



## GT 112-E BARFEED

AUTOMATIC MAGAZINE BAR FEEDER FOR  
SLIDING HEADSTOCK LATHES

Diameter range: 1 mm (0.8 mm) to 12 mm (12.7 mm)  
.031" to 1/2"

Bar length: 12'-2" or 6'-6"  
(other lengths available)



YOUR "ONE-STOP-SHOP"  
FOR MACHINE-TOOL PERIPHERALS



### High Performance and Precise Screw Loading System

The LNS compact solution to automatically load small diameter bar stock into sliding headstock lathes with bar diameter capacity up to 1, 3, 4, 7, 10, or 12 mm. The GT 112-E is designed to withstand production processes running at optimum RPMs. Easy loading on spiral magazine rack with additional storage platform for bar materials. Spiral feed rack magazine tray ensures consistent loading of the smallest bar stock, holds 30 bars from diameter 7mm and under, or 15 bars for over diameter 7mm. Single pitch screw system to keep very small diameter bars separated. No bar diameter selection adjustment required.



### Easy to Use Touch Screen Remote Control (HMI)

The user friendly hand-held touch screen HMI with prompting menu screens ensures the interaction between the bar feeder and the lathe, and therefore the production process can be run safely and efficiently.

The HMI displays alarm description, alarm history of operation errors and position tracking (inch/metric programming).

Easy setup in less than 1 minute. The operator simply inputs bar information into the remote control:

- Bar Diameter
- Feed Out Length
- Guiding Elements Diameter

This automatically sets:

- Pushing Torque
- Forward Speed
- Feeding Length



### Efficient Dual Size Channel

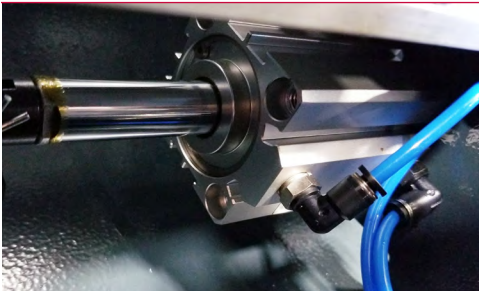
Barstock is guided by hydrodynamic oil support through a dual U-shaped guiding channel. The dual U-shaped guiding channel meets the production runs and the diameter range of the machine tool. A choice of two of any available four channel diameters. One channel selection covers the entire range of the turning machine.

Guiding Channel Selection Chart		
Machine Max. Bar Diameter	Channel Size	Bar diameter Range
3 mm	6 / 8 mm	1 (0.8) to 3 mm
4 mm	6 / 8 mm	1 (0.8) to 4 mm
7 mm	6 / 11 mm	1 (0.8) to 7 mm
10 mm	6 / 14 mm	1 (0.8) to 10 mm
12 mm	6 / 14 mm	1 (0.8) to 12.7 mm
12 mm	8 / 14 mm	2 to 12.7 mm



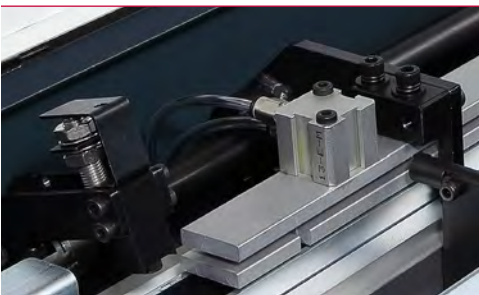
### Self-Centering Bar Clamping Device

The self-centering vise efficiently clamps the bar during extraction and insertion operation covering the whole diameter range of the bar feeder without adjustment. The clamping device is enhanced by an air regulator optimizing the clamping force especially for very small diameter bar, soft material or thin wall tubing.



## Safe and Reliable Bar Insertion and Extraction

A torque power booster is provided to ensure consistent and reliable insertion of the bar to help overcome some variation in bar diameter or challenges from off the shelf collets. To assist with reliable operation the servo motor encoder monitors at all time the extraction and insertion cycle.



## Patented Sectional Guiding Channel Cover

Two-stage, sealed sectional guiding channel ensures ideal guiding of small diameter bars in rotation at high RPM. Safety is ensured with barstock totally secured in the guiding channel. As the pusher feeds through the channels, the upper section unlocks to open the passage of the flag of the pusher without interference.



