

Flexographic Printing: Cryovac, Canada

Application Note 103

Automatic viscosity control with Norcross systems in the flexographic printing industry is so commonplace, that it's hard to visualize news from a flexopant. The installation at Cryovac Canada, Ltd., subsidiary of W.R. Grace Co., however, is definitely worth talking about. This plant, located in Mississauga, Ontario, is a major supplier of packaging for the meat and packaged food industries of Canada. Custom printed bags, casings and films are the principal products. Most of the material is multilayer and polyolefin based. Inks supplied by several ink companies are solvent based.

There are two important characteristics of the operation which present unusual challenges. First, the runs vary from a low of 2500 impressions to over 1,000,000, with an average length of 27,000. Second, opacity of large white areas on some packages is a must, and the finished product has to meet rigorous tests for opacity and color match.

Careful checks revealed that efforts by experienced operators to control viscosity manually with a Zahn Cup were resulting in departures from optimum viscosity by as much as ten Zahn Cup seconds. Excess scrap and uneven quality were the inevitable result.

A search for a better system was initiated. Equipment from Brookfield, Graymills, Crosfield and Norcross was evaluated. Today both the 6-color and 4-color presses are completely fitted with

Norcross controls.

Zahn Cups are used for calibrating, and the controllers display viscosity in the pertinent cup seconds. The systems work so well that the operators insist on using them even on runs as short as 2500 pieces. This can mean in extreme cases that 2.5 hours of press set-up time are followed by less than 1 hour of running time. The men think it's worth it because the fine control of viscosity has enabled them to meet customer specifications for opacity of whites routinely.

James Brown, superintendent of the printing department, attributes the success of their operation to several factors. Clearly sound advice and follow through by Norcross factory personnel was a major element in selecting the right equipment and getting up and running. Another major factor was involvement of press operators from the outset. Their suggestions were valuable and their participation made it "their program, not one imposed on them." For example, they were responsible for the position of valves separated from the measuring elements for ease of handling in cleanup. Last, but not least, the Norcross system does the job so reliably that all the personnel have confidence in it and won't run without it.

There is no doubt about it, dependable, close control of viscosity can make a big contribution to a smooth running flex operation.

