



# *Rebel 80* ○○○ *Servo V3*

The Rebel 80 Servo V3 is a compact bar loading system for CNC lathes. With a large magazine capacity allowing for long unattended operation, the Rebel combines the advantages of auto bar loading with a small footprint and an economical price.



# Rebel 80 Servo V3

**EDGE** ○○○  
**TECHNOLOGIES**

The Rebel 80 Servo V3 is an automatic Bar Loading Magazine for processing bars in the diameter range of 8 - 80mm and in lengths up to 1520mm (5') on CNC lathes.



## Conversational Programming

- User friendly software delivers fast set-up on easier jobs and powerful advanced features for more sophisticated demands.
- **Sub-spindle mode** allowing you to “feed-on-the-fly” using your lathe’s sub-spindle.
- **Return & wait mode** which slashes 30% of bar change time from the load cycle by staging the next bar while the lathe is still cycling.
- **Fixed piece feedout** eliminates the need for a turret stop by allowing you to program a feedout value.
- **Multiple feedout mode** features up to 10 feedouts per part using any combination of the above functions.
- **(Optional) shaft loading** provides an efficient, off-the-shelf loading system for higher production shaft jobs.



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

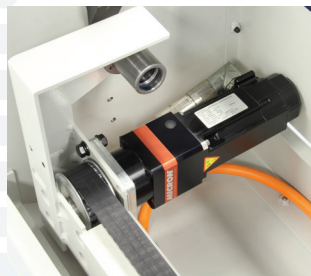
Control stores unlimited part programs.

## Programmable Bar Diameter & Part Length

The operator simply enters the bar diameter and part length, the Rebel will automatically adjust the parameters for loading, feedout, and bar change.

## Linear Feed & Servo Drive

The bar stock is loaded into the main spindle of the lathe by a linear feed mechanism with a toothed belt and servomotor. This allows for bar stock to be fed into position without the use of a fixed bar stop.



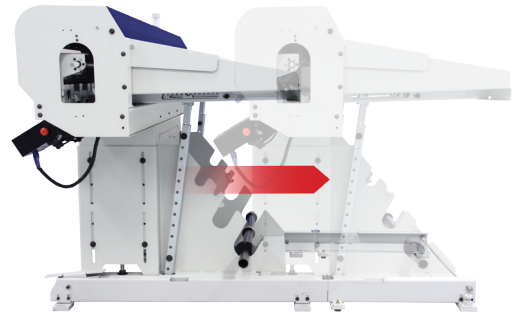
## Remote Control Pendant

Using the control pendant, the operator can choose either forward or reverse pusher travel while the Rebel 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.

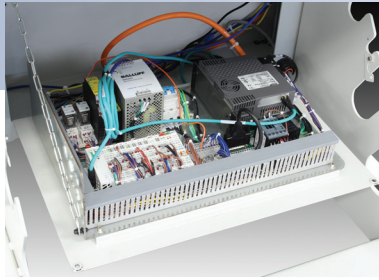


## Fold Away Axial Track

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

- **All Electric Operation**

The Rebel 80 Servo V3 runs entirely on electricity, no shop air required.

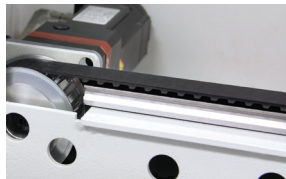


- **Bar Stock Length**

Load bar stock lengths in a range of 6" to 60". Maximum bar stock length cannot exceed length of the headstock plus the chucking package.

- **Belt Drive**

Maintenance free, no adjustments required.



- **Quick Change Pusher**

Push plunger forward out of carrier, release pusher from front sleeve...



...the pusher lifts out. Quickly insert new pusher.

Process takes less than 10 seconds.



- **V-Tray Rollers**

Roller design reduces friction and noise. These rollers are very helpful for loading large diameter bar stock.

Optional 90° rollers available for loading profiled material.



- **Easy Load Simulation**



- **Free Of Noise And Vibration**

The rotating stock does not come in contact with the Rebel 80 Servo V3, allowing high speed machining; especially in hex, square, or profiled stock.

- **Spindle Liner Access**

Spindle liners sized to bar stock diameter support the rotating bar allowing maximum RPM.

- **Spindle Liner Storage**

Includes storage for (3) Spindle Liners under magazine.

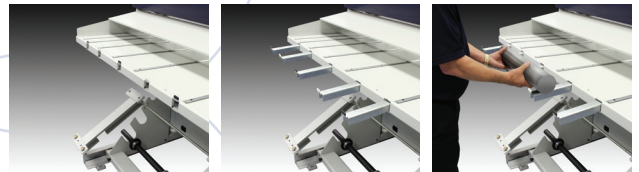


- **Extra Large Magazine**

Magazine storage capacity is 720mm (28").

- **Safety Load**

Magazine extensions used to load large diameter bars without a pinch point hazard.



