

Tech Talk From P



Tech Talk #C8

SATIN AND MATTE AQUEOUS COATING APPLICATIONS

The following are some helpful hints to minimize streaking when coating with satin or matte aqueous products.

- 1. Mix the coating well prior to use. Matte and satin products contain flattening agents that must be dispersed well throughout the drum. While the product is in storage, settling may occur.
- 2. The rollers in the coating unit should be clean and well maintained. Dry coating or imperfections on the coater unit rollers will show up in satin and matte coatings as streaks. Clean the coating unit prior to use with an ammonia/water solution or Prisco Aqueous Coating Cleaner. A nylon scouring pad will help to break up any dry coating build-up on the rollers.
- 3. Smooth metering and applicator rollers should be used in the coating unit. Some presses come standard with a tough rubber metering roller in between the pan and the applicator roller. This rough roller will almost always cause a streak or a pattern effect that will be transferred to the substrate. Consult with your press manufacturer about "kiss ground smooth" rollers in the coating unit.
- 4. Lower the viscosity of the coating. Often, lowering the viscosity of the coating will help. The lower viscosity may help the coating flow and level out. Reduce the coating viscosity with water, using about 1.5% by coating weight. This will lower the viscosity by 3-5 seconds. The viscosity should not be lower than 15 seconds in a #3 Zahn cup at 77°F (25°C).
- 5. Adjusting roller pressure can often reduce streaking. Results will vary from press to press. Some presses run better with more squeeze and some run better with less. Reduce the nip pressures throughout the coating unit to allow more coating on the rollers to completely cover uneven surfaces. Increase the pressures throughout the coating unit to mask the roller imperfections in order to eliminate streaks. It is important to avoid beads on the sides and tail, as they will tend to stick in the load.
- 6. Aqueous coating types will vary. The dullness of a coating and its drying speed has an effect on streaking. There are different types of satin and matte coatings. Some are designed specifically to eliminate problematic streaking issues. Consult with your Prisco Representative for the best product for your particular situation.

As always, your local PRINTERS' SERVICE office is happy to answer your questions:

U.K. 44 (0) 1423 810 320 • 44 (0) 1423 810 319 Fax **Belgium** 32 (0) 56 40 41 82 • 32 (0) 40 41 83 Fax