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**SPARE PARTS AND ATTACHMENT
FOR MULTISPINDLE MACHINES**

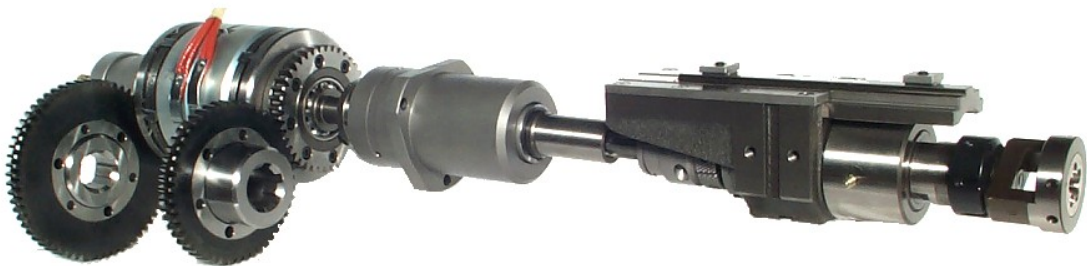
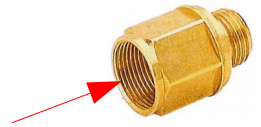
PITTLER - DAM

catalog 2018

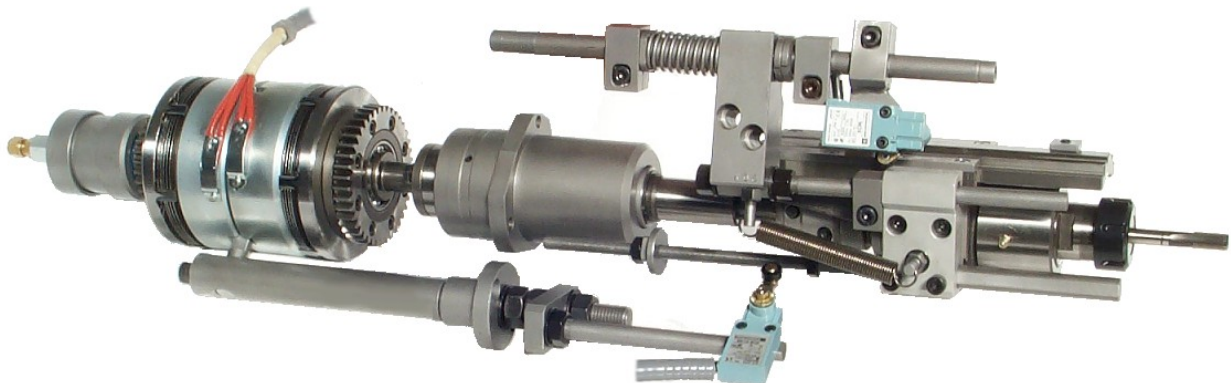
Edizione catalogo / Catalogue issue: 07/2018

This catalog does not show Gildemdeister original parts and accessories,
but all the part and accessories in this catalog are made by Turlo Srl

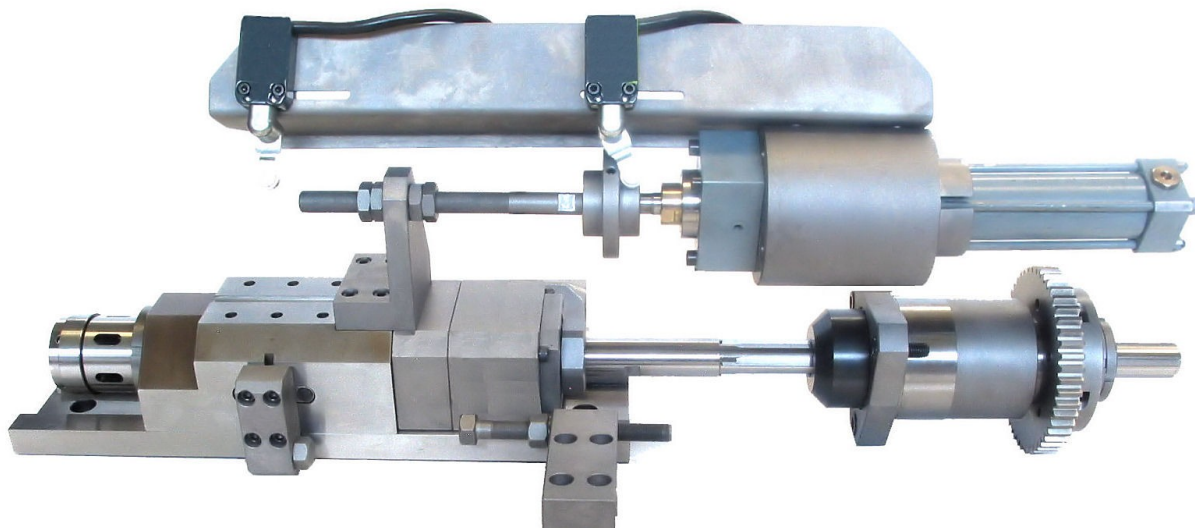
**FULL THREADING ATTACHMENT
APPARECCHIO FILETTATORE
GEWINDESCHNEIDEINRICHTUNG
TARUDEUR
ROSCADOR
ROSQUEADOR COMPLETO PARA ESTAÇÕES 4 E 5**



The threading attachment is used to make frontal internal or external threads. The threading spindle must have an independent feeding, so the ideal positions are the upper independent slides on 4th and 5th. But it can also be requested for pos. 3rd and 6th. We have been always supplying the threading attachment driven by electromagnetic clutches. The self-adjusting electromagnetic clutches have oversized power and they are piloted by our easy-to-install electronic Power Unit. The microswitches check the spindle position and give the Power Unit the right inputs to drive the attachment properly. They can also check any malfunctioning (tap stuck in the component or missed threading operation), and stop the machine in case. The threading spindle is usually supplied for ER type collets, some spindles are now available in coolant through version (high pressure fluid inside bored tap). All gears and shafts are hardened and grinded. The mechanical parts are supplied fitted together as much as possible to make fitting easier. Fully instruction manual is supplied



**HYDRAULIC PICK-UP ATTACHMENT
MANDRINO DA RIPRESA IDRAULICO
ABGREIFEINRICHTUNG
CONTRE BROCHE
PEGADOR E ESCAREADOR NA PARTE POSTERIOR DA PEÇA**



The pick-up attachment is used on cutting-off position frontal slide.

Its spindle rotates at the same speed than the bar, it clamps the part with the collet during the cutting-off.

Still with the part in the collet, it goes backward, allowing the positioning of the reprise tool-holder in front.

Going forward against the reprise tool it makes the finishing of the part on the back side.

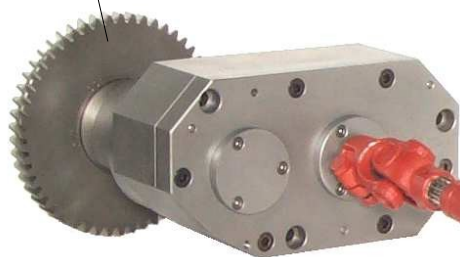
The last phase is the opening of the collet and the expulsion of the part.

The opening and closing of the collet is fully hydraulic. The axial movement of the spindle along the slide is hydraulic.

The attachment is supplied together with the hydraulic unit.

