Direction how to use Fountain Solution Hydrolith –NA+ ZX (No Alcohol)

General Remarks:
Isopropylalcohol in the printing process has its positive effects: it gives the printer more latitude for the ink and water balance, it increases the viscosity for better water transfer and gives other advantages. Yet the disadvantages today are more obvious: IPA is irritating to eyes and skin, the vapour cause dizziness, it evaporates into the atmosphere, it is costly and lowers in many cases the print quality. Yet the disadvantages today are more obvious: IPA is irritating to eyes and skin, the vapour cause dizziness, it evaporates into the atmosphere, it is costly and lowers in many cases the print quality.

Conditions for alcohol reduction and elimination:
The press should be fitted out with • a Fountain Solution Cooling System: temperature 10-14°C • soft parallel rollers with a soft shore hardness with a high transfer capacity – hydrophilic surface • ideally with a ceramic metering roller • if possible with separate ink and dampening unit • ideally with a inking unit cooling system to prevent high temperatures with long runs • standardizes water, ideally deionises with Reverse Osmoses and hardened up to ca. 10°dH/270 ppm • fountain solution filtering system

Directions

1. ensure that all setting of the press are correct, in particular the roller settings. After a few days printing IPA free or IPA reduced calibrate rollers again.
2. clean up the press with a good wash **(B-Matic Wash AIII**) and rejuvenator (**Rollo Vital liquid or paste),** including the removal of calcium residues (**Calcium, Remover GEL)**
3. clean the fountain solution circulation with a good Cleaner which contains biocides **(DSC Cleaner)**
4. add **Hydrolith BS-NA/ZX** 3-4% depending on the water conditions and make sure that the dosage is correct
5. reduce the IPA down to 0-4% and run for a couple of days – in some cases a low percentage of IPA might still be necessary
6. control on a regular base the parameter of the Fountain Solution: conductivity and pH value

Printing without IPA or IPA minimized reduces the Fountain Solution window. Also a higher Fountain Ductor speed is usually necessary if no hydrophilic rollers with a rough surface are in use.

Adjustments of Dampening Rollers

- The **Shore Hardness of the Metering Roller** should be low: ca. 18-25 (common is a shore hardness of 25-30°).
  Advantage: softer rollers are more hydrophilic an the stripe between the Chrome- and Metering Rollers becomes broader without increasing the pressure.
  Result: a broader window while printing, a more even distribution of the water on the chrome cylinder.
- Reduce the pressure stripe between Chrome Roller and Dampening Roller down to ca. 3-6mm
  Advantage: the water film on the Chrome Roller will be reduced and a slip between Form and Chrome Roller is achieved
- The **Metering Rollers** should be adjusted parallel in the beginning. Only if in the middle of the plate the dampening is too much and at the ends too less water the rollers should be entangled.
- Advantage: the plate is dampened evenly all over the plate.