- **Easy Load**

The magazine's incline is adjustable enabling the loader to "easy load" large diameter bars.





## Technical Data

- **Center Line Height**  
950mm (38") - 1350mm (53.1")
- **Bar Diameter**  
8mm (.315") - 80mm (3.15")
- **Bar Length**  
152mm (6") - 1520mm (60")\*
- **Rapid Return Rate**  
1300mm/sec. (4'/sec.)
- **Bar Change Time**  
Approx. 20 seconds
- **Operating Voltage**  
Electric supply 230V (60Hz)
- **Bar Pushers**  
10mm dia. Hardened steel  
19mm dia. Hardened steel
- **Weight**  
1100 lbs.

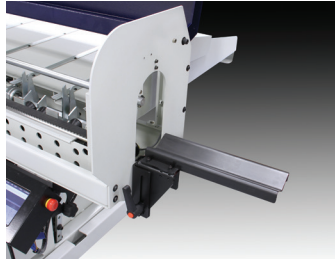
\*The maximum bar length must not exceed the measured length from front of chuck jaw/collet to rear of headstock guard.

## Options Available

- Z axial shift device
- Lathe spindle liners
- 6mm diameter bar pusher
- Magazine extension rack
- 90° Rollers
- Front load
- V-Tray

### ● Optional V-Tray

Used when gap between lathe sheet metal and spindle coolant collector exceeds 8 inches.

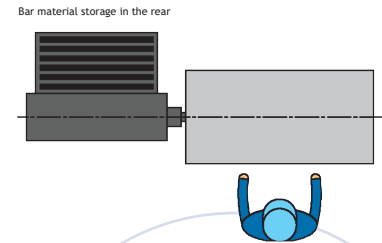


## Specifications

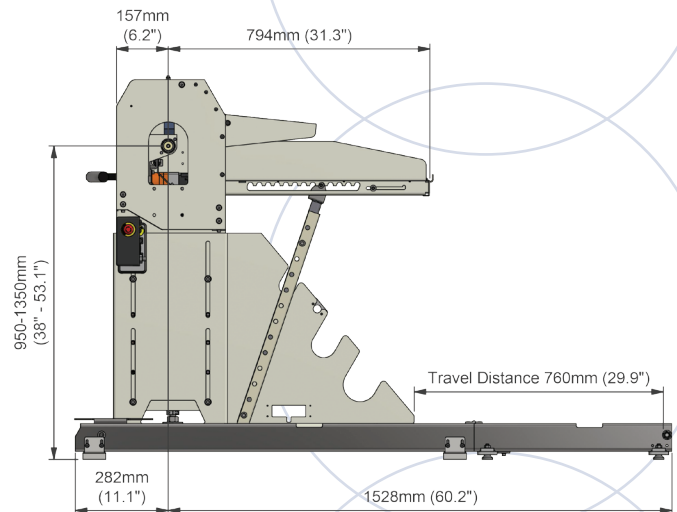
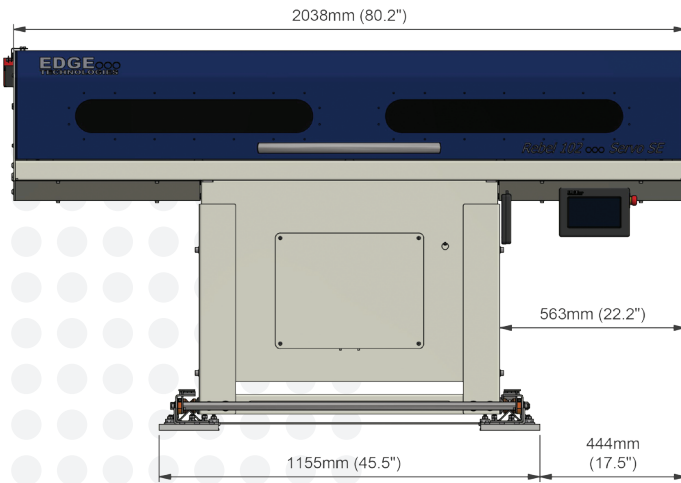
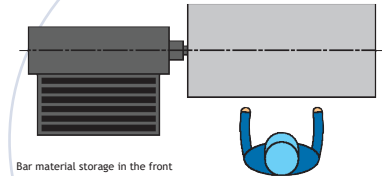
|                                     |                                  |
|-------------------------------------|----------------------------------|
| <b>Bar Size</b>                     | 8mm (.315") - 80mm (3.15")       |
| <b>Rack Capacity</b>                | 720mm (28") deep                 |
| <b>Bar Length</b>                   | 152mm (6") - 1520mm (60")*       |
| <b>X &amp; Z Axial Track Travel</b> | X Axis = 760mm<br>Z Axis = 760mm |

## Configurations

### Rear Load (Standard)



### Front Load (Optional)



Technical data subject to change without notice