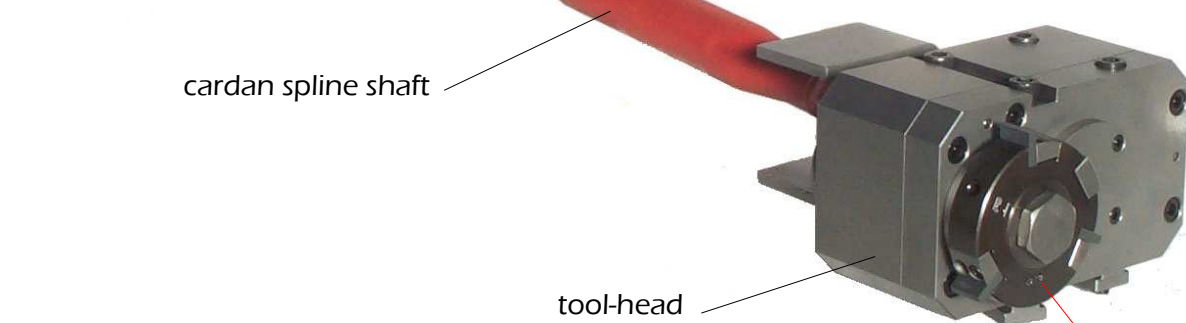
**POLYGON-GENERATING ATTACHMENT
APPARECCHIO POLIGONATORE
MEHRKANTDREH
APPAREIL A POLYGONER
POLIGONADOR
GERADOR DE POLÍGONOS**

driven gear



cardan spline shaft

tool-head



The polygon is usually fitted in position 2 because of the power of the cross-slide there.

The tool rotates at double speed than the bar, same rotating direction.

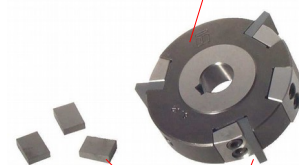
The number of milled flats is always twice the number of cutters on the tool.

1 cutter = 2 flats at 180° (key)

2 cutters at 180° = 4 flats at 90° (squares)

3 cutters at 120° = 6 flats at 60° (hexagons).

polygon tool



carbide insert

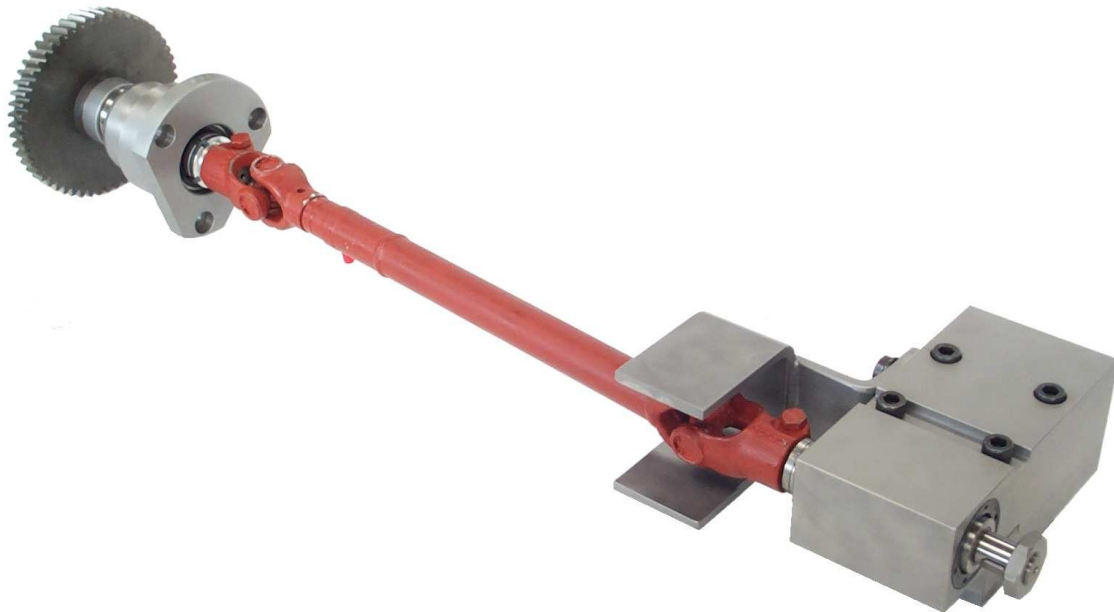
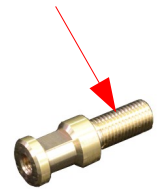
The cutters can have different width and they must be grinded by the user.

The tool fitting is usually 8°32' degree taper (conical)+ key.



**for PITTLER - DAM
multispindle machines**

**THREAD-MILLING ATTACHMENT
APPARECCHIO FRESAFILETTI
GEWINDEFRASEINRICHTUNG
APPAREIL A FRESAIR LES FILETS
FRESADOR DE ROSCAS**



The thread-milling attachment is made by a driving with the gear, the red cardan shaft and the tool-head for the cross-slide. It can go on any station of the machines.

The tool rotates at the same speed of the bar and makes external threads in a quick way on soft materials, like brass, but also on hard materials.

The tool-fitting is usually 8°32' taper (conical) with key but can be made different on demand.

Tools have usually Ø96-98 outside diameter, but we don't supply thread-milling tools, since there are specialized company manufacturing them.

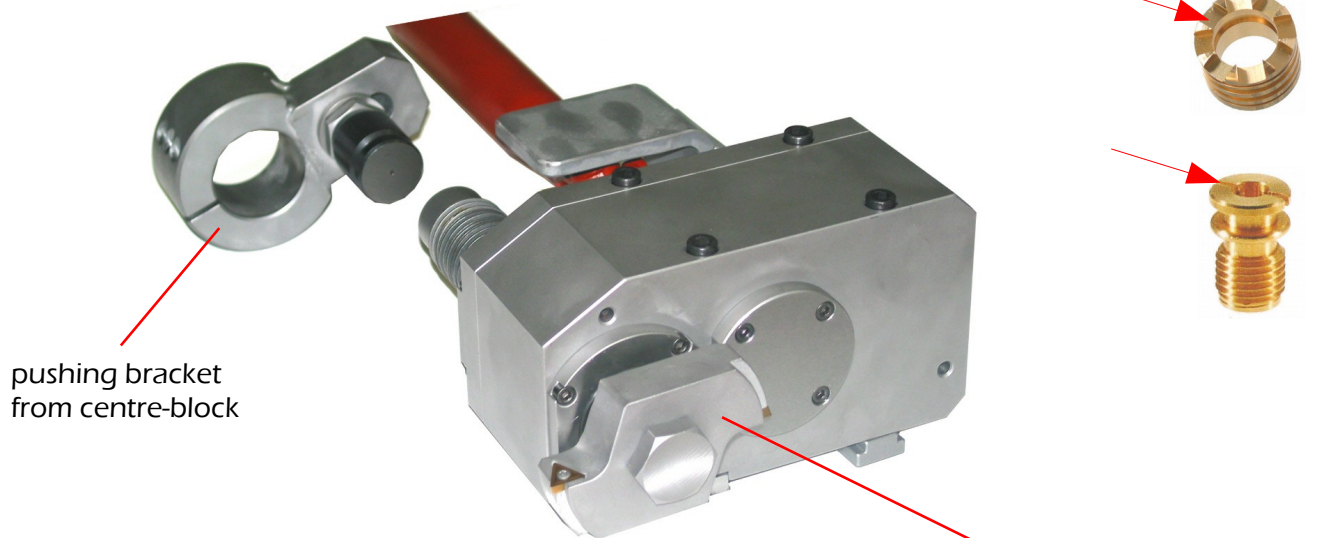


We also can supply smaller drill-holders in order to make drilling operations in the same station where you are fitting the attachment.



