

BAR FEED TRANSFER MACHINE FOR THE MACHINING OF PARTS FROM NON-ROTATING BAR



The BTB bar transfer machine is a multi-spindle system with rotary indexing table having horizontal axis and equipped with an integrated bar loader for non-rotating bars for loading bars with round, hexagon or special profile.

This bar machine, fully NC-controlled, including the bar cutting unit, is entirely engineered by BTB TRANSFER in compliance with the most rigid building standards: qualified technicians, by means of the most advanced CAD 3D work stations take care of the design; specialized workshops, partners of BTB provide for the manufacture of the mechanical components which are carefully verified and tested 100% in the metrology room; specialized mechanical and electronic staff assemble the equipment by following coded procedures in conformity with the safety standards and the EC Machinery Directive – EC Mark.

The managing software developed by BTB TRANSFER allows an easy control of the loading, machining and verification of the entire work cycle, while constantly monitoring machining stress, tool wear and breakage.

THE HIGH ADDED VALUE OF BTB BAR FEED TRANSFER MACHINES

- Possibility of dividing the machining operations over multiple stations
- Simultaneous machining of the part on more sides
- Reduced cycle times
- High production efficiency level of the machine and reduced change over times
- Constancy of dimensions obtained within the established tolerances
- Total and continuous control of the productive cycle
- Remote Service allowing BTB technical staff to operate in real time by remote accessing your PC directly in our offices
- Wide range of available accessories like recessing heads, machining centers, etc. to guarantee the highest flexibility of our machine without compromising its productivity
- Possibility of unmanned operation
- Possibility of obtaining the finished product directly from bar thus eliminating a number of intermediate operations and expensive material handlings
- Utilization of standard tools of unlimited typologies and suppliers
- Simple programming in ISO RS247 G-Code with graphic interface

FOR YOU, THE ADDED VALUE OF BTB TRANSFER MACHINES IS:

- **Higher productivity with improved quality of product**
- **Higher production flexibility**
- **Higher market autonomy, in particular for companies working on behalf of third parties**
- **Lower costs for tool procurement**
- **Lower costs for product management**
- **Faster change over times**
- **Reduced maintenance and service times**
- **Significant increases in revenue production per square foot**



TRANSFER



BRASIL

AMILTON BAGATIM - Sao Paulo



CHINA

BTB TRANSFER CHINA (Mr. Yao Chungang)

CHINAWAY ENGINEERING Ltd (Mr. Eric Ren) - Shanghai



GERMANY

INGENIEURBÜRO GÜNTHER STOLZ - Erding



KOREA

KYUNGWOO KOREA CO.,LTD. (Mr. Jeon Young-Soo) - Seoul



RUSSIA

PNEUMAX Ltd. (Mr. Alexander Gogolev) - Moscow



SPAIN

JOSEP DORCA - Barcelona



NORTHERN SPAIN

EIRE IND (Mr. Miguel A. Marcalda) - Bilbao



SWEDEN

KARLEBO GJUTERITEKNIK AB (Mr. Bertil Andersson) - Sollentuna



TURKEY

MCM CNC Makina SAN. ve TIC. (Mr. Murat ÇETKİN) - Istanbul



USA

GOSIGER IMPORT Dayton, Ohio

Gosiger Northwest - Washington / Oregon / Idaho/ Alaska

Gosiger Northern California

Gosiger Southern California

Gosiger Wisconsin

Gosiger Michigan

Gosiger Indiana

Gosiger Kentucky

Gosiger Cleveland

Gosiger Mid-Atlantic/ DSM – Pennsylvania, Maryland, WV, Va, New Jersey, Delaware

Gosiger Southeast – Florida, Puerto Rico

Spare parts:

GOSIGER IMPORT- Dayton, Ohio

Customers support:

BTB NORTH AMERICA - Dayton, Ohio

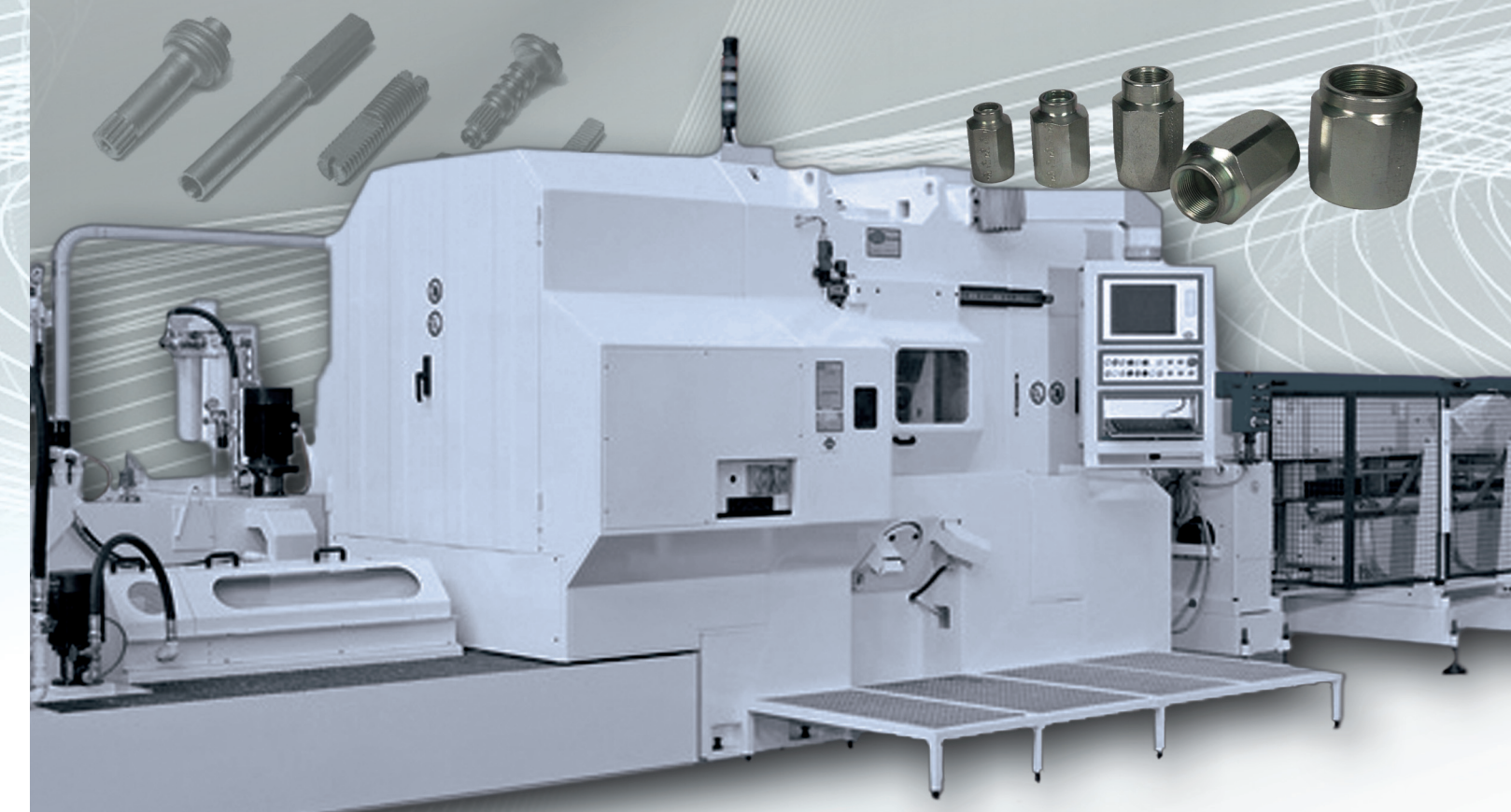
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TRANSFER

