



## Rebel 80 Servo Unloader

The Rebel 80 Servo Unloader is a compact unloading system for CNC lathes for parts in the diameter range of 8 - 80mm. Parts are gently extracted from the sub-spindle of single-spindle lathes. With a large magazine capacity allowing for long unattended operation, the Rebel combines the advantages of auto part unloading with a small footprint and an economical price.



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The Rebel 80 Servo Unloader is an automatic Part Removal System for unloading parts in the diameter range of 8 - 80mm from the sub-spindle of single-spindle lathes.



## Conversational Programming

- User friendly software delivers fast set-up on easier jobs and powerful advanced features for more sophisticated demands.
- Servo controlled positioning for unloading of parts
- Enter pickup and drop off value and the unit automatically adjusts



## Conversational Control Features State-of-the-Art Touch Screen and Menu Driven Programming

Control stores unlimited part programs.

## Programmable Bar Diameter & Part Length

The operator simply enters the part diameter, part length, and pickup position and the Rebel will automatically adjust for part unloading.

## Linear Feed & Servo Drive

Tooth belt and servo motor used for accurate positioning, smooth acceleration, deceleration, and unloading.



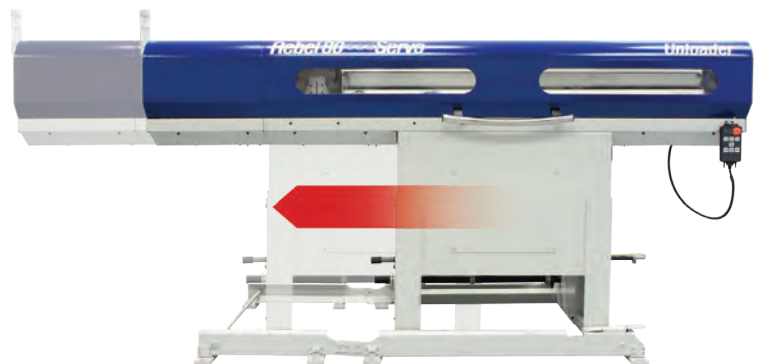
## Remote Control Pendant

Using the control pendant, the operator can choose either forward or reverse extractor travel while the Rebel Unloader is in manual mode.



## Axial Shift

The axial shift allows for spindle liner changes as well as maintenance access to the back of the lathe spindle. The Axial Track is standard in X or Z axis. Please specify axis style at the placement of the order.



## Fold Away Axial Track

When not in use, the axial track folds up to eliminate tripping hazards when loading magazine.



- **All Electric Operation**

The Rebel 80 Servo Unloader runs on electricity, no shop air required. Air is offered as an option as some end effectors may require it depending on specific applications.



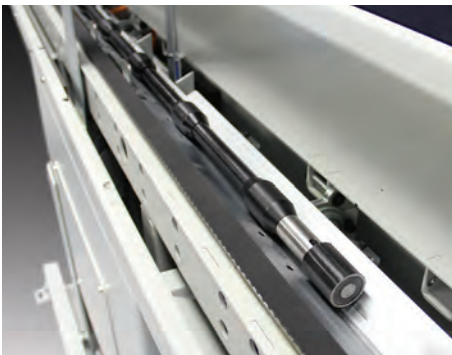
- **Belt Drive**

Maintenance free, no adjustments required.



- **Quick Change Extractor**

The Rebel 80 Servo Unloader offers several options; magnetic tips for steel parts, OD collets and ID gripper collets for aluminum and brass, and special engineered solutions for profiled stock and odd shaped stock.



- **Extraction V-Tray**

The V-tray is used to accommodate various lengths of parts.

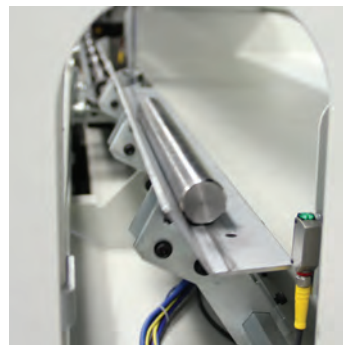
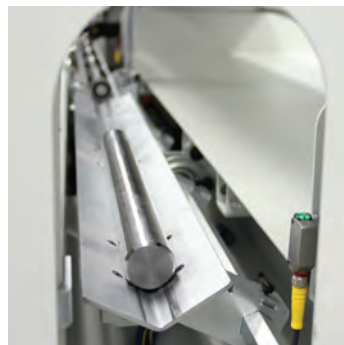
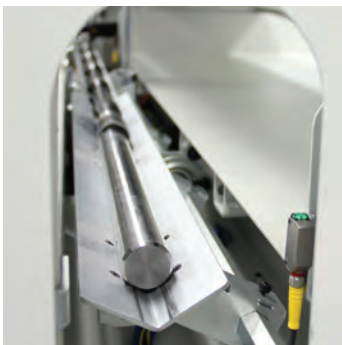
- **Easy Unload Simulation**

Magnetic Extractor retrieves part from sub-spindle.

