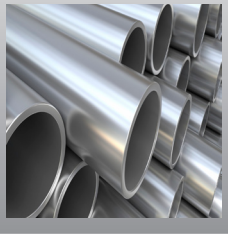
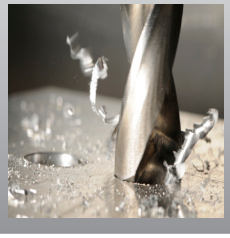
SOLUTIONS SHOP


Closed Loop Control of Machining Lubrication Saves Customer $300 per Axis

Challenge:

A machine tool manufacturer wanted to be able to focus streams of oil on the cutting surface while the apex of the cutting tool pierced the metal. Their requirements included slow, precise movement, high force, durability, and compactness.

Solution:

Bimba was able to meet all the customer's requirements using PFCN cylinders with matched PCS controllers, providing a closed loop solution. Nozzles were pulled through an arc using a cable assembly attached to the PFCN cylinder. The PFCN cylinder mounted compactly against the side of the machining center, while the PCS controllers were mounted separately to optimize the routing of cables. This also saved space and removed the controllers from the presence of oil and cutting debris. Mounting the controllers in a different location also eliminated the chance of developing EMI, or electromagnetic interference, which is noise picked up in the signal wires that causes performance problems.

By ordering the PCS controls with connectors and cables as the "YQ" option with the cylinders, the customer was able to save $300 per axis. They used the money they saved to add an additional nozzle for improved lubrication and heat transfer.

Benefits:

- **Saves $300 per axis.**
- **Closed loop solution.**
- **Eliminates EMI (electromagnetic) interference.**

Other Applications:

- **Drilling**
- **Sawing**
- **Grinding**
- **Feeding**

Contact Bimba at 1-800-44-BIMBA or cs@bimba.com

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