

Glebar Company



Thrufeed Grinding Steel Tubes

incumbent process

- ❑ Manufacturers use grinding machines with a narrow work wheel requiring several passes to reduce the diameter and achieve acceptable surface finish. Thus creating longer cycle times.
- ❑ Machines are difficult to adjust for setup and changeovers requiring highly skilled technicians.
- ❑ Heavy material removal in a short distance deforms thin walled tubing and causes burns.

challenges

- ❑ Deliver a process with a small footprint that can grind tubes while maintaining a high quality part.
- ❑ Decrease downtime related to maintenance, troubleshooting, and complicated changeovers.



solution – Glebar TF-9DHD Infeed/Thrufeed Centerless Grinder

- ❑ 8-5/8" wide work wheel combined with a 15HP main spindle motor removes more material per pass than larger machines, improving cycle times and providing a better surface finish.
- ❑ Grinds both hard and soft materials specializing in parts from 1" in diameter down to 0.002" diameter.
- ❑ Multi-axis controller can position both grinding wheel slides to a 0.1 micron resolution.
- ❑ Available in-line gauge provides real-time feedback of ground parts helping ensure tube roundness.
- ❑ In a recent test, Glebar ground 12' stainless steel tubing which had a 0.191" diameter. The TF-9DHD removed 0.006", while maintaining 0.0001" roundness, 0.0004" straightness, and an 8 Ra finish with a cycle time of 2.35 minutes per tube.

benefits

- ❑ The TF-9DHD features the widest work wheel on the market: 8-5/8", despite its small overall footprint measuring 56"x70"x50".
- ❑ Glebar's in-house programmers configure the operator-friendly controls reducing set up and changeover time.
- ❑ Remote connectivity allows Glebar's technicians to quickly troubleshoot any issues reducing machine downtime.
- ❑ The 8-5/8" wide work wheel combined with the more gradual regulating wheel angle reduces the pressure on the tubing increasing the accuracy and maintaining roundness.
- ❑ The machine is built on a 2,000 lb granite base which absorbs vibration, keeping the machine stable while grinding.