

AQUEOUS COATING TROUBLESHOOTING GUIDE

Problem	Cause	Corrective Action
Coating Bead on Tail Edge of Sheet	<ul style="list-style-type: none"> • Applicator roller speed running faster than blanket roller • Too much pressure between blanket and back cylinder 	<p>Reduce roller speed</p> <p>Release back cylinder pressure slightly</p>
Voids in Coating Uneven Coating Film on Sheet	<ul style="list-style-type: none"> • Uneven nip pressure between applicator roller and blanket • Not enough squeeze between blanket and back cylinder • Dried coating on blanket or rollers 	<p>Adjust rollers to blanket KISS impressions</p> <p>Increase back cylinder pressure until even coating film is achieved</p> <p>Clean blanket or rollers</p>
Coating Foaming	<ul style="list-style-type: none"> • Pumping coating too hard forcing air into coating • Coating does not contain enough defoamer to accommodate high sheer Anilox coater and circulation system 	<p>Slow coating pump down</p> <p>Add manufacturers recommended defoamer press side to reduce foaming</p>
Bad Lay of Coating Over Inks (Mottling)	<ul style="list-style-type: none"> • Wax in ink other than polyethylene • Dirty coating blanket • Too much back cylinder pressure 	<p>Use wax free inks. Limit wax inks to polyethylene</p> <p>Clean blanket</p> <p>Release back cylinder pressure slightly</p>
Orange Peel Effect	<ul style="list-style-type: none"> • Too much coating transfer to blanket • Coating viscosity is too high 	<p>Apply more pressure between nips. Slow roller speeds to apply less coating to blanket.</p> <p>Lower viscosity of coating</p>

ACTEGA Kelstar, Inc.
 1050 Taylors Lane
 Cinnaminson, NJ 08077
 USA

Tel +1 856 829 6300
 Fax +1 856 786 2860
 E-mail info.actega.kelstar@altana.com
www.actega.com/kelstar

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Back Trap of Ink on Blanket	<ul style="list-style-type: none"> • Too little coating being transferred from rollers to blanket • Too much back cylinder pressure (impression cylinder) 	<p>Increase roller speed to transfer more coating to blanket</p> <p>Unpack blanket packing or reduce pressure from back cylinder to blanket</p>
Ridges in Coating Applicator Roller	<ul style="list-style-type: none"> • Roller is set improperly 	<p>Reset roller pressure</p> <p>Check coating roller</p>
Coating Build Up on Sides of Sheets	<ul style="list-style-type: none"> • Too much pressure between applicator roller or blanket and back cylinder 	<p>Release pressure between rollers (open nips)</p>
Offsetting of Ink in Pile	<ul style="list-style-type: none"> • Coating viscosity too low • Not putting enough coating on sheet • Insufficient drying 	<p>Change coating to higher viscosity drum</p> <p>Speed up coating unit or open nip between rollers</p> <p>Dry with adequate air knife and IR</p>
Mud Cracking	<ul style="list-style-type: none"> • Coating drying too fast • Coating over excessive ink density 	<p>Slow down coating dry speed</p> <p>Select coating with better film formation properties</p>

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Picking and Sticking of Sheets in Pile	<ul style="list-style-type: none"> • Too much coating being applied to sheet • Coating viscosity too high • Coating drying too slowly • Insufficient drying 	<p>Slow down unit speed. Reset nip applicator and roller pressures</p> <p>Lower viscosity of coating</p> <p>Select a faster drying, better block resistant coating</p> <p>Press drying system is not properly functioning</p> <p>Increase air movement via air knife</p> <p>Run spray powder</p>
Splitting and Slinging	<ul style="list-style-type: none"> • Coating building up on edge of roller 	<p>Reduce viscosity and adjust roller settings speed</p>
Sheet Curl	<ul style="list-style-type: none"> • Stock is absorbing too much water • Too much heat 	<p>Stock moisture content is too low, less than 5% leading to excessive curl as water is absorbed from aqueous coating</p> <p>Reduce coating weight or viscosity</p> <p>Use faster setting inks with lower water pick up</p>
Volcanoing	<ul style="list-style-type: none"> • Volatiles in ink are being forced through the ink causing a small volcano looking void 	<p>Lower dryer settings to lower temperature in pile</p> <p>Use higher solids ink with less volatiles</p> <p>Dry inks more before applying and drying coating</p>

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