

Fully Automated Medical Guidewire Grinder Increases Throughput and Improves Efficiency

Recognized for improving process efficiency, reducing scrap rates, and creating safer work environments, Glebar has delivered innovative grinding solutions to guidewire manufacturers for over 50 years. Our newest automated solution processes guidewires from the feeder to a finished part in a single operation.

Current Process & Challenges:

Legacy grinding machines require experienced operators to load, grind, and unload wires manually. Skilled mechanics manually move sensors in the grinder to change the wire profile or length.

This process:

- is highly manual resulting in slow cycle times and long changeovers, increasing downtime, and limiting throughput.
- is inconsistent, relying on highly skilled operators to grind complex wire geometries.
- relies on experienced mechanics who are aging and quickly retiring.
- uses open platforms exposing operators to the grinding zone creating an unsafe work environment.
- is difficult to replicate, increasing scrap rates.

Solution: The Glebar GT-9AC Guidewire Grinder with Automatic Feeder, Wire Cutter, and Extractor

Increase the throughput and efficiency of our GT-9AC Guidewire Grinder with the addition of an automatic feeder, wire cutter, and extractor for a completely automated process that provides the capability to grind multiple parts per 10-foot wire.

The feeder automatically picks, loads, and stages wires for a continuous feed. To produce a more consistent grind and maintain tighter tolerances, a 1-micron encoder extends the length of the feeder updating the wire position every 0.00025". The automated wire cutter and extractor allow for double-ended grinds and grinding multiple short parts from the same wire. Previously only available on our CAM.2 Micro Grinder, this solution was adapted for the GT-9AC, now producing a faster throughput rate than the CAM.2.

Benefits

This fully enclosed and automated solution precisely grinds medical guidewires with multiple tapers, paddles, and parabolic shapes.

This allows customers to:

- perform double-ended grinds or grind multiple parts from the same 10-foot wire without stopping for a changeover, reducing downtime.
- easily and precisely change the wire profile or length using the touchscreen HMI, resulting in faster changeovers, increasing throughput.
- utilize the full enclosure and safety mechanisms to provide a safe and clean work environment.
- hold tighter tolerances, resulting in better length accuracy and repeatability.
- virtually eliminate manual touchpoints, producing higher throughputs.
- continuously feed Nitinol or SLT wire from a spool.
- feed wires in a single operation - from raw material to finished part.

