

Rapid Grinding System RGS 850

Reciprocating Profile Grinder



Automation solutions for the
modern foundry

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The RGS850 machine provides a highly efficient, automated grinding cycle for extremely fast material removal rates. A 50HP hydraulic belt drive delivers the power to remove the heaviest of gates, while the large fixture base can accommodate fixtures to process large batches of parts in a single cycle. Multi axis servo control and the ability to change contact wheel size allow for accurate profile grinding. Simplified programming at the machine HMI allow shop floor operators to program and run this machine.

MACHINE FEATURES

- **Safety**

Safety relays monitor doors and emergency stop devices to reliably shut the machine down at the first sign of a safety breach. Loading doors and guards are designed such that they inhibit operator ingress during a cycle, yet provide fast and easy access for part loading, cleaning and belt change.



Enclosed Work Table

- **Profile grinding**

Removing gates from curved surfaces manually is now a thing of the past. Servo axis control gives the RGS850 the added flexibility of autonomously grinding profiled shapes for more complex parts.

- **Work Table and limits**

A T-slotted fixture table of 24" long by 18" wide gives maximum ability for fixture design and clamping. Usable grinding limits are 24" in the X (in/out) direction and 10.5" in the Y (up/down) direction. Minimum throat opening (belt to work table) is 1", with a maximum of 12".



T-slot fixture table with bellows

- **Belt Size**

A 10" wide contact wheel allows up to 10" wide belts to be used without belt oscillation, or up to 8" wide belts to be used with 2" of belt oscillation. Belt length is standard 132" long to improve belt life and mean time to change

- **Contact wheel diameter**

A 5" diameter contact wheel has gives a good balance between belt wrap angle and the ability to grind contours across multiple rows of parts.

- **Interchangeable contact wheels**

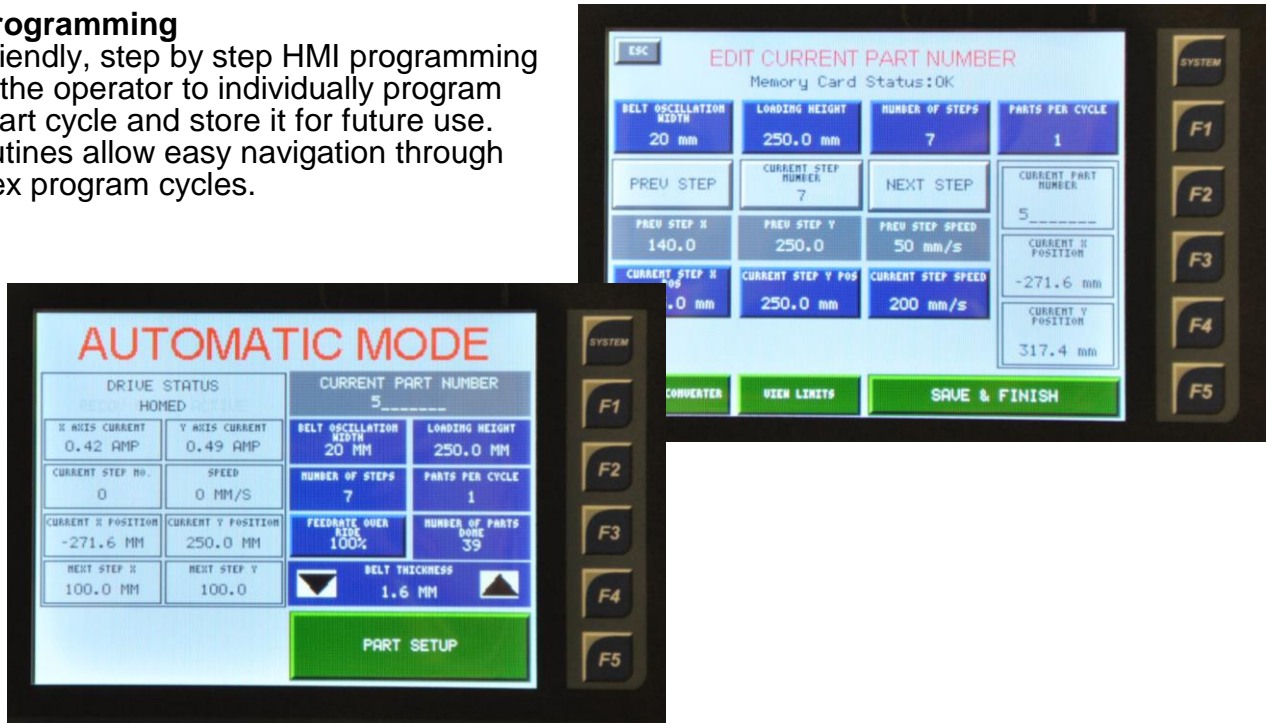
A variety of wheel diameter and widths can be fitted to allow for the needs of diverse part geometries



Choice of contact wheel diameter & width

- HMI Programming**

User friendly, step by step HMI programming allows the operator to individually program each part cycle and store it for future use. Subroutines allow easy navigation through complex program cycles.