for PITTLER - DAM multispindle machines

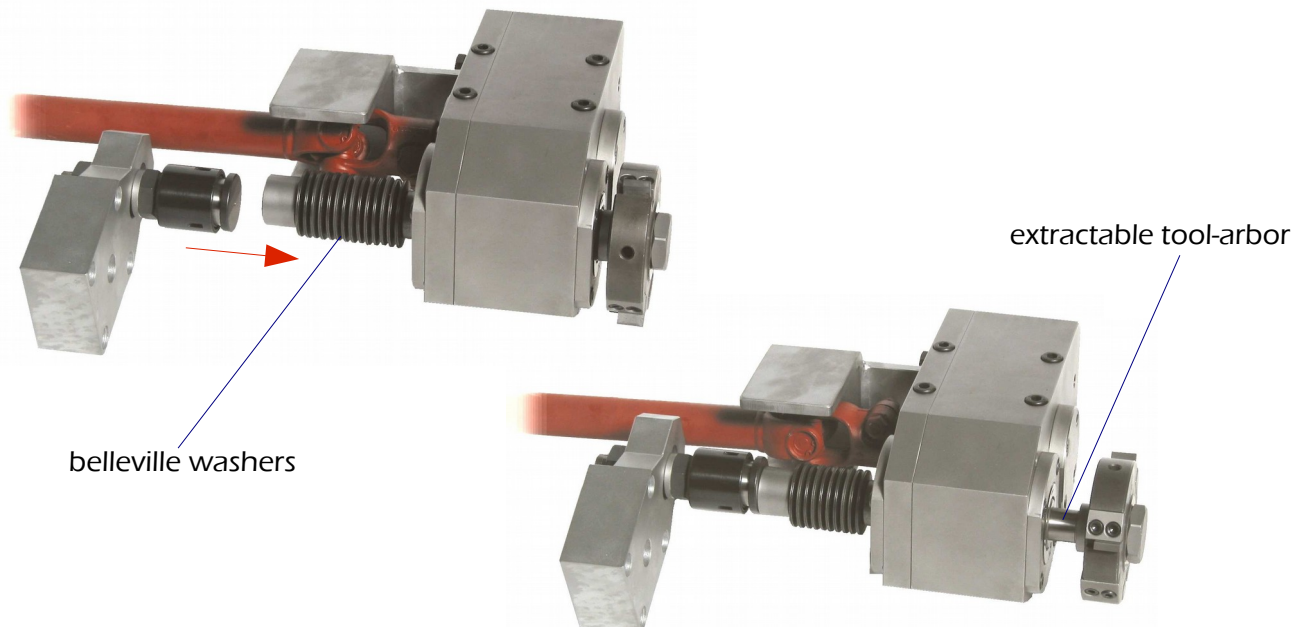
POLYGON HEAD WITH AXIAL MOVEMENT OF THE TOOL FOR STEEL
TESTA POLIGONATRICE CON MOVIMENTO ASSIALE PER ACCIAIO
TÊTE A POLIGONER AVEC MOUVEMENT AXIAL POUR ACIER
POLIGONADOR CON MOVIMIENTO AXIAL PARA ACERO
POLIGONADOR COM MOVIMENTO AXIAL PARA AÇO



pushing bracket
from centre-block

polygon tool with
standard inserts

This polygon head has got an extractable tool-arbor.
The tool-arbor back end is outside the head,
so it can be pushed forward by a bracket fixed on the centre block in the same station.
A set of belleville washers will pull the arbor into start position at the end of the cycle.
This kind of attachment is very good for wide polygon jobs and even better for hard jobs on steel.
In this cases we suggest to use special tools with standard inserts.
Please note that using this attachment can avoid to buy very expensive compound slides.



belleville washers

extractable tool-arbor

**FRESATORE FRONTALE SINCRONO
SYNCHRO FRONTAL MILLING ATTACHMENT
APPAREIL A FRAISER FRONTAL
FRESADOR FRONTAL
FRONTAL FRAESEINRICHTUNG
FRESADOR FRONTAL SINCRONIZADO**



TECHNICAL DATAS

- | | |
|--|---|
| - Fitting position | all |
| - Max speed for the bar | 3000rpm |
| - Max Ø for the milling tool | Ø70mm |
| - Max Ø for the component | Ø25mm |
| - Inside rotating ratio speed | 0,39 for the steel – 0,61 for the brass |
| - Adjustable cross position for the tool | |

The attachment head rotates at the same speed and same direction of the bar.

So the milling disk has always the same orientation compared to component.

When the tool touches the component, it can make a slot in centre (for screwdriver) or off-centre, or it can make an external flat.

Using two milling disks it makes two slots or even two external flats (for key).

Also available the attachment version for spindle-stopping machine.



**for PITTLER - DAM
multispindle machines**

**HIGH SPEED DRILLING ATTACHMENT
MANDRINO FORATORE RAPIDO
SCHNELLBOHREINRICHTUNG
PERÇAGE TOURNANT
TALADRO RAPIDO
FURADOR COM ALTA VELOCIDADE**



The High Speed Drilling Attachment rotates in the opposite direction than the bar, that allows to drill at higher cutting speed.

Different pairs of ratio gears can be supplied to change the cutting speed.

The spindle is hold by the standard centre block braket.

The attachment is also available in the coolant through version:

the coolant liquid can be pushed through the drilling tool at high pressure during the drilling operation.

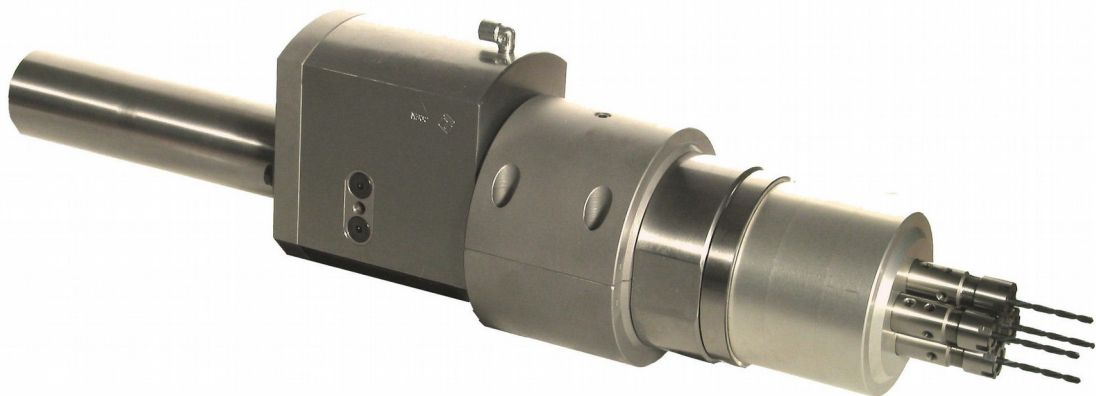
Usually supplied with spindle for ER collets.

It is good to be fit in any position.



**for PITTLER - DAM
multispindle machines**

**SYNCHRO FRONTAL MULTI-DRILLING ATTACHMENT
APPARECCHIO FORATORE MULTIPLO SINCRONIZZATO
FORADOR MÚLTIPLOS SINCRONIZADO**

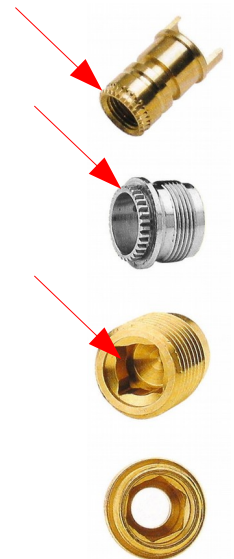


This multi-driller in particular is designed to make 4 drilled holes on a specific interaxis, we can supply it for a special spindle-stopping machine, but also for standard machines.

