Turbo 3-26 & Turbo 3-38

The FMB Turbo 3-26 and Turbo 3-38 are Automatic Magazine style Bar Feeders designed for feeding round, square and hexagonal bar material into CNC lathes. Quick change polyurethane guide channels allow for quiet operation at high RPM while feeding round, square or hex bar stock.

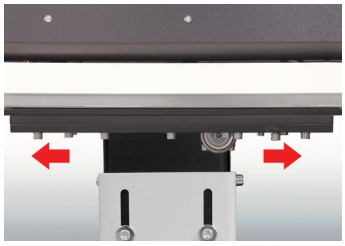
These feeders are compatible with all types of sliding or fixed, CNC or cam operated lathes with spindle bores up to 38mm.

Turbo 3-26 & 3-38

FMB Machinery

The FMB Turbo 3-26 and Turbo 3-38 are automatic bar loading magazines for processing bars in the diameter range of 3-38 mm and in lengths up to 12' or 14' on machine tools.

- The FMB Turbo 3-26 and Turbo 3-38 are designed for automatically feeding round, square and hexagonal bar material into CNC lathes.
- The rugged design of the support is resistant to bending and reduces vibration to a minimum, therefore smooth operation is guaranteed.
- Oil filled polyurethane guide channels provide the ideal guiding system while reducing noise and vibration.
- Bars are placed on the storage table at the side of the guide channel with a loading capacity of 11 inches.
- Axial Shift assembly (optional) used to convert from guide bushing mode to non-guide bushing mode.



- Bars within a larger diameter range can be processed without the change of the bar pusher and guide channel.
- The bar remnant is withdrawn to the back end of the magazine. A gripper extracts it out of the bar stock collet.
- Polyurethane guide channels can be changed quickly and easily for feeding other diameters of bar stock.
- 8" easy touch screen operator control panel guarantees the interaction between the bar feeder and the CNC lathe. Parameters are clearly shown on the text display.

Quick Change Guide Channels

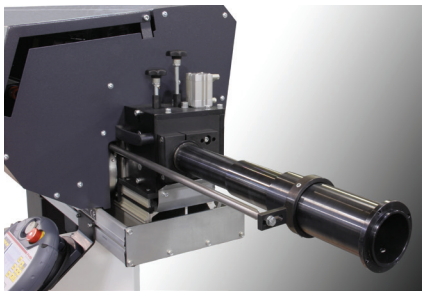
The guide channel can be changed quickly and easily in about 10 minutes to accommodate other bar stock diameters. Bar stock collet changes can be done less than 2 minutes with the "Pin-On" collet feature.

Profiled Material

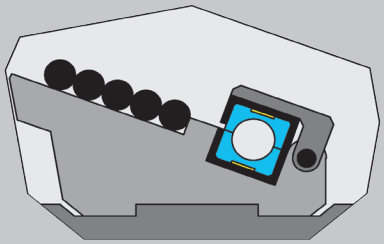
The feed mechanism is automatically pulsed to ensure the profiled material is successfully located in the lathe collet/chuck.

Swiss Headstock Sync.

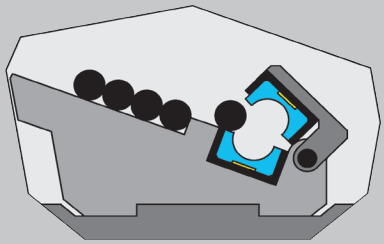
The headstock synchronization device allows the Turbo 3-26 and Turbo 3-38 to be compatible with fast moving, sliding headstock lathes.



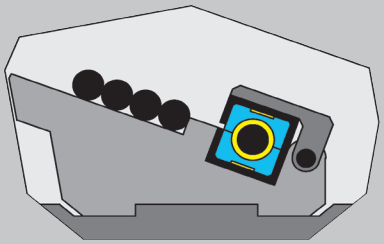
The mode of function of FMB loading magazines



Loading
The storage capacity is 11 inches.



Bar Separation
The material is loaded from the bar storage table into the guide channel.