- Hydraulic drive**

Hydraulic belt drive delivers high power in a small package, completely eliminating belts and pulleys from the main drive system.. Fast starting and stopping of this drive means the belt is stationary during loading and unloading operations, while the single hydraulic pump is utilized for belt drive and ancillary hydraulic cylinder control.

- Compact Design**

The RGS850 machine is built on a compact footprint. This allows trouble free installation and easy re-location should your layout need to change



Hydraulic power unit

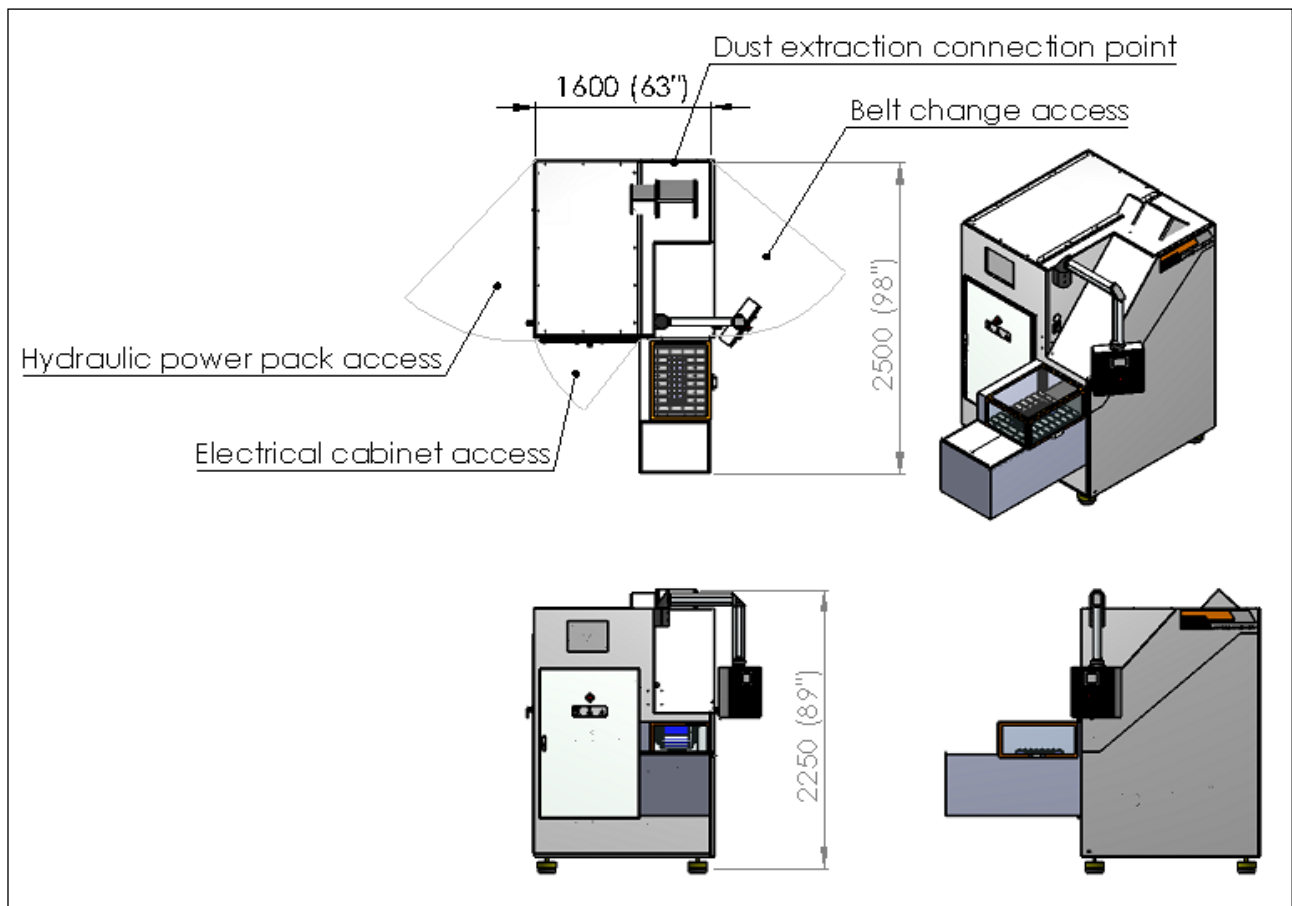
SPECIFICATIONS

| | | RGS850 | |
|---|--------------------------|---------------|-----------------|
| | | US | Metric |
| A | Drive Motor | 50 HP | 37 kW |
| B | Belt width (Maximum) | 8 in | 200 mm |
| C | Up/Down Movement | 10.5 in | 270 mm |
| D | Fore/Aft Movement | 24 in | 600 mm |
| E | Maximum Throat Opening | 12 in | 300 mm |
| F | Table size | 18 in X 24 in | 450 mm X 600 mm |
| G | Belt length | 132 in | 3350 mm |
| H | Electrical Requirement | 480V,3ph | 380- 415V,3ph |
| I | Machine Weight (Approx.) | 8500 lbs | 4000 kg |

LAYOUT & FLOOR PLAN



Cutaway showing contact wheel and table



A.W. Bell Machinery P/L reserves the right to change specifications without notice. 2019.