For standard machines the multi-driller head rotates at the same speed than the bar.

The multi-driller heads are customized for the kind of component you are going to produce.

**BROACHING ATTACHMENT
APPARECCHIO BROCCIATORE SINCRONO
MEHRKANTSTOBENRICHTUNG
APPAREIL Á MORTAISER (ETAMPER)
BROCIADOR
BROCHADOR**



This attachment is designed to make polygons or geometrical profiles inside or outside the component, provided that they can be reached frontally.

It has to be fitted on the centre block of the machine (or upper independent longitudinal slides).

The tool rotates at the same speed than the bar.

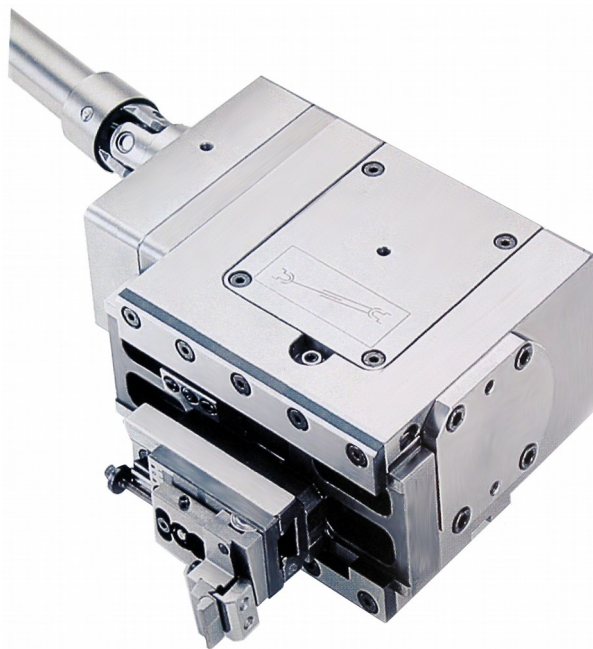
The tool spindle axis is slightly inclined in order to reduce the axial load during the broaching.

The standard tool-spindle uses ER type collets.



**for PITTLER - DAM
multispindle machines**

**THREAD CHASING ATTACHMENT
FILETTATORE A PETTINE
GEWINDESTREHLER
APPAREIL À PEIGNER LES FILETS
ROSQUEADOR POR PENTES**



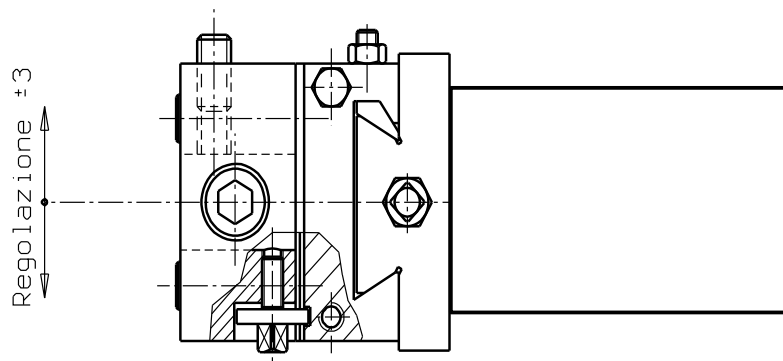
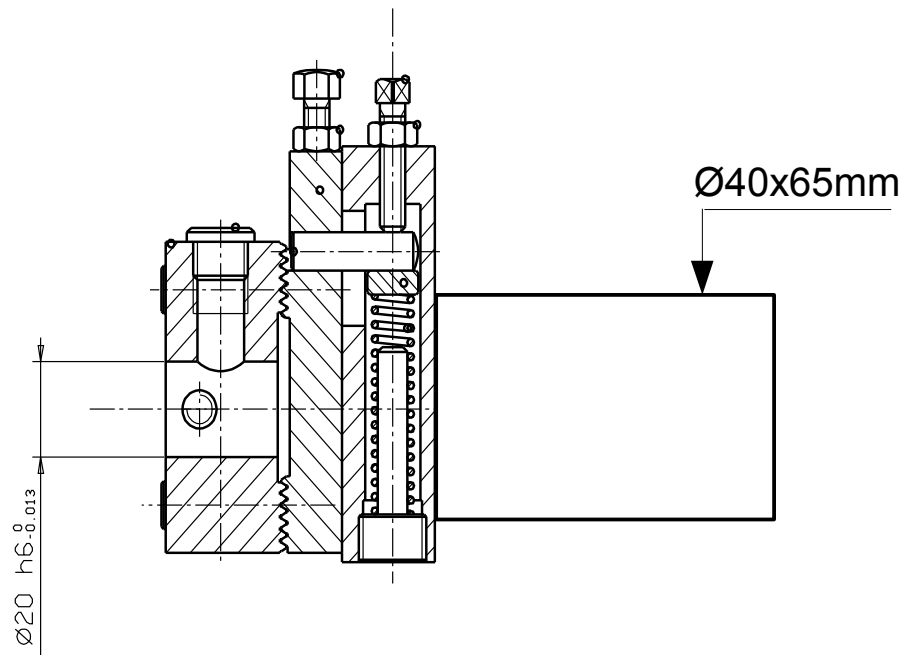
THREAD CHASING ATTACHMENT

Attachment for multispindle automatics with mechanic motion used for threading pieces on diameters which usually can't be reached by a normal die. This attachment is a valid alternative to thread rolling and to milling devices. With suitable variants, internal threads can be obtained in addition to external

