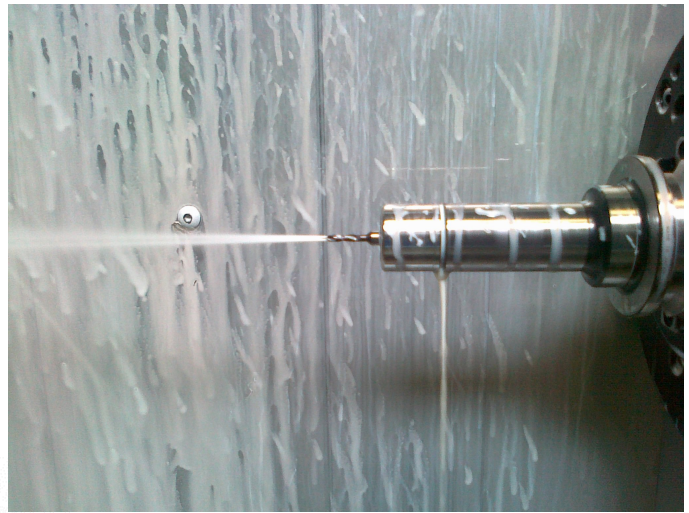


Application story



High Pressure Coolant for Plastics Machining

Location	Hungary	Hydra-Cell model	G10XKBTHFECA
Type of application	High Pressure Coolant for Plastics Machining	Flow rate	30 l/min (8 gpm)
Liquid	Machine Tool Coolant	Pressure	60-70 bar (870-1000 psi)
Application details	A Hungarian plant of a leading international group specialising in glass and plastics manufacture was operating a machining facility far below its rated speed and capacity pending the development of a viable high-pressure coolant system. Meanwhile Knoll low-pressure centrifugal pumps were in use for coolant delivery. The plant makes a variety of components and finished products machined in special plastics such as PEEK, PTFE, ETFE, PVDF, Plexi and glassfibre PP. Products manufactured include purpose-designed trays for surgical screws and tools, turbo housings for the automotive industry and other parts requiring precision surface finish. While reliant on low pressure cooling, the high costs of tooling and materials prevented the company from making proper use of its fast plastics processing machinery. Efficient cooling depends on consistently reliable delivery of coolant emulsion to the workface at high pressure. Inadequate cooling can cause the plastic to fuse, even to entrap the tool, and crash the system. In choosing a pump for the projected high-pressure coolant system management considered the Knoll piston pump range. But the design advantages of the Hydra-Cell, distributor support and the practical evidence of a successful 3-month trial period with a customized system incorporating the G10 led to the purchase of a further ten complete systems. Each system, in addition to the pump itself, includes safety valve, filters, pipework and controls based on a PLC in conjunction with frequency inverter to vary motor speed. Following the installation of the high-pressure coolant systems, processing speeds are faster, output has increased and energy costs have fallen.		
Advantages of Hydra-Cell pump on this application	High pressure capability. Small footprint. Consistent flow rate. Self-priming. Low energy consumption.		

www.hydra-cell.co.uk

Wanner Engineering -
World Headquarters & Manufacturing
Minneapolis USA
t: (612) 332-5681
e: sales@wannereng.com

Wanner International
Hampshire UK
t: +44 (0) 1252 816847
e: sales@wannerint.com

Wanner Pumps
Shanghai CHINA
t: +86-21-6876 3700
e: sales@wannerpumps.com

Wanner Pumps
Kowloon HONG KONG
t: +852 3428 6534
e: sales@wannerpumps.com