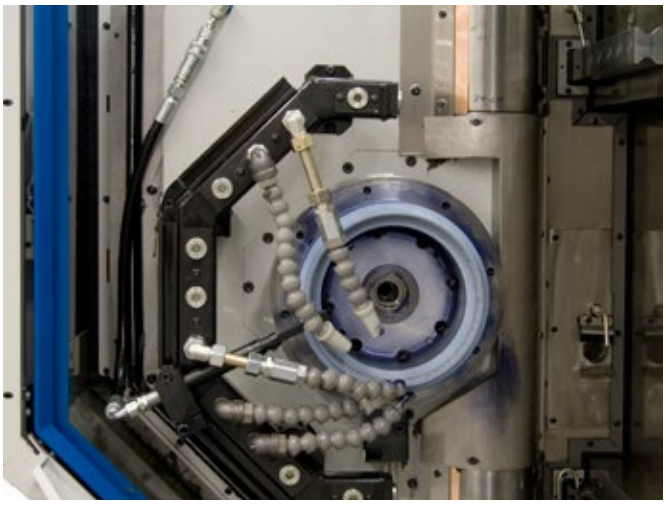
MCHT-013-E

APPLICATION SOLUTION:	Coolant Head Positioning



Product Family: Electric
Product Used: RSA Electric Rod Actuator
Product Type: Modified Standard

Application Requirements:
Load: 50 lb

Application Description:
Moving a manifold of coolant jets.

Challenge:
In a machine tool builder's gear grinding system, a flow of lubricating coolant needs to be precisely directed at the grinding wheel's point of contact at all times to ensure the best finish. The original coolant head design involved an electric actuator moving a 50-pound manifold of coolant jets in small increments as the grinding wheel was consumed and changed dimensions. However, their actuator sometimes had trouble moving the heavy manifold, causing increased friction in the system which led to position loss and machine stoppage. A new actuator was needed that could handle the manifold, fit in the limited space of the system and withstand the wet environment.

Tolomatic Solution:
Because the machine couldn't accommodate a physically larger motor, a RSA electric rod actuator was used. The RSA features a reverse-parallel motor drive where the motor is mounted alongside the actuator, providing powerful performance. The smallest size model had enough power for this application. Modifications included sealing gaskets to prevent ingress of fluids and custom front flange mounting to fit the actuator within the space constraints of the machinery.

Customer Benefit:
- Increased productivity and flexibility
- Eliminated machine faults
- Provided powerful performance with compact profile electric rod actuator

(Reference: 9900-9198)