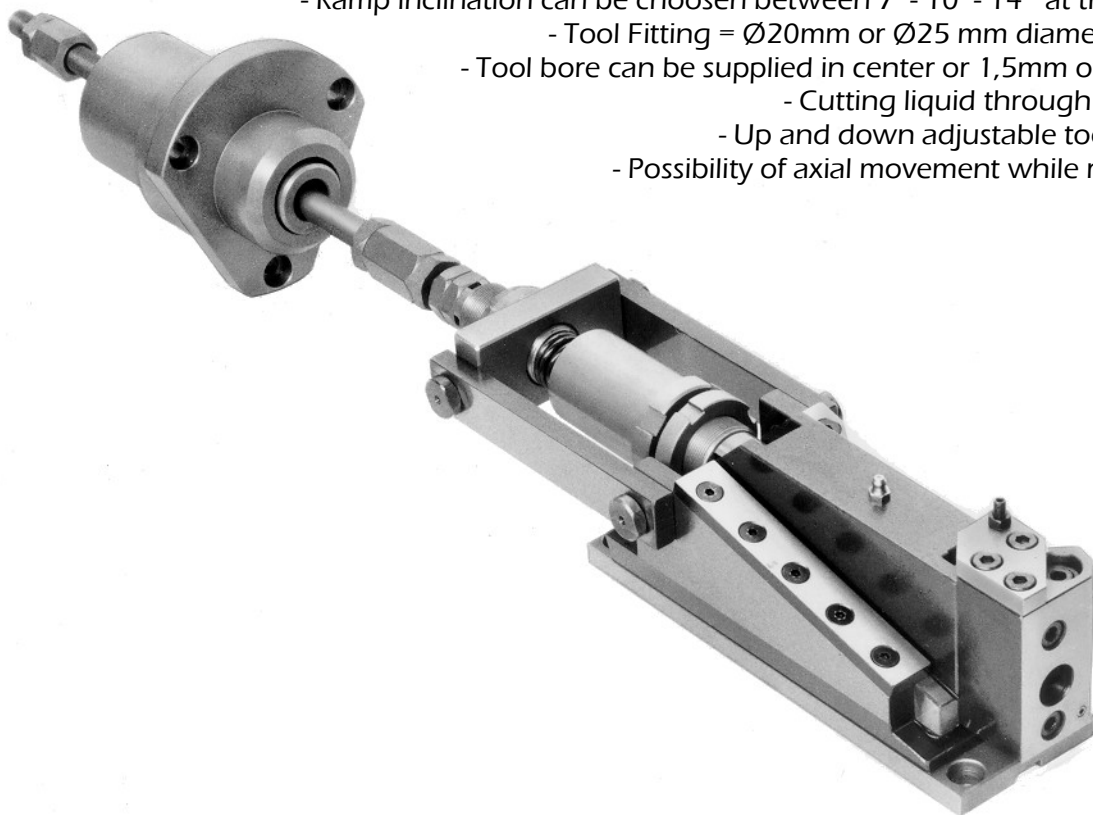


**for PITTLER - DAM
multispindle machines**

**RECESSING HEAD
TESTINA PER RECESSI**

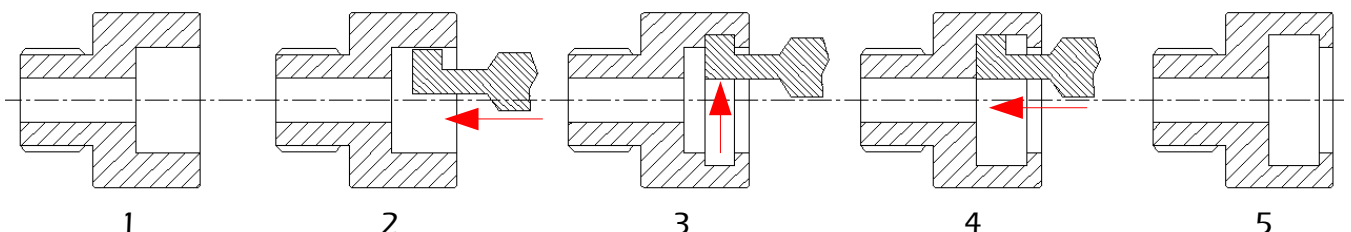


RAMP RECESSING ATTACHMENT
APPARECCHIO RECESSITORE A RAMPA
INNENAUSDREHSCHIEBER
APPAREIL A CHAMBRER
CAJEADOR
ABRIR CANAIS INTERNOS E ACIONAMENTO TIPO RAMPA

**TECHNICAL DATA:**

- Ramp inclination can be chosen between 7° - 10° - 14° at the order
- Tool Fitting = Ø20mm or Ø25 mm diameter bore
- Tool bore can be supplied in center or 1,5mm off-centre
- Cutting liquid through the tool
- Up and down adjustable toolholder
- Possibility of axial movement while recessing

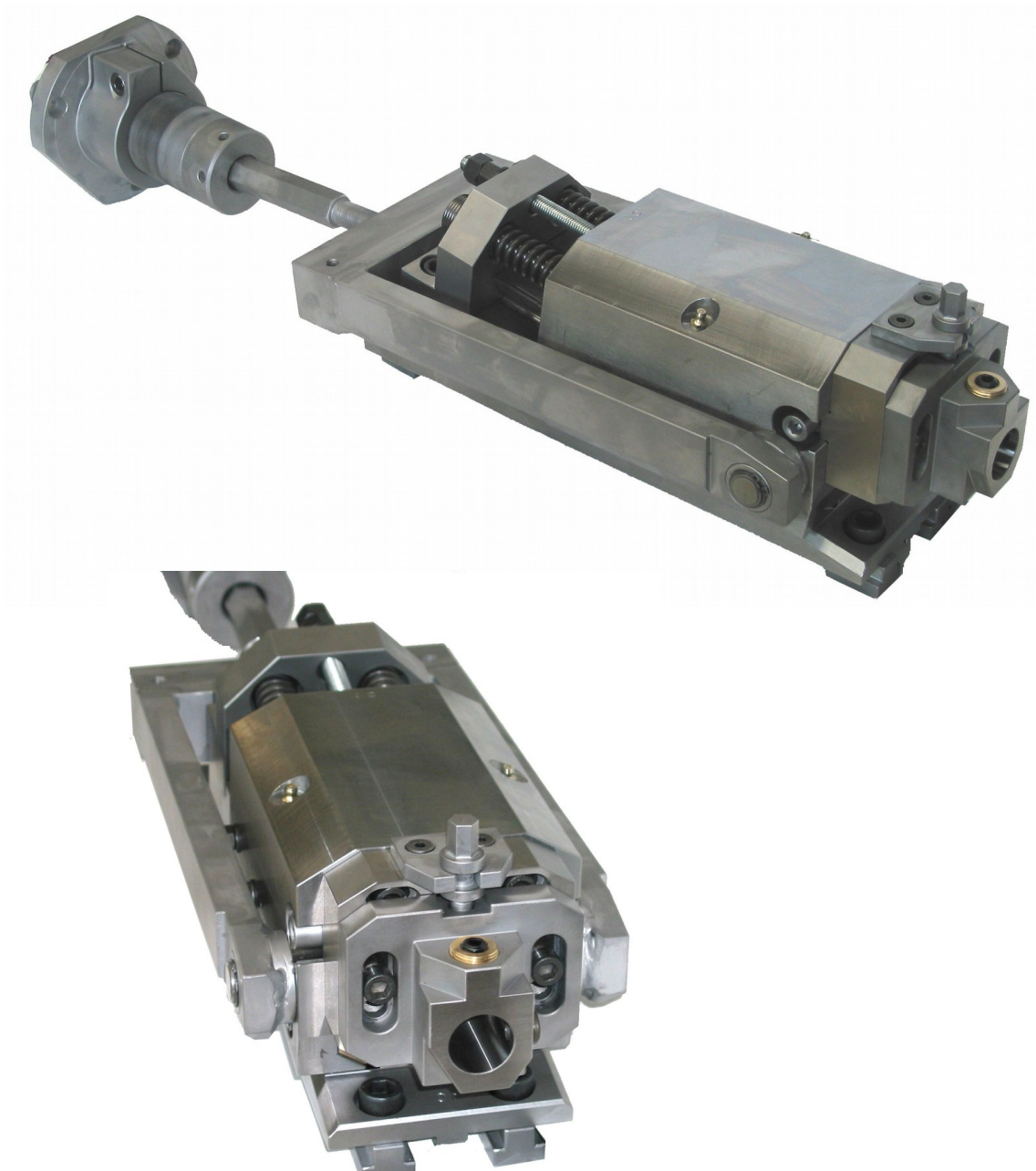
This attachment is used to make recesses inside the component. It has to be fixed on the centre block of the machine (frontal station). After reached the right position inside the component the tool-holder moves upwards, sliding on a inclined ramp (in case of 14° ramp : 1 mm upwards every 4 mm of axial movement of the centre block). The length of the recess is usually the same as the length of the cutting tool. However, if you need to create longer recesses, our attachment can also move axially, doing long turning while recessing.





