



GT 342 BAR FEED

AUTOMATIC MAGAZINE BAR FEEDER FOR
SLIDING HEADSTOCK LATHES

Diameter range: 0.12" to 1.73" (3 mm to 44 mm)

Bar length: 32" - 12' 6" (800 mm - 3810 mm)



PERIPHERAL VISION

For CNC machine tool peripherals, it's LNS, then all the rest



Accelerating Productivity at an Affordable Price

The LNS highly affordable solution to automatically load long bars from 3 mm to 44 mm into sliding headstock turning machines. The GT 342 is a heavy duty design to withstand production processes running at optimum RPMs. High guiding quality, low noise and effective vibration-dampening are guaranteed from start to finish.



Easy to Use Remote Control (HMI)

The user friendly 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 remote control is ultra light featuring easy set up and operation. It 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:

- Shape
- Bar Diameter
- Guiding Elements Diameter
- Feed Out Length

This automatically sets:

- Pushing Torque
- Forward Speed
- Feeding Length



Changeover Simplicity

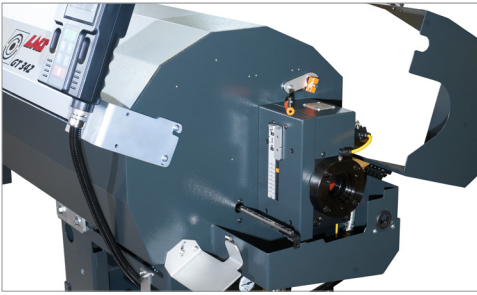
Changeover of bar diameter on magazine tray is performed by a simple manual adjustment via the changeover lever, no tool required.

- 2 minutes or less for partial changeover
- 7 minutes or less for complete diameter changeover

For complete diameter changeover, the lower guiding elements can easily and quickly be replaced. No tool required with this simple and reliable design. The patented upper 2 section channel guides cover the entire bar diameter range and does not need to be adjusted when changing out lower guide channels.

The minimal gap between guide channels maintains oil during bar rotation, and one standard pusher length covers the entire range of sliding headstock machines with no pusher extension required.

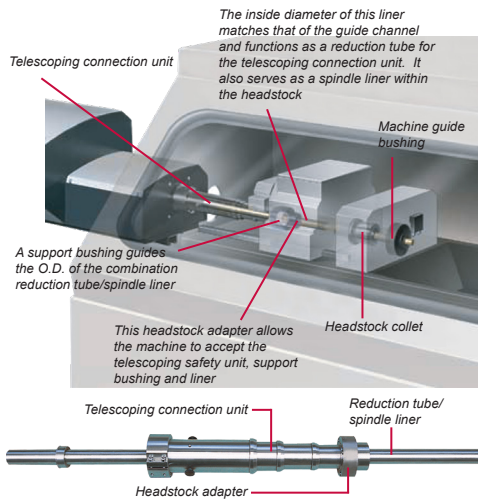




Greater Bar Stock Stability and Less Oscillation Inside the Lathe

A robust two-position front stabilizer with v-shaped guiding elements dampens residual vibration between the front of the bar feeder and the back of the spindle. A bar size gauge allows you to quickly adjust to the bar diameter by making a simple manual adjustment. Vee blocks can be easily changed out to round blocks for running profiled material. An air blast is included to eliminate residual oil transferring from the bar feeder to the machine.

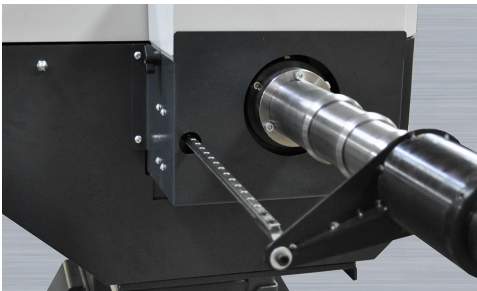
The pneumatically actuated opening and closing of the front stabilizer is mechanically locked providing safe and secure guiding of the bar in rotation.



Safer Operation and Optimum RPM

The LNS Swiss safety connection eliminates the unsupported area between the bar feed and machine tool to provide greater safety and better bar stock support. It consists of a telescoping tube that extends in sections to maintain a continuous connection between the GT 342 and the machine sliding headstock. This feature allows the headstock to move forward to make parts without the danger of exposed bar stock.

For added flexibility, the GT 342 includes an assortment of reduction tubes to use within the Swiss safety connection and the lathe headstock. The inside diameters of these reduction tubes match those of the bar feed's guide channels. They act as a combination spindle liner to reduce the gap inside the spindle and additionally the inside diameter of the Swiss safety connection. The result is reduced vibration and bar oscillation within a critical and traditionally under-supported area. This GT 342 feature improves part diameter tolerances, increases RPM, enhances surface finish and extends tool life.



