



Pumping Viscous Bonding Resins

Location		Hydra-Cell model	G10XKCGHFEYA
Type of application	Pumping Viscous Bonding Resins	Flow rate	5 - 8 L/min (1.3 to 2.1 gpm)
Liquid	Resin	Pressure	10 bar (145 psi)
Application details	A leading producer of bonded abrasives was having difficulties pumping a viscous, shear-sensitive, bonding resin.		
	The screw pumps installed required frequent, expensive maintenance and were also subjected to run-dry conditions from entrapped air that can damage screw pumps. Consequently, they had to be replaced annually at high cost.		
	Each pump feeds a circulating loop 4.9 - 7.9 L/min at 10 bar (1.3 to 2.1 gpm @ 145 psi) which in turn feeds a mixer. Air entering the system causes the resin to become even stickier, requiring the system to be regularly flushed with water.		
	At 4200 mPas, the resin was considered to be too viscous for a Hydra-Cell pump to handle.		
	The pump was tested at the distributor's facility and then again on-site by the customer, passing with flying colours.		
	At present, one Hydra-Cell D10 has been installed and two others await installation when the remaining screw pumps fail.		
Advantages of Hydra-Cell pump on this application	Seal-less design for:		
	 Ability to reliably handle highly viscous, shear-sensitive liquids. Lower initial cost. Significant savings through reduced maintenance costs. 		

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