

MACHINE TOOL COOLANT

Quick

STUDY

Hydra-Cell
Seal-less Pumps

www.Hydra-Cell.com

Location:	United Kingdom
Application:	High-pressure coolant delivery
Media:	• Titanium
Model No.:	D15
Flow Rate:	Various
Pressure:	>2175 psi (>150 bar)
Hydra-Cell Advantages:	• Seal-less design - with no dynamic seals, Hydra-Cell pumps were chosen in preference to screw pumps because of the Hydra-Cell's reliability in handling very abrasive titanium alloy particles in the coolant liquid

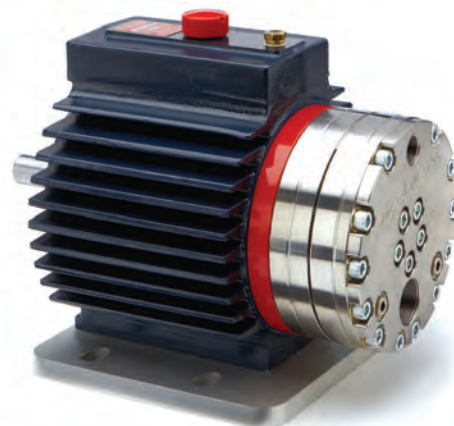


Machining Titanium Alloys

Machining the hard titanium alloys used in the aircraft industry requires coolant to be delivered at pressures over 2175 psi to achieve good results.

The particles produced from these hard alloys are very abrasive. The presence of even minimal amounts in the filtered coolant can cause problems for high pressure pumps reliant on dynamic seals.

UK aircraft builders are using Hydra-Cell D15 seal-less pumps to deliver coolant at high pressure in these demanding conditions.



Characteristics of Fluid Pumped:

☒ Contains Abrasives ☐ Corrosive ☒ Solids in Suspension ☐ High-temp. (>158°F/70°C) ☐ Non-lubricating ☐ High-viscosity (>500 cPs)