"3-S" High Speed Headstock Synchronization System (Patent)

The headstock is directly connected to the servo drive eliminating transmission delay with sliding headstock machines and guarantees perfect synchronization between the pusher and the headstock with added safety. The 3-S synchronization is standard with the GT 342 equipped with sliding headstock machines up to 44 mm bar capacity.



More Robust for Exceptional Productivity

The GT 342 is built around an extra heavy, rigid frame filled with mineral cast to further improve long-term stability and vibration dampening.

A Z-axis retract system on the GT 342 allows the bar feed to be moved back 15.35 inches (390 mm) from the machine spindle.

This feature allows easier access for routine machine maintenance reducing production downtime. Simplified design for improved serviceability with easy access to all components.



GT 342 BARFEED

TECHNICAL SPECIFICATIONS

Specifications subject to change without notice

| Capacity | |
|-------------------|--------------------------------|
| Diameter | 0.12" - 1.73" (3 mm - 44 mm) |
| Bar Length (12') | 32" - 12'6" (800 mm - 3810 mm) |
| Loading System | Lateral |
| Loading Capacity | 11" (280 mm) |
| Loading Side | Front or Rear |
| Shipping Weight | 2,800 lbs |
| Applications | |
| Type of Headstock | Sliding |
| Retraction Z | 15.35" (390 mm) |
| Remnant Length | Min: 90 mm, Max: 400 mm |
| Front Rest | Adjustable Vee Block |
| Bar Selection | Simple Lever |
| Controls | Hand Held, Touch Screen |

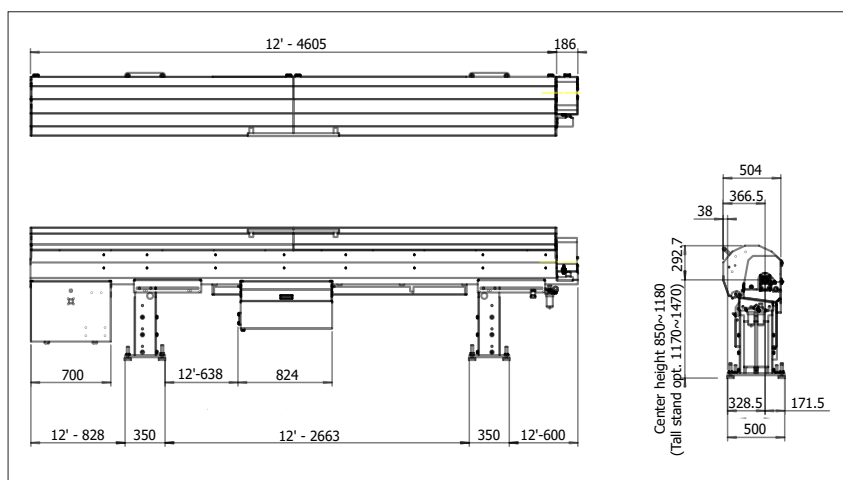
| Changeovers | |
|--|--|
| Partial changeover | 2 minutes (within the same guiding elements) |
| Complete changeover | 7 minutes (for all guiding elements) |
| Driving Systems and Bar Support | |
| Motor | Servo |
| Drive | Chain |
| Guiding Channel | Sealed, Semi-Round |
| ISO 100 oil | 9 gallons |
| Options | |
| 2-position Z-axis retraction - Max: 12" (310 mm), adjustable | |

Barstock Straightness Specifications and Performance

For optimum rotational performance speeds, bar stock straightness needs to be .020" per 3.25 feet, 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.

| Guiding Channel Selection Chart | | | | | | | | | | | | |
|--|-------|--------|--------|--------|---------|---------|-------|---------|-------|---------|---------|---------|
| Guiding Channel Diameter | 11 | 14 | 17 | 19 | 21 | 23 | 27 | 32 | 33 | 35 | 37 | 39 |
| Bar Stock Diameter Range with Bar Preparation | 3-10 | 4-13 | 7-16 | 9-18 | 11-20 | 13-22 | 17-26 | 22-31 | 23-32 | 25-34 | 27-36 | 29-38 |
| Bar Stock Diameter Range without Bar Preparation | 3-8.5 | 4-11.2 | 7-14.4 | 9-16.5 | 11-18.2 | 13-20.7 | 17-24 | 22-27.5 | 23-30 | 25-32.2 | 27-33.5 | 29-36.6 |

| Guiding Channel Selection Chart | | | |
|--|---------|-------|---------|
| Guiding Channel Diameter | 41 | 43 | 45 |
| Bar Stock Diameter Range with Bar Preparation | 31-40 | 33-42 | 35-44 |
| Bar Stock Diameter Range without Bar Preparation | 31-38.1 | 33-40 | 35-41.3 |



PERIPHERAL VISION

Peripherals, by definition, are an outer boundary. But at LNS, that boundary is where we put our focus. Because here's the secret—with LNS peripherals on your side, you can turn your attention to what you do best—making chips and making money.

That's why we do what we do. Five product categories and industry-best expertise means no company on earth can match the passion and vision we have for machine tool peripherals.



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