



## Cutting Head Positioning Cylinder Increases Life 20%

### Challenge:

A customer needed to position a sheet metal cutting head, requiring precise control. A standard position feedback cylinder had worked well for a time, but eventually moisture and application debris worked their way into the seals and into the cylinder. As a result, the cylinders leaked air and the probes wore prematurely.

Bimba's PFCN cylinders with magnetostrictive probes would have been the ideal solution. Their probes will not wear in the presence of moisture and contaminants. Unfortunately, the PFCN was a bit too long, and the additional length prevented use as a drop in replacement.

### Solution:

Bimba's solution was a modified M-091-TW cylinder with a switch track and special external sensor. The sensor used is sealed to IP68, and outputs 0-10V or 4-20mA over the full inch stroke. The cylinder uses a stiffer urethane wiper which seals better, eliminating the ingress of application debris.

This new solution was a perfect fit. It served as a drop in replacement for retrofitting, integrating flawlessly with the machine's PLC and electrical components, and increasing cylinder life by 20%.

### Benefits:

- Precise control.
- Drop in replacement for retrofitting.
- Increases cylinder life 20%.

### Other Applications:

- Part Verification
- Positioning and Positioning Verification
- Measuring
- Gauging - Go/No Go

