	-	+	+	+	+
Transparent White	VS44108	n/a	+	+	+	+	-	+	+	+	+
Black	VS44109	8	+	+	+	+	-	+	+	+	+
Violet	VS44110	4	-	-	-	-	-	-	-	-	+
Opaque White	VS44111	8	+	+	+	+	-	+	+	+	+
Yellow 012	VS44112	5/6	+	+	+	+	-	+	+	+	+
Orange 021	VS44113	6	+	+	+	+	-	+	+	+	+
Red 032	VS44114	6/7	+	+	+	+	-	+	+	+	+
Blue 072	VS44115	4	-	+	-	+	-	-	-	-	+

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