TRANSFER MACHINE FOR THE MACHINING OF BAR FED PARTS OBTAINED FROM NON-ROTATING BAR



*Productivity and flexibility with one sole objective,
your satisfaction*





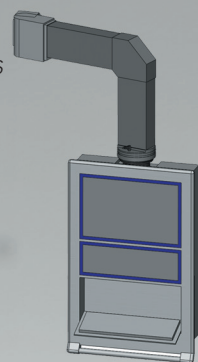
BAR FEED TRANSFER MACHINE FOR THE MACHINING OF PARTS FROM NON-ROTATING BAR

The bar feed transfer machine produced by BTB TRANSFER is the ideal machine for the machining of turned parts obtained from non-rotating bar in brass, steel, or aluminium, as an alternative to the conventional production machines like the traditional/automatic multi-spindle lathes and screw machines.

The BTB bar transfer machine allows the machining from both sides of the bar blank by clamping it in the chuck or loading the gripper by means of one part clamping, while on the conventional lathes the part is first machined from one side and then rotated and/or moved to allow the machining of the opposed side, thus promoting inevitable positioning errors. State of the art technologies, from the original experience and creativity of BTB's technical staff, has permitted the possibility of an extremely versatile and flexible machine, able to guarantee high productivity with reduced change over, making it very suitable even for the small lot production runs.

Besides the conventional drilling, boring operations, this machine can perform the following :

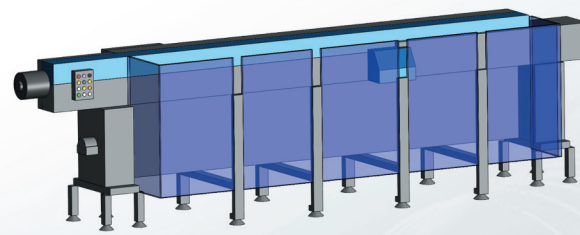
- Contouring of internal and external profiles
- Cylindrical and taper threading single-point in multiple passes
- Outside turning with rotating part by means of lathe units interpolated with tool slide and tool holding turrets
- Machining operations performed with machining centers, also equipped with **tool change device to 3 / 4 positions (BTB patent)**
- Operations performed radially with respect to the part, requiring a very high precision and extremely small angular tolerances thanks to the use of high-precision angular indexing devices mounted on machining centers.
- Circular or planetary marking
- Knurling and execution of special profiles
- Part repositioning on machine
- Machining with special angles on 4 or 5 faces of the part by means of rotating chucks or rotating jaws
- Dimensional checks



6) CNC:

the machine is fully NC-controlled in all functions, including the bar cutting unit.

Example of work cycle of valve obtained from bar

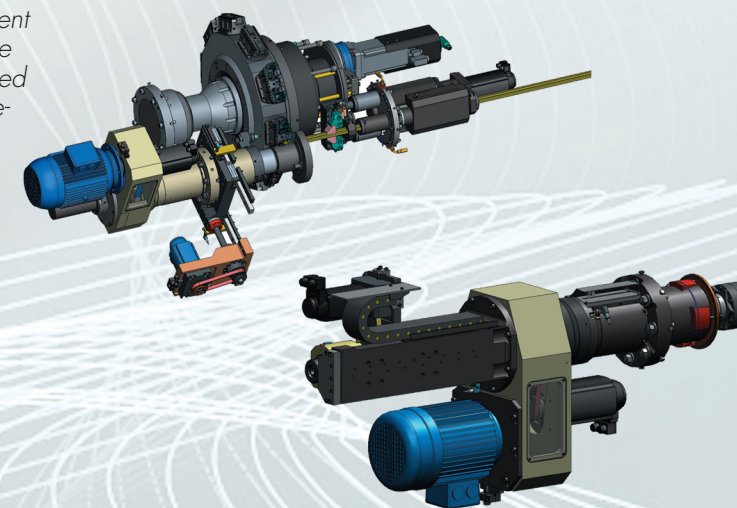


1) AUTOMATIC BAR LOADER:

for loading bars with round, hexagon profile or extruded bars with max. weight of 2,500 Kg and length from 3 to 4 m. Interfaced with the NC of the machine, the loading unit controls the loading of the new bar, by selecting it from the bundle and positioning it into the feeding device, where in a completely automatic cycle, the bar is faced, positioned and clamped in the chuck or in the loading gripper.