**for PITTLER - DAM
multispindle machines**

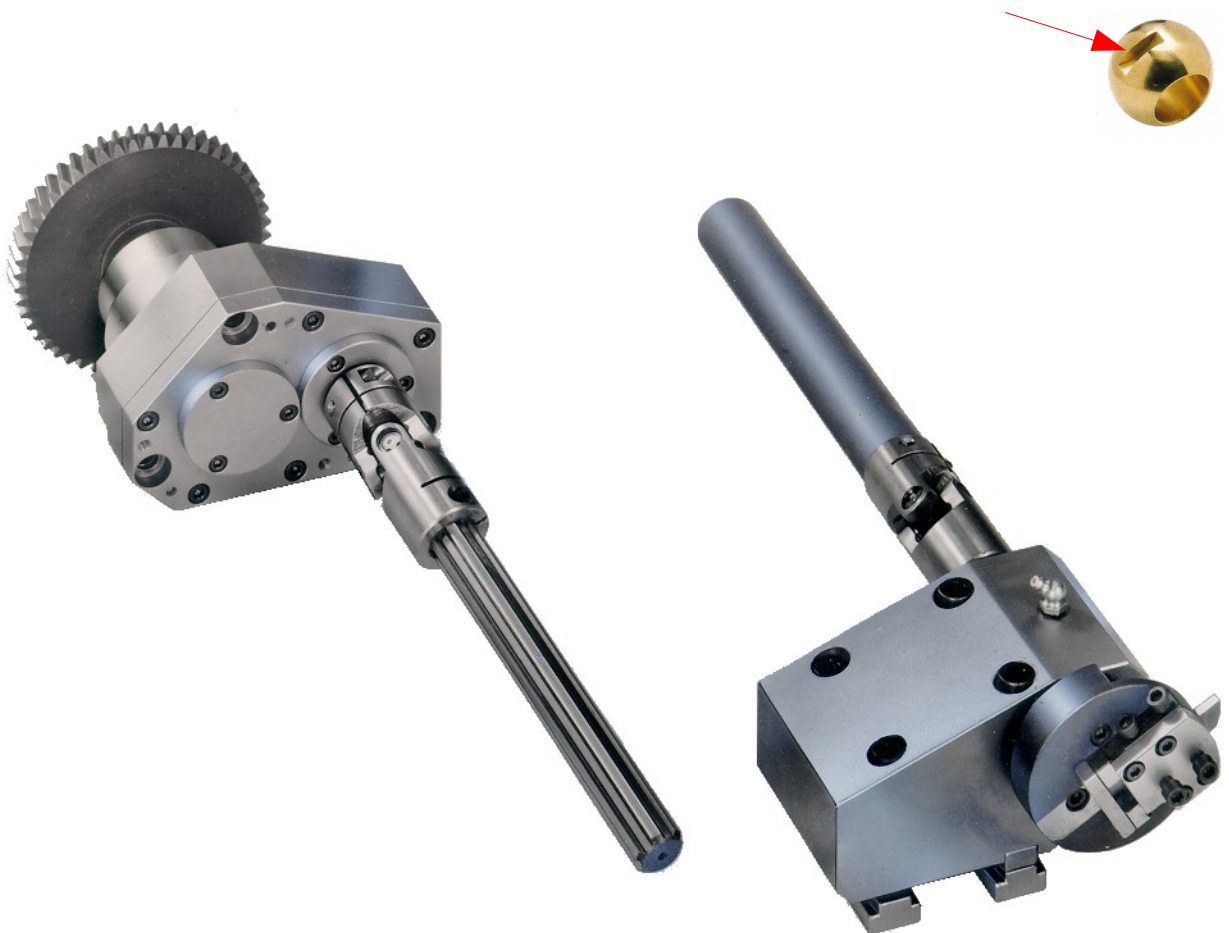
RAMP RECESSING ATTACHMENT - HEAVY DUTY VERSION
APPARECCHIO RECESSITORE A RAMPA TIPO PESANTE
INNENAUSDREHSCHIEBER
APPAREIL A CHAMBRER
CAJEADOR
ABRIR CANAIS INTERNOS E ACIONAMENTO TIPO RAMPA





**for PITTLER - DAM
multispindle machines**

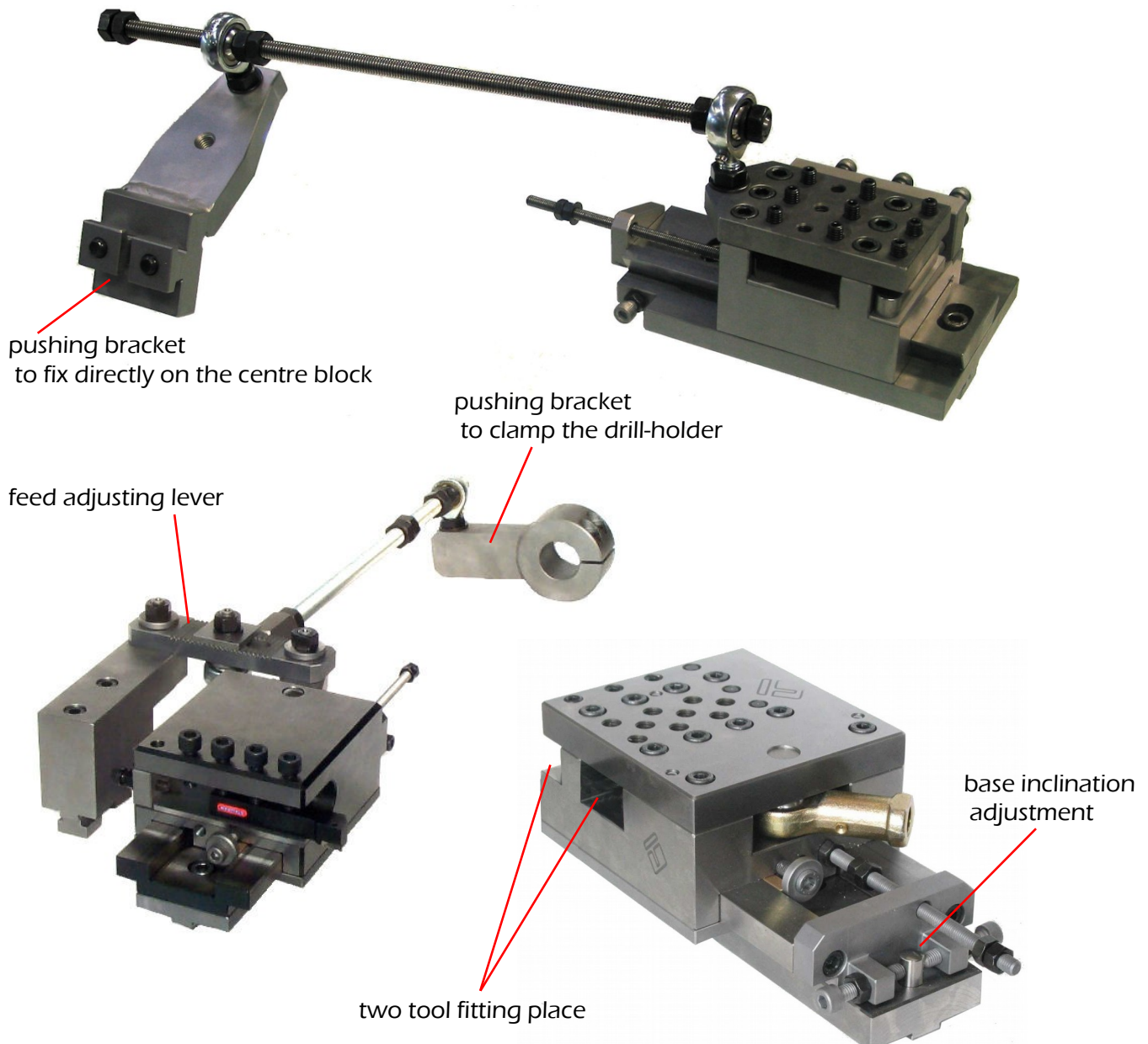
**RADIAL SLOT CUTTING ATTACHMENT
APPARECCHIO CONTROPOLIGONATORE (PER SPACCO SFERE)**



This attachment is designed to make radial slots on the external of the component. It must be fitted on the cross slide of the machine. The tool rotates at the same speed of the bar but in opposite direction. Each cutter on the tool makes a single slot on the component. The radius of the slot it is not the same than the radius on which rotate the cutter. The radius of the slot depends on different geometrical factors and that allows to make even small slots with a bigger tools.

