

# **Powerful Automatic Bar Puller for CNC Lathes**



- STATIONED AT THE TURRET
- DRIVEN BY COOLANT
- CONTROLLED BY THE NC-PROGRAMME





## **GRIPPEX**<sup>®</sup> II is the Bar Puller that makes your CNC-Lathe more effective, right away!

For various reasons, such as high costs or limited floor space in work shops, a small percentage only of the CNC-Lathes are equipped with some kind of magazine-type bar feeder. In small-batch production, however, the machine spindle itself, in addition with its inserted guiding tube and GRIPPEX, provides you with a simple and highly efficient Bar-

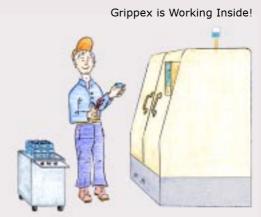


## A new way to work

#### Conventional way of working!



Imagine that you are opening and closing the operator door 40 times or more every hour!



With the machine in unmanned production, you'll find yourself doing some quality enhancing job instead.

Please, imagine that 40 workpieces of 20 mm length each may be automatically machined from a single one meter bar!

- Make GRIPPEX do it for you! 40 workpieces in unmanned production!

Supposing that the machining cycle time is 1 minute. Then GRIPPEX gives you 40 spare minutes for better use than pulling the bar manually or handling small pieces of cut raw material.

- You'll find yourself with a lot of spare time for other operation such as quality checks and/or making preparations for the next batch work etc.

## Here's how it works

## **Programming method**

- · Calling the turret tool post holding the GRIPPEX Bar Puller.
- Positioning of GRIPPEX in X- and Z-axes.
- · Coolant ON for GRIPPEX clamp.
- Chuck unclamp
- Pulling-out the bar and exact positioning in Z-axis according to the programme.
- Chuck clamp
- · Coolant OFF for GRIPPEX unclamp.
- Return to Zero and calling first tool.









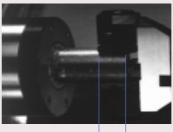
# **Grippex advantages**

- Instant setup gripping is secured without any adjustment within the whole gripping range.
- Compact and light Adjacent turret tool positions need not be vacated
- Powerful stands high pressure 20 bar. No need for a pressure reduction valve.
- Grippex doesn't need high pressure for pulling properly.
- It's working from 0.5 bar onward (see the power diagram on next page)
- Clamps very close to the chuck, allowing for short overhang of the bar.
- Clamps hexagon bars without need for spindle orientation.
- Can be used as well as a Pick-Up Unit with robot jaws.

Grippex clamps very close to the chuck.



3.5 mm (bar ø 60 mm)



20 mm

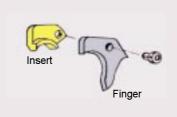
Mechanical spring type bar pullers need a lot of space for clamping.

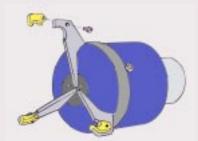
## **Design and Handling**

#### Easy exchange of Inserts

Grippex II provides inserts, which can comfortably be exchanged even with the Bar Puller already mounted on the turret. The inserts are hardened to a degree of HRC57, which assures a long life of hard work.

To be fitted, the insert is placed within the radius of the gripping finger and turned until its tapped hole matches the through-hole of the finger. Finally, the insert is secured by the locking screw.





## Valve outlet when lathes are equipped with a check valve

An adjustable valve is provided within the body of Grippex, serving machines with a check valve, which prohibits coolant from flowing back when turned off.

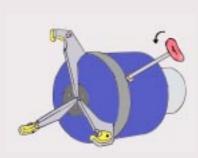
In case you want to speed up the release of the fingers, just loosen the screw some turns ccw for quicker release.

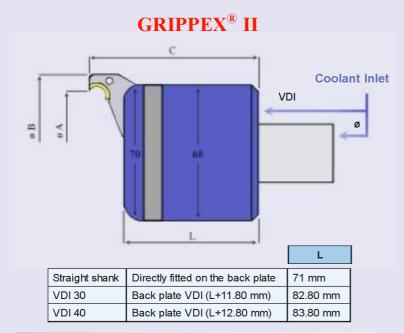


Closed

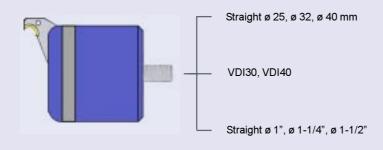


Open





## 1. Select the shank

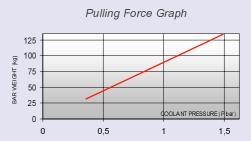


## 2. Select the gripping range



## 3. Select others





The graph shows the max. allowable weight of a mild steel bar to be pulled at a coefficient of friction valued <0.2

Grippex II stands high pressure - 20 bar

## Dimensions at different gripping ranges

| GRIPPING RANGE     | ø A    | ø B    | С      |
|--------------------|--------|--------|--------|
| 3-60 mm (option)   | 64 mm  | 83 mm  | 89 mm  |
| 3-80 mm (standard) | 83 mm  | 102 mm | 94 mm  |
| 7-105 mm (option)  | 110 mm | 129 mm | 108 mm |

| ORDER CODE    | DESCRIPTION                            |
|---------------|--|
| GPX-II/D25    | Grippex II with ø 25 mm straight shank |
| GPX-II/D32    | Grippex II with ø 32 mm straight shank |
| GPX-II/D40    | Grippex II with ø 40 mm straight shank |
| ODY #4/DI00   | 0: " : " \                             |
| GPX-II/VDI30  | Grippex II with VDI 30 shank           |
| GPX-II/VDI40  | Grippex II with VDI 40 shank           |
| GPX-II/1"     | Grippex II with 1 inch shank           |
| GPX-II/1-1/4" | Grippex II with 1-1/4 inch shank       |
| GPX-II/1-1/2" | Grippex II with 1-1/2 inch shank       |

| ORDER CODE   | DESCRIPTION                 | CAPACITY |
|--------------|-----------------------------|----------|
| GPX-II/F60*  | Grippex II gripping fingers | 2-60 mm  |
| GPX-II/F80*  | Grippex II gripping fingers | 3-80 mm  |
| GPX-II/F105* | Grippex II gripping fingers | 7-105 mm |

<sup>\*)</sup> Order set contains three fingers

| ORDER CODE  | DESCRIPTION   |
|-------------|---|
| GPX-II/IF*  | Grippex II Inserts  |
| GPX-II/RJ** | Grippex II Robot Jaws   |
| GPX-II/AD   | Grippex II Adapter for lathes without internal coolant supply |

<sup>\*)</sup> Order set contains three fingers

Distributed by:



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<sup>\*\*)</sup> Suitable only for GPX-II/F80 and GPXP-II/F105