The de-energized Extractor retracts from the front V-Tray.

The V-Tray slowly rotates down..

depositing the part softly onto the tray.



### Effectors



Bar Collets



Electromagnet



Expansion ID Gripper



Feed Finger



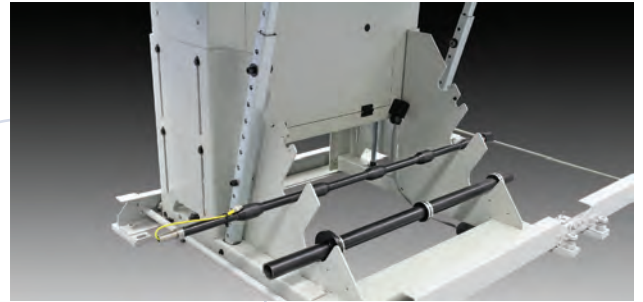
Angular Gripper



3-Point Gripper

- **Spindle Liner Storage**

Includes storage for (3) Spindle Liners under magazine.



- **Extra Large Magazine**

Magazine storage capacity is 720mm (28").



- **Easy Unload**

The magazine's incline is adjustable enabling the unloader to "easy unload" large diameter parts.



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## Technical Data

- **Center Line Height**  
950mm (38") - 1350mm (53.1")
- **Bar Diameter**  
8mm (.315") - 80mm (3.15")\*
- **Bar Length**  
152mm (6") - 915mm (36")\*
- **Rapid Return Rate**  
1300mm/sec. (4"/sec.)
- **Unload Time**  
5-20 seconds
- **Operating Voltage**  
Electric supply 230V (60Hz) - 3 Ph
- **Power Consumption**  
1kW - (1.5kVA)
- **Extraction Rod**  
One included
- **Weight**  
1100 lbs.

\*The maximum bar length must not exceed the measured length from front of chuck jaw/collet

## Options Available

- Z axial shift device
- Lathe spindle liners
- 90° Rollers
- Rear Unload
- Load/Unload Option
- V-Tray Kit
- **Optional V-Tray**  
Used when gap between lathe sheet metal and spindle coolant collector exceeds 8 inches.

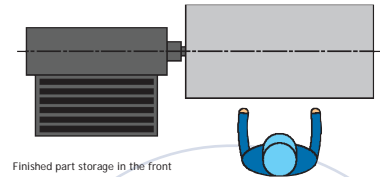


## Specifications

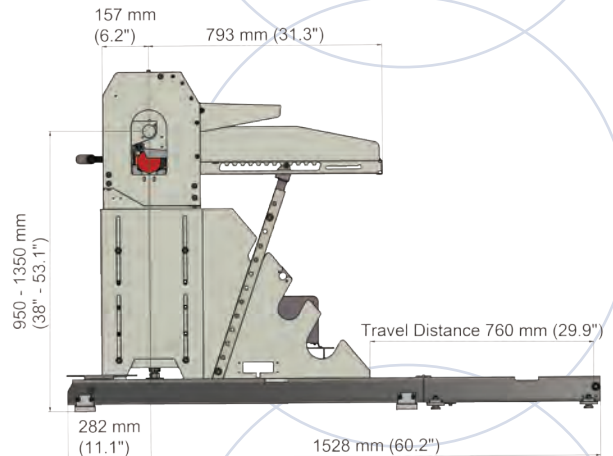
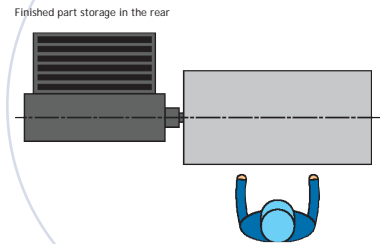
<b>Bar Size</b>	8mm (.315") - 80mm (3.15")
<b>Rack Capacity</b>	720mm (28") deep
<b>Bar Length</b>	152mm (6") - 915mm (36")*
<b>X &amp; Z Axial Track Travel</b>	X Axis = 760mm Z Axis = 760mm
<b>Chip Conveyor</b>	Low Profile or Rear Required

## Configurations

Front Unload (Standard)



Rear Unload (Optional)



Technical data subject to change without notice