2) NC CUTTING UNIT:

with fully NC-controlled cutting movement of the saw and positioning of the blade with respect to the part dimensions. Feed control by means of a high-precision recirculating ball screw.

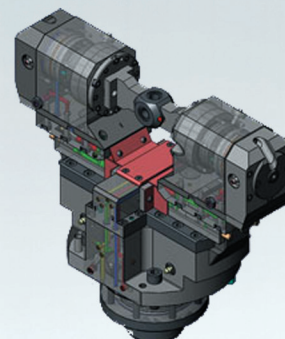


3) MACHINING UNITS:

boring and threading/boring units, fully NC-controlled, available with different spindle attachments, and equipped with special devices like recessing heads, die heads, revolving heads, tool change device to 3 or 4 positions, through-the-spindle coolant, to meet any special machining requirements.

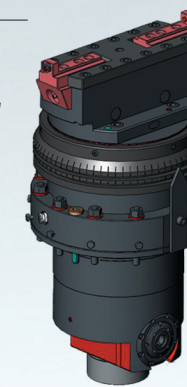
4) 360° ROTATING CHUCKS:

To allow machining of 5 sides of the part. The possibility of 1° rotations of the chuck can permit execution of specially angled machining operations.



5) ROTATING JAWS:

allowing to machine 4 sides of the part. No external control or clutch is required. All rotation control systems of the jaw are housed inside the table, avoiding any cleaning problems or wear of the assembly.



TRO 8S-13U HSK63 CNHY-BAR

With 90° rotating jaws without external drive

Field:	Automotive (cardan joints)
Material:	AVP hardened and tempered - hexagon bar - hexagon dims. max. 36/round bar max. d=44
Feed:	Bar loader for non-rotating bars max. 2500 Kg
Max. bar diam.:	45 mm
Spindle nose:	HSK63 - different attachments possible upon request
Cycle time:	8 sec. Ball SF106AL
Tooling change over:	1h 10'



Ball SF106AL
Round bar d=25
4 machined planes 20x20



TRO 10S-10U+1MC+1 LATHE ISO40 ELCN-BAR

Complete machining of part With outside turning by a lathe unit

Field:	Hydraulics (Elbow & stem) - screw DIN 7643.2005-07
Material:	AVP hardened and tempered - hexagon bar - hexagon dims. max. 36/round bar max. d=44
Feed:	Bar loader for non-rotating bars max. 2500 Kg
Max. bar diam.:	45 mm
Spindle nose:	ISO40 DIN2080 - different attachments possible upon request
Cycle time - Screw DIN 7643:	9 sec. Screw 10-M14x1,5
Cycle time Elbow:	11 sec. GAS 1" stem
Change over time:	1h 15'



Screw 10 - M14x1,5
Hexagon head - hexagon
dims. 19 - length 38 mm



GAS 1" stem
Head d=20
length 106 mm

TRO 12S-18U ISO40 ELCN-BAR

Complete machining of valve housings and fittings in brass and steel

Field:	Hydraulic fittings
Material:	Steel 11SMnPb30 - hexagon bar - hexagon dims. max. 36.6 Brass CDA 360 - hexagon bar - hexagon dims. max. 36.6
Feed:	Bar loader for non-rotating bars max. 2500 Kg
Max. bar diam.:	45 mm
Spindle attachment:	ISO40 DIN69871 - different attachments possible upon request
Cycle time:	5,5 sec. Steel nipple
Cycle time:	4,5 sec. Steel valve
Change over time:	1h including adaptation of chip conveyor tank



Brass valve
Special profile
dims. 28 - length 45 mm



Steel nipple
Hexagon dims. 24
length 30 mm