



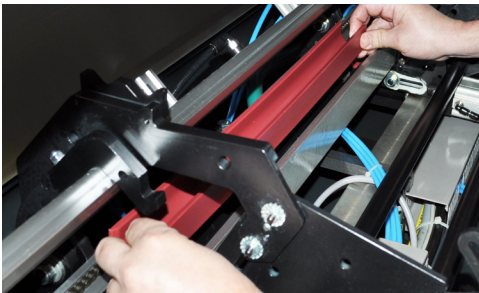
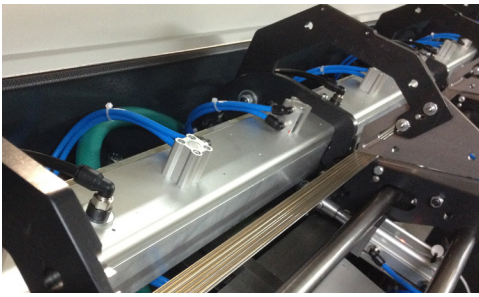
HYDROBAR EXPRESS 220 S2+ BARFEED

AUTOMATIC MAGAZINE BAR FEEDER FOR
FIXED OR SLIDING HEADSTOCK LATHES

Diameter range: .079" to .787" (2 mm - 20 mm)
1.02" (26 mm) max with
bar preparation



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



Steering Your Investments Safely

The LNS Hydrobar Express 220 S2+ provides an unequalled combination of automated productivity and safety benefits. It incorporates all of the field-tested advantages of the Express family while adding new features that keep pace with evolving machine tool technology.

Hydrobar Express 220 S2+ and other models of the Express family share the same controls and guide channels, so operators will immediately become comfortable and productive. And, like previous Express models, Hydrobar Express 220 S2+ is available for fixed or sliding headstock turning machines, including right or left hand headstock models with front or rear load.

Two-Minute Partial or Eight Minute Complete Changeover

A change in diameter and part length is a factor in production cost that must be closely monitored. The fully automatic Hydrobar Express 220 S2+ permits two-minutes for partial changeover or less than eight-minutes for complete changeover.

After changing the collet size to the new bar diameter for partial changeover, simply enter the shape, bar diameter, part length, and guiding channel ID from the remote HMI. No mechanical adjustment is required.

- The hydrostatic outboard stabilizer, bar selection fingers of the magazine tray, speed and torque automatically adjust to the new setup. No manual adjustment is required.

Increasing Your Productivity With Quick Production Setup Changeovers

Start-up and diameter changing can be performed in record time. The user friendly, ultra-light 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 Express 220 S2+ automatically makes all changeover adjustments by answering three simple questions when prompted by the remote control:

1. Shape?
2. Diameter?
3. Part Length?

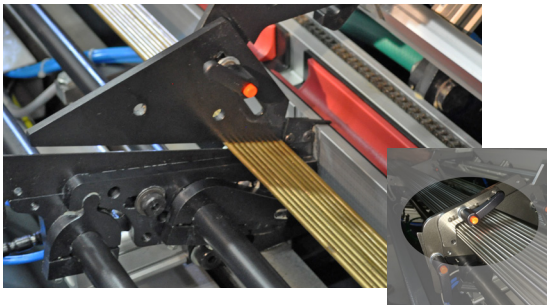
Input any additional parameter information related to the application. And all changeover adjustments happen automatically.

Parts Library

For added flexibility and faster production changeovers, the "Parts Library" allows the user to store specific parameter configurations that are unique to a machining program. After all the parameters have been entered the first time, the configuration is saved as a unique number that will be associated to a specific machining program. The "Parts Library" is a standard benefit and can be used with a Standard or Ethernet interface.

Additional valuable features of the HMI include:

- Displays alarm descriptions
- Alarm history of operation errors and position tracking (inch/metric programming)
- Enhanced serviceability through the QR code technology that instantly lists diagnostic data and automatically populates an email to be sent to an LNS Customer Service Representative
- Enables monitoring of interface signals via a diagnostic timing chart
- Makes troubleshooting faster and easier by using diagnostics to access codes that quickly identify inconsistencies



Loading Capacity

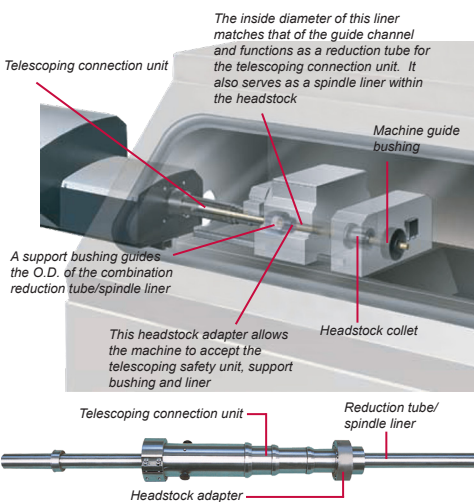
At a depth of 240 mm, the enclosed loading ramp allows a large number of bars to be prepared. An optional 100 mm internal extension for bars from 4 to 12 mm provides up to 340 mm capacity of extended production runs.



