

FMB's Newly Designed Turbo 3-26 and 3-36 Feature Upgraded Design

The FMB Turbo 3-26 and Turbo 3-36 are automatic bar loading magazine 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 compati-

ble with all types of sliding or fixed, CNC or cam operated lathes with spindle bores up to 36mm.

The robust design of the Turbo's main beam and support stands are resistant to bending, keeping vibration from bent bars to a minimum for smooth operation. Double-pusher space-saving design is 4 foot shorter than single pusher bar feeders.

The Turbo 3-26 and 3-36 feature a GE FANUC SPS controller with a servo motor drive to the feed mechanism. The bar feeder has flexible control of bar length and rate of feed. Options on the operator control panel

guarantee proper interaction between the bar feeder and the CNC lathe, with parameters clearly shown on the text display.

Both of these FMB Turbo models are equipped with a headstock synchronization device allowing rapid backward/forward movements on sliding headstock lathes without forward feed pressure from the bar pusher resulting in no bar distortion. The polyurethane guide channels can be



changed quickly and easily in about 10 minutes to accommodate multiple bar stock diameters. Oil-filled guide channels envelope the stock, providing a guiding system for high RPM turning operations. During this process the rotation of the bar creates a hydrodynamic effect, centering the bar stock in the channel reducing noise and vibration. The guide channel is securely closed with a toggle lever system while machining bars.

A roller steady rest device on the Turbo guides the bar stock between the bar feeder and lathe. Rollers or blocks provide feeding of round or profiled material. The rollers can be continuously adjusted to the bar diameter and can quickly be replaced with blocks for supporting profiled material. Three Turbo 3-26 and 3-36 configurations will handle bar lengths of 3200 mm (10'6"), 3800 (12'5"), and 4200 mm (13'8").

Bars are placed on the storage table at the side of the guide channel. The table features a loading capacity of 11 inches. 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. Loading time for a 12' bar is 26 seconds. Maximum adjustable feeding speed is 600 mm per second and maximum adjustable return speed is 1000 mm per second.

The bar remnants are withdrawn to the back end of the magazine and a gripper extracts it out of the collet and deposits it in a remnant basket. An air operated 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 and it is completely "Self-Centering". Bar pusher collet changes can be done less than two minutes with the "Pin-On" collet feature.

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