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HYDROBAR EXPRESS 332 S2

The ideal automatic magazine bar feed for 12' bar stock used with sliding or fixed headstock turning machines

2-minute partial changeovers

8-minute complete changeovers

Bar stock diameters: .1/8" to 1-1/4" (3mm to 32 mm)



LNS America
4621 East Tech Drive
Cincinnati, Ohio 45245

HYDROBAR EXPRESS 332 S2



Super Charge Your Productivity

The Express 332 S2 is compact, simple with a robust design built on a heavy duty steel frame to support high performance and machined components to ensure accuracy and reliability. Stable and precise bar feeding to help you make parts quickly and accurately. Express 332 S2 features optimized dynamic behavior through coaxial forces and efficient distribution throughout the frame ensuring minimum stress and vibrations. Efficient four points locking mechanism ensures safe secured and balance guiding of the bars in rotation. Reliability you can count on for long runs and unattended operation. Faster job changeovers with less operator involvement, faster and easier than ever before. The Express 332 S2 is the most value-packed automatic magazine bar feed for 12' bar length available today.

Its new PLC PCD3 has a processing time ten times faster than the older generation of PLC with added connectivity (Ethernet, USB) and is ready for future communication standards with CNC of the lathe.

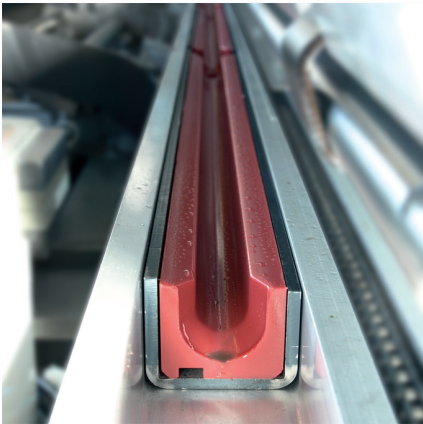
Efficient Changeovers

Keeping your production running with minimal stoppage allows you to meet customer's demands. Time consuming changeovers can hinder your productivity.

2-minutes for partial changeovers for bar stock diameters within the .4" (10 mm) guiding channel range. Simply follow the prompts on the remote control to enter the shape, bar diameter, part length and guiding channel ID. The Express 332 S2 does the rest.

- The front bar stock stabilizer automatically adjusts to the bar and pusher diameters as they feed through the device.
- A servo drive with absolute encoder automatically optimizes torque and feed rate.
- The bar selection fingers automatically adjust to the new bar stock diameter preventing accidental multiple loads and operator's error.
- The only mechanical adjustment required is to change the collet sized for the new bar stock diameter.

Less than 8-minutes for a complete changeover (outside the guiding element range) the new pusher and guiding elements need to be installed. Designed for very fast changeovers, no manual adjustment and no tools are necessary.



Changing The Guide Elements

The guiding elements made of extruded polyurethane are the essential elements for achieving maximum performance. They have to withstand the highest physical stresses. Designed for very fast changeovers, no manual adjustment and no tools are required.

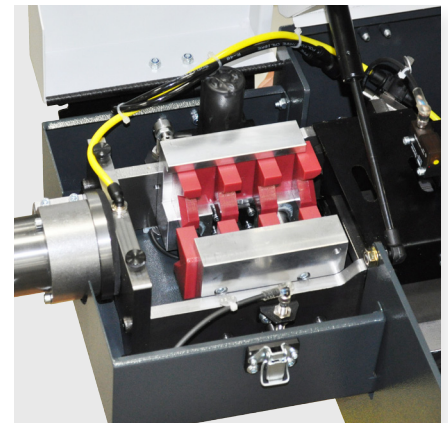
Greater Bar Stock Stability and Less Oscillation Inside the Lathe

Troublesome bar vibrations transferring to the machine cutting area can create poor machining performance and wear on tool life drastically.

The LNS patented, fully automatic "V" shaped front stabilizer uses its full 6" length to provide superior bar support from start to finish with unmatched stability. This prevents troublesome bar vibrations from transferring to the machine cutting area. And, it automatically adjusts to the bar and pusher diameters simply by memorizing the bar stock diameter and the guiding element diameter entered in the HMI (Human Machine Interface).



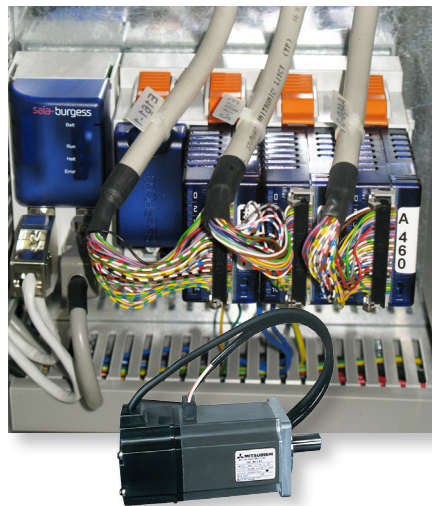
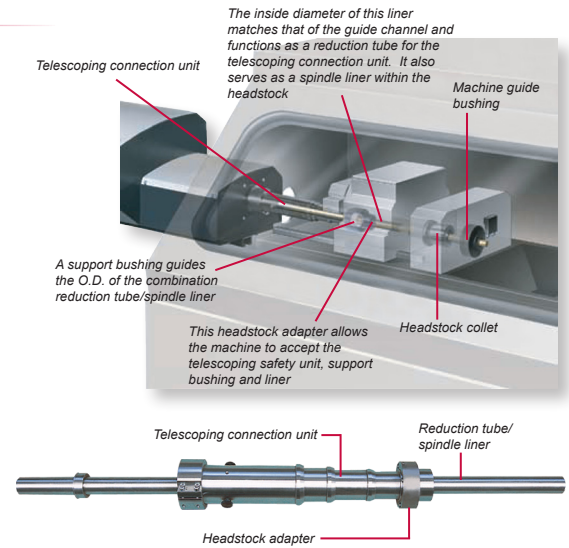
Two HMI's available:
Classic or
Advanced Touch Screen



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 series of telescoping tubes that extend in sections to maintain a continuous connection between the Express 332 S2 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 Express 332 S2 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 Express 332 S2 feature improves part diameter tolerances, increases RPM, enhances surface finish and extends tool life.