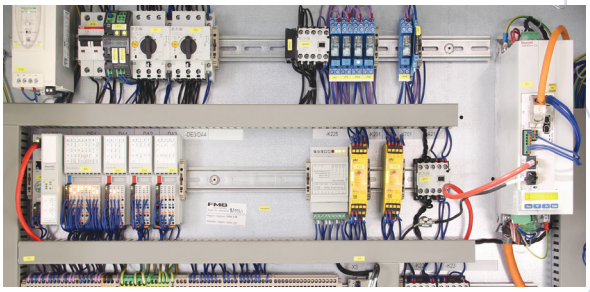
Processing
Support of the bar within the oil-filled guide channel.

In-feed Control

The new bar is automatically positioned in the lathe ready for facing before the first component is produced. Part to part feedout can be controlled without a dead stop required.

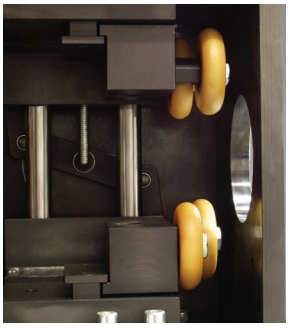
Bosch Electronic Package

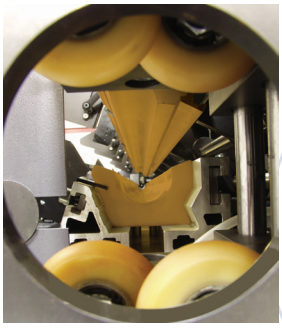
Bosch controller with servo motor drive to the feed mechanism. Flexible control of length and rate of feed guarantee the optimum practical and therefore economic use of the magazine.



Roller Steady Rest

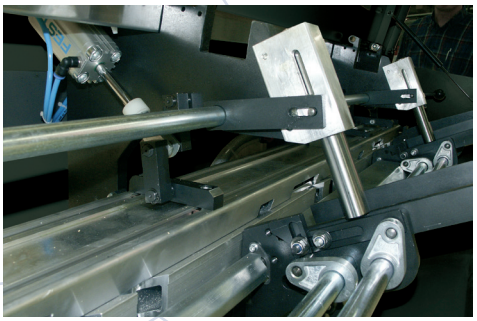
This device guides the bar stock between the lathe and bar feeder. Rollers or blocks provide the ideal guiding of round or profiled material. The rollers can be continously adjusted to the bar diameter and can quickly be replaced with blocks for supporting profiled material.





Bar Stock Alignment Guides

The bar stock alignment guides and seperation device can be quickly adjusted for the choice of other bar diameters. The set-up-time is therefore reduced. The guide channel is closed and locked with a toggle lever system.



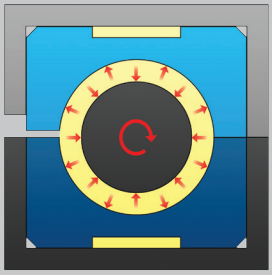
Gripper

A mechanical gripping device is used to both insert the new bar into the bar stock collet and to extract the remnant. It is not necessary to chamfer the bar if it is cleanly cut. No adjustment for bar size is necessary. “Self-Centering”.

FMB Guide Channel

The channel is filled with hydraulic oil from the storage tank. The rotation of the bar creates turbulence which keeps it in the center of the channel. The higher the rotation speed the better centralization effect, therefore the magazine will help the lathe to achieve optimum cutting conditions.

If the diameter of the bar stock is close to that of the channel, very little turbulence can be created by rotation and thus the hydrodynamic bearing effect supports the center of the channel.



Turbo 3-26 & 3-38

Technical Data

- **Power consumption**
  2.0 kW
- **Feed force**
  adjustable, max. 450 N
- **Forward feed rate**
  adjustable max.1000 mm/sec
- **Return feed rate**
  2000 mm/sec
- **Loading time**
  24 sec (for 12' bars)
- **Oil capacity**
  80 liters (22 gallons)
- **Oil viscosity**
  ISO 150 cST
- **Operating voltage**
  200-460 V/60 Hz
- **Compressed air supply**
  6 bar (90psi)
- **Compressed air consumption**
  approx. 10 liters per loading action
- **Weight without oil**
  3800 mm - 1400 kg (3,080 lbs)
- **Remnant length**
  450 mm max. (17.7 inches)

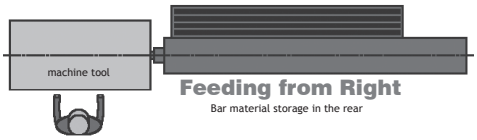
Options Available

- **Maximum Bar Length**
  FMB Turbo 3-26 and 3-38:
  3800 (12'5") 4200 mm (13'8")
- **Bar Diameter Range**
  3-26 mm and 3-38 mm