## Reliable Headstock Synchronization System

An electro-mechanical synchronization device is directly connected to the head stock of the machine allowing safe movements of the bar in perfect synchronization with the movements of the headstock. The servo drive torques are automatically set when the operator enters the bar diameter into the HMI. Safe and reliable on the full bar length.

A safety joint pipe connection between the bar feeder and the lathe ensures the bar is fully contained, and reduces the spindle ID to the channel size. Spindle liners or additional anti-vibration system on the lathe are not required.



## Exceptional Productivity

- An optional adjustable 2-position retraction with dual safety switches to accommodate non-guide bushing applications.
- Optional 15" (400 mm) Z-axis barfeed retraction system with a safety switch provides full access to the machine for easy maintenance.





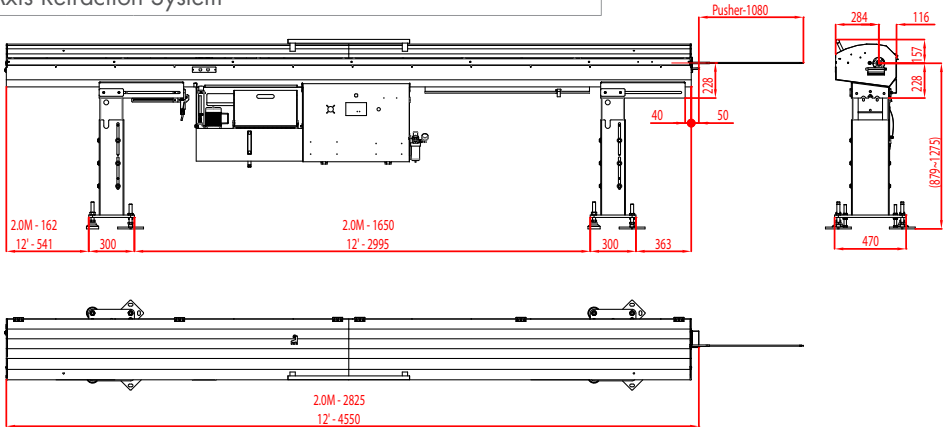
# GT 112-E BARFEED

## TECHNICAL SPECIFICATIONS

Capacity		
Diameter	mm	1 mm (0.8) to 11 mm (12.7 max. with bar preparation)
Min. Bar Length	mm	1000 to 1700 (consult factory)
Max. Bar Length	mm	3700 or 2000 (other lengths available)
Loading Capacity	mm	30 pieces - 7 mm and under 15 pieces - over 7mm
Loading Side		Front or Rear
Shipping Weight	lbs	1,130 (12'-2" model)
Applications		
Type of Headstock		Sliding
Headstock Synchronization	mm	Electro-Mechanical
Changeovers		
Partial changeover	min	2
Complete changeover	min	10
Driving Systems and Bar Support		
Motor		Servo
Electrical		
Control voltage and power		24V DC 3 phase, 220 VAC, 5 amp, 60 Hz (other voltage available)
Options		
<ul style="list-style-type: none"> <li>Adjustable 2-position retraction with dual safety switches to accommodate non-guide bushing applications</li> <li>15" (400 mm) Z-Axis Retraction System</li> </ul>		

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12 mm	8 / 14 mm	2 to 12.7 mm

**Barstock Straightness Specifications and Performance**  
 For optimum rotational performance speeds, bar stock straightness needs to be .020" per 3.25 feet, per side, non accumulative. Bar stock out of this tolerance will not run at optimum RPM. Other factors such as material type (brass, copper, bronze and other malleable materials), clamping efficiency of the machine workholding, alignment of the bar feed, oil type, bar preparation and spindle liners will affect optimum RPM capability of the system.



**YOUR "ONE-STOP-SHOP" FOR MACHINE-TOOL PERIPHERALS**

LNS provides a full range of barfeeders, chip conveyors, coolant management systems, air filtration systems, and workholding systems that is second to none on the market. We are known in the industry for the solid experience we have gained over several decades in an exceptionally wide range of applications, our excellent customer service, and our technical support. This support is ensured by highly qualified technicians who are available throughout North America.



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