

# Rebel 102



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The Rebel 102 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.



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The Rebel 102 is an automatic Bar Loading Magazine for processing bars in the diameter range of 8 - 102mm and in lengths up to 1520mm (5') on CNC lathes.



# Linear Feed & Servodrive

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 the feeding of the bar stock into position without the use of a fixed bar stop.

#### Free Of Noise And Vibration

While processing the bar there is no contact between the bar stock and the loading magazine, so whether the bar is round, square, or hexagonal, high speed machining is possible with the use of a properly sized lathe spindle liner.

# All Electric Operation

The Rebel 102 runs entirely on electricity, no shop air required.

#### Minimum Maintenance

Smart design requires very little preventative maintenance.

# Minimum Space Requirement

The compact design of the loading magazine results in a minimum amount of floor space being used.

# Side Loading

The loading storage capacity is 1000 mm (40") deep. The inclination of the storage table can be adjusted to give the loader a "soft-load" effect for large diameter bars. Bars are loaded from the rear of the bar feeder.



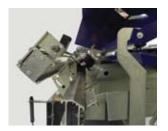
#### • Feed Force

Feed Force automatically set by the controller after the bar diameter is entered into the user-friendly touch screen control.

# Spindle Liner Access

Spindle liner changeover is accomplished very quickly by the open architecture design of the top cover and special "swingout" style pusher carriage. Axial shift is not necessary to change spindle liners.









o Loading to the Automatic Lathe

The bar stock is loaded into the lathe spindle and is guided there. Spindle liners are necessary to accommodate different bar diameters. New bar positioning can be attained without the use of a dead stop.

Length of the Bar Stock

Bar stock with lengths of 250mm (10") - 1520mm (60") can be loaded. The maximum bar length is determined by the spindle length of the lathe and the chucking package.



# Remote Control Axis Jog

Using the control switch, the operator can choose either forward or reverse pusher travel while the Rebel is in manual mode.



#### Software

Multifaceted software includes fixed piece feedout to correct length without a part stop. Includes a shaft loading option as well as a sub-spindle "feed-on-the-fly" option with a return and wait pusher feature. The Rebel 102 can store up to 20 standard setup parameters.

### Control Panel

The user-friendly multi-line display and operation station includes all needed information to allow rapid setting and productive operation of the loading process. The Rebel features a user-friendly conversational

touch screen control.



# 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.

# Axial Shift Option

The axial shift option can be added to allow for maintenance access to the back of the lathe spindle. The Axial Track can be configured for X or Z axis movement. Please specify at the placement of the order.





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# **Technical Data**

- Center line height 850mm (33.5") - 1150mm (45.2")
- Bar diameter 8mm (.315") - 102mm (4.015")
- Bar length 250mm (10") - 1520mm (60")\*
- Rapid Return Rate 1300mm/sec. (4'/sec.)
- **Bar Change Time** Approx. 20 seconds
- Operating voltage Electric supply
- Bar pusher 16mm dia. Hardened steel
- Bar load cut to cut 18 sec. app.

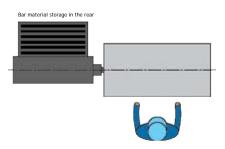
Weight 1000 lbs.

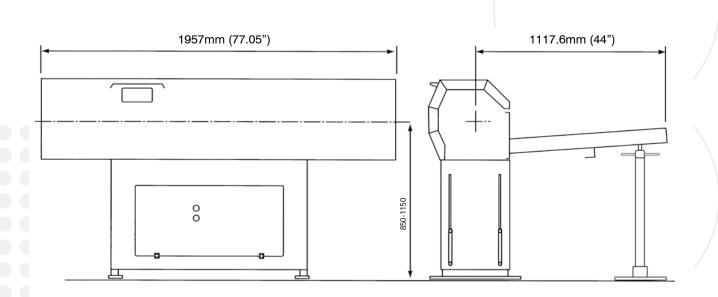
\*The maximum bar length must not exceed the measured length from front of chuck jaw/collet to rear of headstock guard.

# **Options Available**

- X or Z axial shift options
- Lathe spindle liners
- 6mm diameter bar pusher kit
- Magazine extension rack

# **Configuration**





As per 5/1/2006 - Technical data subject to change without notice

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