**LONGITUDINAL TURNING CHARIOT
CARRO TORNITORE IN PASSATA
AXIALSCHLITTEN LANGDREHSCHIEBER
CHARIOT POUR LONG TOURNAGE
CARRO PARA TORNEAMENTO LONGO**

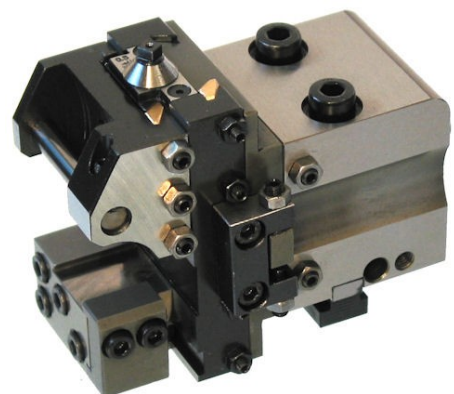
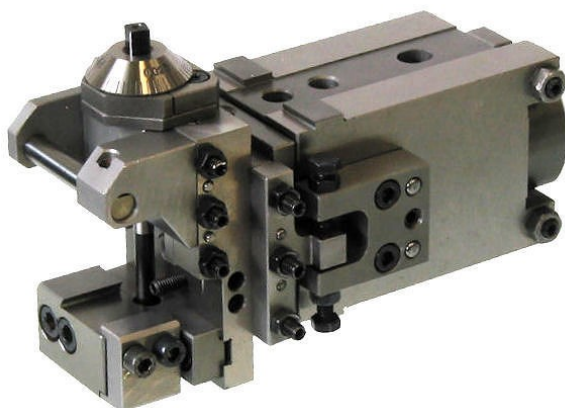
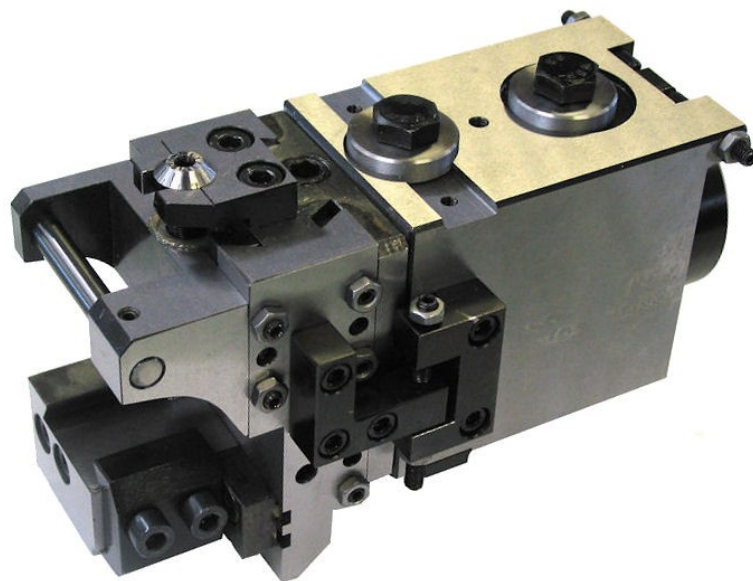
The axial chariot can be used on machine cross slides to make long turning operations. The feed is taken by fitting a pushing bracket on the centre block (same station). The bracket can be fixed directly on the centre block or it can clamp the drill holder back end. The inclination of the bottom base is adjustable. The chariot has the same feed than the centre block unless you prefer the version with adjustable feed lever.





**for PITTNER - DAM
multispindle machines**

**SHAVING TOOL-HOLDER
CALIBRATORE
KALIBRIERWERKZEUGE
PORTE OUTILS À CALIBRER
CALIBRADOR/AFEITADOR**



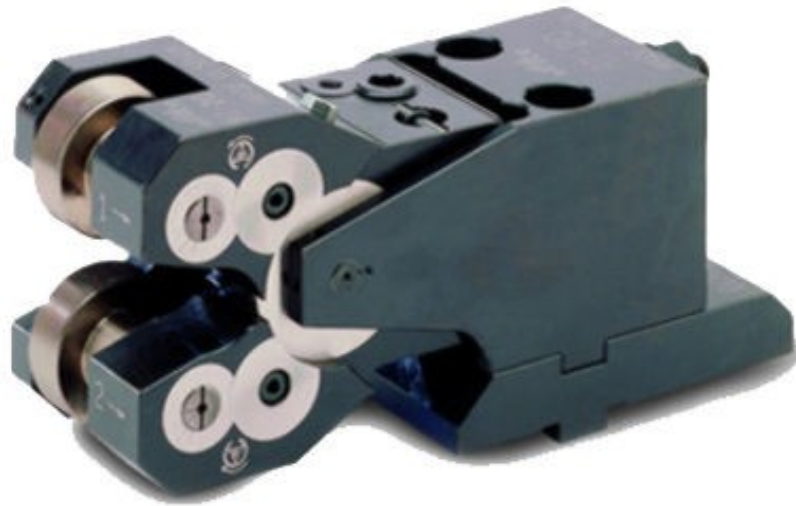
The shaving tool-holder is used to have very precise diameter.

It can be used on any cross-slides. It must be completed by the customer by a roller on
The top carbide pin and a cutting insert clamped at the bottom.



**for PITTLER - DAM
multispindle machines**

**THREAD ROLLING ATTACHMENT for cross slide
RULLATORE DI FILETTI TANGENZIALE**



We can supply new or good used cross thread-rolling Fette heads,
models are the following T12, T18, T27

We can adapt them to any kind of machine model

Siamo in grado di fornire rullatori di filetti tangenziali Fette nuovi o usati.