Intelligent Electronic Synchronization

Precise synchronization of the pusher assembly with bar stock during rapid movements of the sliding headstock is essential to eliminate bar buckling and unsafe disconnect from the collet fingers. Heavy mechanical components for synchronization will provide unnecessary stress on the headstock.

Combined with a Mitsubishi Servo Motor, Express 332 S2 continuously monitors sliding headstock and bar feeding movement with the electronic synchronization system. This allows the system to actually anticipate headstock motion and precisely synchronize the movements of the pusher and lathe headstock.

Faster, Easier Routine Maintenance

Routine maintenance on the lathe should be conducted in a timely and efficient manner to have your production back on line with minimal loss of time.

A unique retract system on the Express 332 S2 allows the bar feed to be moved back 20 inches 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.

Packed With Features, Simple By Design

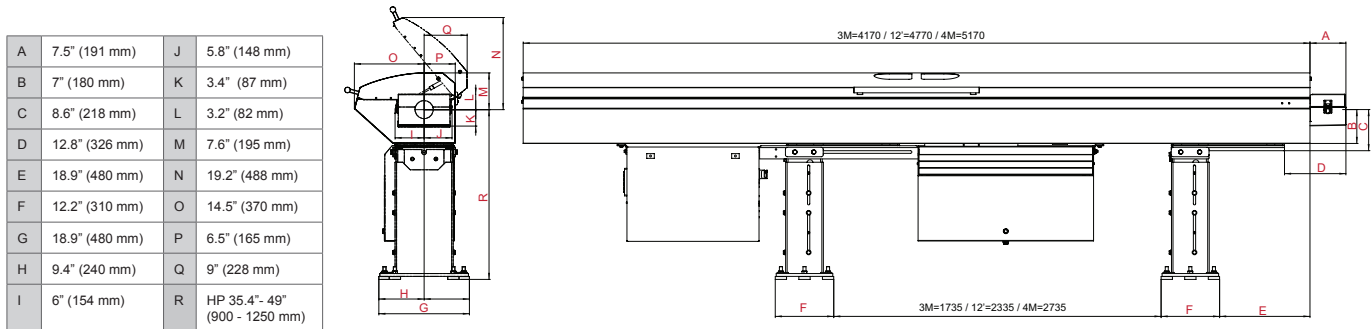
Although the Express 332 S2 is loaded with features you won't find anywhere else, it's designed with fewer mechanical parts for greater performance and reliability. It uses the latest advancements in electronics, servo drives and other technologies to give you the safest, most efficient and robust automatic magazine bar feed you can buy.



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Features & Benefits

- .125" to 1.250" (3 mm to 32 mm) bar capacity
1.375" (34 mm) bar capacity with bar end preparation.
- Maximum bar stock length:
 - o Model 12': 12' 6" (3850 mm)
 - o Model 3 M: 10' 6" (3250 mm)
- Minimum bar stock length: 48" (1200 mm)
- Magazine storage capacity: 10.6" (270 mm) wide
- Remnant length removal: 4" to 16.5" (100 mm to 420 mm)
- 2 minutes for partial changeover (within guiding element range)
- 8 minutes or less for complete changeover
- Automatic diameter adjustment of magazine loading fingers
- Patented front stabilizer automatically adjusts to bar stock and pusher diameter
- Pusher servo drive with absolute encoder
- Electronic headstock synchronization
- Maximum feed rate: 4,000 IPM
- Maximum pushing torque: 50N/meter
- Automatic feeds and torque adjustment
- Prompting HMI
- PLC with added connectivity (Ethernet, USB) for interface communication with advanced CNC controls
- Swiss safety connection for sliding head stock machines with liner tubes
- Z-axis retract: 20" (500 mm)
- Available to load from front or rear, on either left or right hand machines
- Hydraulic oil: 21 US gallons (80 liters) of ISO 100 grade
- Requires 80 to 100 PSI of shop air
- Electrical requirements: Adjustable, 230/380/420/480 volts AC, 3 phase, 2 Amp max
- Shipping weight: 2,650 lbs (1,100 kg)



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.

Your "One-Stop Resource" for machine tool peripherals

LNS is your one-stop resource for industry leading bar feeding equipment and accessories, chip conveyors and coolant management systems, work holding systems and air filtration systems. So you get unmatched product range, applications experience, service and support.

The LNS customer service and technical support teams are the industry's most experienced. Together, they provide expert product selection and application assistance, professional installation and comprehensive training.

We support every product we sell with replacement parts, and both field and factory service. We provide this expert service through trained technicians who are strategically positioned throughout the world.

And because we design every bar feed, chip conveyor and coolant system we sell, we can provide parts and service for all LNS equipment - even chip conveyors and bar feeds that have been in service for over thirty years.



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