

## Axle Tube Case Study

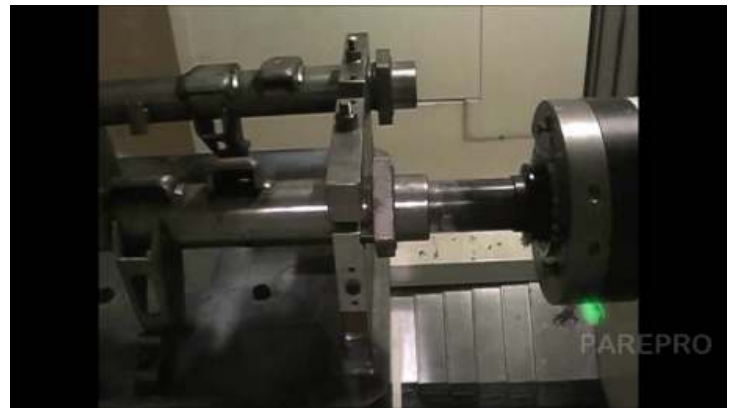
**Challenge** – An international supplier of axle assemblies was having troubles with machined chips obstructing the tube ID post operation. In turn the operator would need to perform a secondary operation to manually clear the debris. In addition to the added cycle time the customer was also unable to incorporate automated material handling because of the obstructed tube. Ultimately the customer was looking for solutions to reduce not only cycle time but the overall cost per unit (CPU).



**Solution** - ParePro was applied to the ID of the tube which resulted in four (4), four (4) inch scribe lines covering the machining length on the tube. The tube surface scribe depths ranged from 1 – 4mm varying on the finished cut geometry of the axle tube. By ParePro pretreating the axle tube prior to the machining operation enabled the manufacturer to use existing equipment without any capital cost changes.

**Result** – By incorporating ParePro to the existing operation the manufacture was able to see the following benefits:

- **Reduced number of passes to one pass**
- **Cutting speed was increased**
- **Eliminated secondary debris removal operation**
- **Net saving of 43% machining time**
- **Able to run without coolant**
- **Increased production on existing equipment**
- **Increased safety for operator**
- **Longer use of tooling**
- **Reduced cost of this operation by 27%**



Each application has its own set of benefits and we would welcome the opportunity to discuss how ParePro can help improve your turning operation. Give us a call or drop us a note and one of our Solution Engineers will reach out shortly. 734-240-1500 or [info@parepro.com](mailto:info@parepro.com)