Glebar Company

Thrufeeding bar stock and tubing

incumbent process

- Outsourcing grinding of components.
- Looking for a way to reduce lead times on parts, reduce costs, and bring capability in-house.

solution - GT-610 machine

- Since Glebar develops our own software, a grinding sequence was programmed into the controls where the regulating wheel infeeds the part at a controlled rate and initiates the thrufeed process.
- Glebar has a vast variety of grinding wheels, and grinding experience, valuable in selecting the proper wheel for this process. The wheel selection was critical to provide efficient cutting action and reduced heat buildup.

challenge

- Thrufeed 1-½” diameter, 15’ aluminum tubes removing 0.003”-0.006” per pass.
- Grind 8’ steel tubes featuring a 1” diameter bearing surface in the middle of the tube which could not be ground.
- The grind would have to begin in the middle of the tube where the machine would infeed to that section and then initiate a thrufeed process.
- The part also had a thin wall that had to be maintained requiring strict control of the grinding process to avoid burning.

benefits

- The machine is built on a granite base which absorbs vibration, keeping the machine stable while grinding.
- Independent slides reduce set-up and changeover time.
- Custom, operator-friendly controls that are fully configurable.
- Multi-axis controller can position both grinding wheel slides to a 0.1 micron resolution.
- 8-⅝” wide wheels result in efficient part grinding and less wheel maintenance.