RollTrack® Computerized Servo Control System

A servo motor, which controls the tilt infeed of a grinding wheel head, is used for grind shape generation via the Grind menu of the RollTrack® roll measuring software. The wheelhead tilt control is activated when the carriage is traversed by the main controls. Multiple cycles can be selected. RollTrack® grind software monitors the wheel position and computes the current crown height at each profile target location. RollTrack® checks the feed back gauge reading and moves servo in or out to make gauge match the location target height.

If an intermediate measurement is done on a roll, the measuring results can be applied to the grind program to correct next grinding wheel paths by generating a new profile target. The target values can be edited manually for special shapes

The RollTrack® grind system can be retrofitted to a single wheel or a two-wheel roll grinder by adding computer control of a servo motor.

The RollTrack® servo control, grind retrofit includes the following features:

- Set roll grinding parameters by the main controls (roll and wheel speeds, traverse) of the roll grinder.
- Set roll grinding cycles.
- Set crown amount, angle, and grinding length. Optional secondary crown.
 Optional dubbing (a separate function).
- Set continuous infeed (.xxxx" per foot of travel) as needed.
- Set end infeed (.xxxx") as needed.
- Start traversing the roll grinder carriage and the grind control system holds the grinding wheel at the target line according to the location of the carriage.
- The RollTrack® servo control system computes current crown height at each location and monitors the grinding wheel position with a feed back gauge.
- RollTrack® moves the servo in or out

to make the wheelhead match the target location height.

- If an intermediate measurement is done on a roll, the measuring results from the RollTrack® measuring program can be applied directly to the RollTrack® grind program to compensate the grinding wheel path accordingly.
- Display includes offset showing available infeed range.
- Optional roll motion measurement and motion control. See a separate brochure on Motion Control.



Hardware:

- Computer system with display
- Reference gauge for grinding wheel position
- Encoder with bracket and wheel for carriage position
- Servo Drive and Motor
- Gear box as needed
- Limit switches
- Other electrical and electronics components
- Engineering
- Wiring diagram and user manuals

Optional Equipment and Services:

- Linear scale/encoder with display for reading and displaying the infeed position of the wheelhead, which helps to control manual infeed.
- Computer console as needed.
- Machine mounted roll caliper.
- Facts finding trip, start-up assistance, on-site testing, and operator training are available by FMT Equipment.

Typically FMT is responsible for up to controlling the servo motor and gear box of the project. Customer responsibilities are mechanical interfacing, brackets and mounting plates, and mounting of the hardware unless agreed otherwise.









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