Precise High Speed 3-S Headstock Synchronization System

The patented 3-S electronic headstock synchronization system is directly connected to the servo drive eliminating transmission delay and guarantees perfect synchronization between the pusher and the headstock.

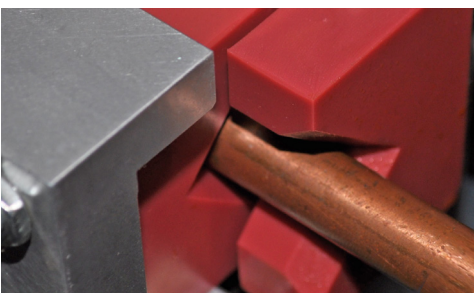
Its design provides optimum synchronization for high-speed sliding headstock machines and small diameter bars (2 to 5 mm), and when running special materials, such as titanium providing safe and reliable performance.



Optimum RPM & Operator Safety

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 safe and continuous connection between the Hydrobar Express 220 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, Hydrobar Express 220 S2+ includes an assortment of reduction tubes to use within the Swiss safety connection and the lathe headstock eliminating the need of spindle reduction tubes. The inside diameters of these reduction tubes match those of the bar feed's guiding channels providing additional support as the pusher exits the bar feeder. The result is reduced vibration and bar oscillation within a critical and traditionally under-supported area. This Hydrobar Express 220 S2+ feature improves part diameter tolerances, increases RPM, enhances surface finish, and extends tool life.



Greater Bar Stock Stability & Less Oscillation

The LNS patented, V- guide hydrostatic outboard uses its full 6" length to provide superior bar support for unmatched stability within the .393" (10 mm) guide channel range. Automatically adjusts for new bar and pusher diameter. Troublesome bar vibrations are eliminated at the source and stopped from transferring to the machining area.



Exceptional Productivity

- Optional Z-axis barfeed retraction system with a safety switch provides full access to the machine for easy machine maintenance.
- An adjustable bar feed 2-position with dual safety switches to accommodate non-guide bushing applications is also available.



HYDROBAR EXPRESS 220 S2+ BARFEED

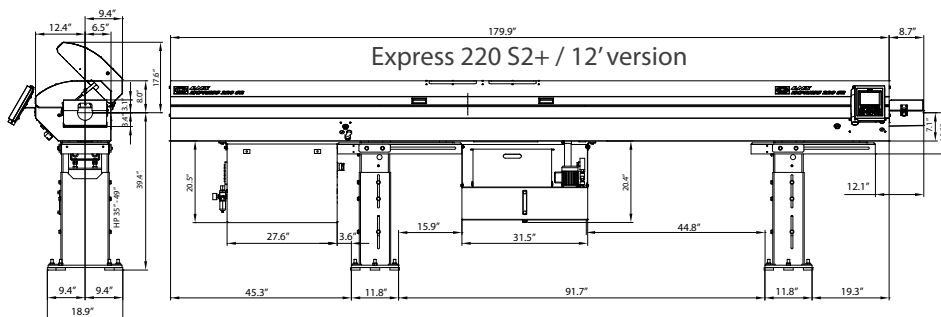
TECHNICAL SPECIFICATIONS

Capacity		
Diameter	mm	2 - 20 (26 max. with bar prep)
Bar Length (2m, 3m, 12', 4m)	mm	1000 to 2200/3200/3800/4200
Loading System	mm	Lateral Gravity Magazine, Enclosed
Loading Capacity	mm	240*
Loading Side		Right or Left
Shipping Weight	lbs	1,870
Applications		
Type of Headstock		Fixed or Sliding, Right or Left Configuration
Remnant Length	mm	Min. 70 / Max. 400 (300 for 2M unit)
Headstock Synchronization		Electronic "3S", High Speed
Controls		Hand Held, Touch Screen with Parts Library (500 Parts)
Changeovers		
Partial changeover	min	2 within the range of guide channel
Complete changeover	min	8 or less
Driving Systems and Bar Support		
Motor		Servo
Drive		Chain
Guiding Channel		Polyurethane, Quick Change 2-Layer Active Cover
ISO 100 oil	gal	8
Options		
*100 mm internal extension of the magazine for bars from 4 to 12 mm		
450 mm Z-axis retraction systems.		
Adjustable longitudinal 2-position for non-guide bushing applications.		
Ethernet interface (CNC capable)		

Guiding Channel Selection Chart				
Guiding Channel Diameter	27	23	21	19
Bar Stock Diameter Range without Bar Preparation	17-24	13-20	11-18	9-16
Bar Stock Diameter Range with Bar Preparation	17-26	13-22	11-20	9-18

Guiding Channel Selection Chart				
Guiding Channel Diameter	17	14	11	8
Bar Stock Diameter Range without Bar Preparation	7-14	4-11	3-8	2-5
Bar Stock Diameter Range with Bar Preparation	7-16	4-13	3-10	2-7

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.



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.



LNS North America
 4621 East Tech Drive
 Cincinnati, Ohio 45245

513-528-5674
 Allproducts-sales@LNS-northamerica.com
 www.LNS-northamerica.com