Loading Configurations

Type A/D - Standard

Feeding from Left
Bar material storage in front



Feeding from Right
Bar material storage in the rear

Type B/C - Optional

Feeding from Left
Bar material storage in the rear

Feeding from Right
Bar material storage in front

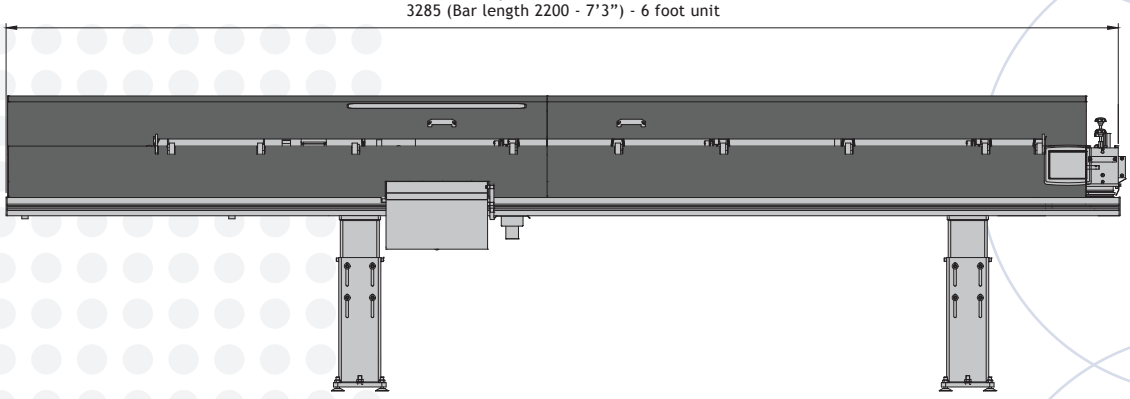
Standard Guide Channel Sizes

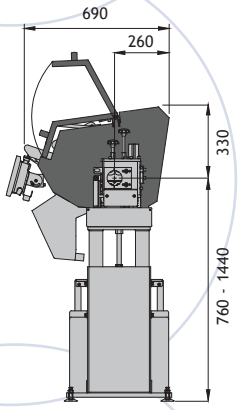
Turbo 3-38 / Turbo 3-26

Guide Channel Sets	Pusher Diameter	Min. Bar Size	Max. Bar Size	Max. Bar Size With Front Remnant Expulsion *
Ø 7 mm	7 mm	3 mm (.118")	6.4 mm (.250")	7 mm (.275)
Ø 10 mm	10 mm	3 mm (.118")	8 mm (.315")	10 mm (.393)
Ø 12 mm	12 mm	3 mm (.118")	10 mm (.393")	12 mm (.472")
Ø 15 mm	15 mm	3.2 mm (.125")	13.5 mm (.531")	15 mm (.590")
Ø 18 mm	18 mm	3.2 mm (.125")	16 mm (.625")	18 mm (.708")
Ø 20 mm	20 mm	8 mm (.315")	18 mm (.708")	20 mm (.787")
Ø 22 mm	22 mm	8 mm (.315")	20 mm (.787")	22 mm (.866")
Ø 25 mm	25 mm	10 mm (.393")	23 mm (.905")	25 mm (.984")
Ø 28 mm	27 or 28 mm	10 mm (.393")	26 mm (1.023")	28 mm (1.102")
Ø 32 mm	32 mm	10 mm (.393")	30 mm (1.181")	32 mm (1.259")
Ø 34 mm	34 mm	12.7 mm (.500")	31.75 mm (1.250")	34 mm (1.338")
Ø 36 mm	35 or 36 mm	12.7 mm (.500")	33.3 mm (1.312")	36 mm (1.417")
Ø 38 mm	38 mm	12.7 mm (.500")	36 mm (1.417")	38 mm (1.500")

**This max. diameter is attainable only if remnant is ejected through the lathe spindle or if one end of the bar stock is turned down to a smaller O.D. to accept a smaller O.D. collet.*

4885 (Bar length 3800 - 12'5") - 12 foot unit
3285 (Bar length 2200 - 7'3") - 6 foot unit





Technical data subject to change without notice

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