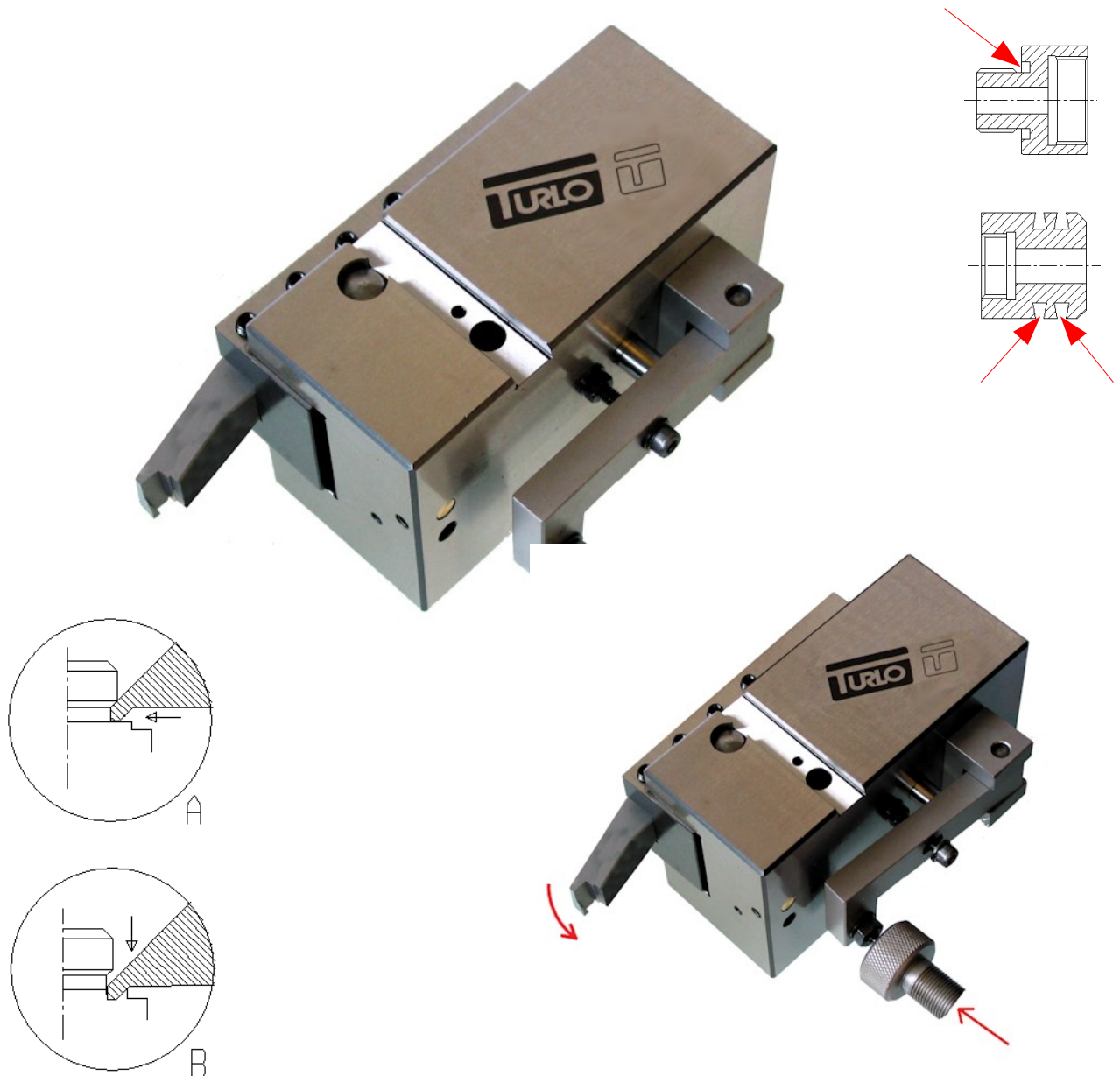
I modelli sono i seguenti: T12, T18, T27

Possiamo fornire supporti per adattarli a qualsiasi macchina



**for PITTLER - DAM
multispindle machines**

**BACK-SIDE TURNING TOOL-HOLDER FOR SMALL GROOVES
PORTAUTENSILE BASCULANTE PER SCARICHI POSTERIORI
PORTA FERRAMENTA PARA TORNEAR SEDE JUNTA POSTERIOR**



This special cross slide tool-holder makes back (collet-side) grooving operations.

Typically used to make place for seals

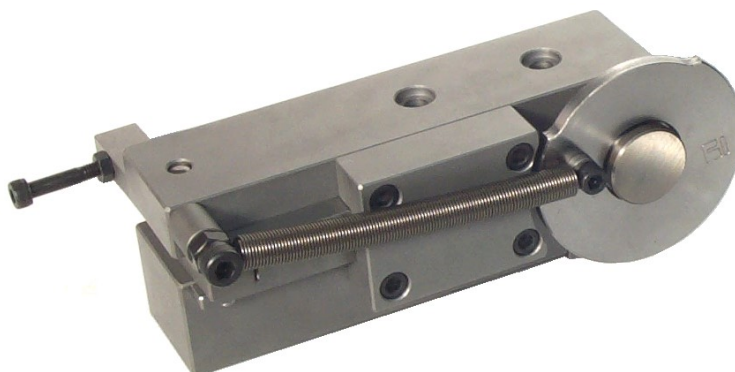
The tool cutter moves along a circle but, because of the big circle radius and the small movement inside the part, the result is very like a straight movement.

The tool-holder is pushed by a bracket fixed on centre block.

The tool is not included and must be properly profiled by the customer.

We also supply similar attachment for doing frontal grooving operations.

**CROSS MARKING ATTACHMENT
TIMBRATORE TANGENZIALE
SIGNIEREINRICHTUNG
MARQUAGE TANGENTIEL
MARCADORES**



This attachment is used to mark the components in a very simple and quick way, it is based on a completely mechanical logic.

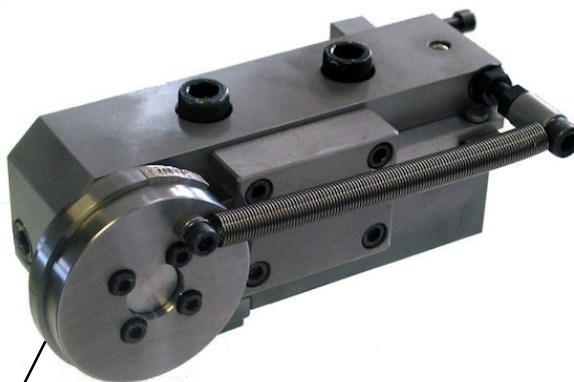
With our attachment on, the cross slide moves forward till the engraved disk hits the component. Because of the friction between them, the disk starts to turn and mark the component. After one rotation engraving is over and a locking pin stops the disk in a special position, where it cannot touch the component again.

When cross slide returns back, a proper pin, fixed on the wall of the machine, unlocks the disk, and the spring takes it to its start position.

We can supply blank disks or engraved disk, following customer's requirements.

The same attachment can be taken apart and re-assembled the other way round in order to fit all station of the machine.

Now it is also possible to fit a disk with interchangeable letters.

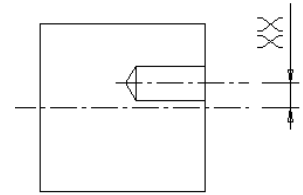


The new roller with interchangeable characters



**for PITTLER - DAM
multispindle machines**

**OFF-CENTRE DRILLING SPINDLE
FORATORE ECCENTRICO
FURADOR FORA CENTRO**

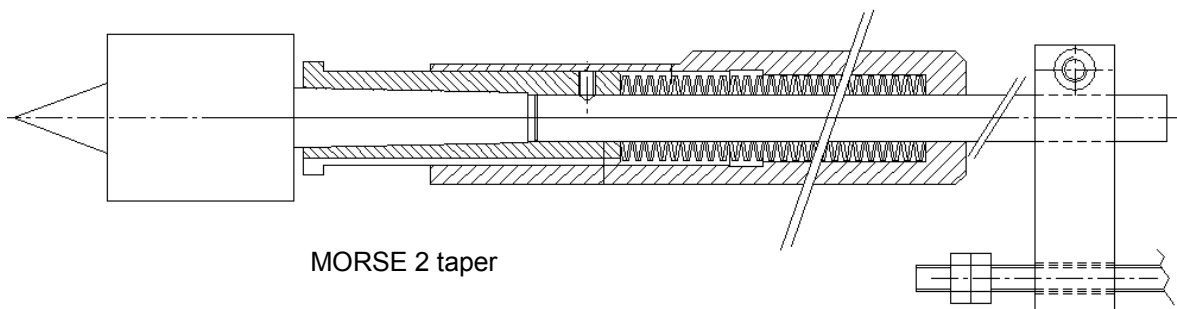
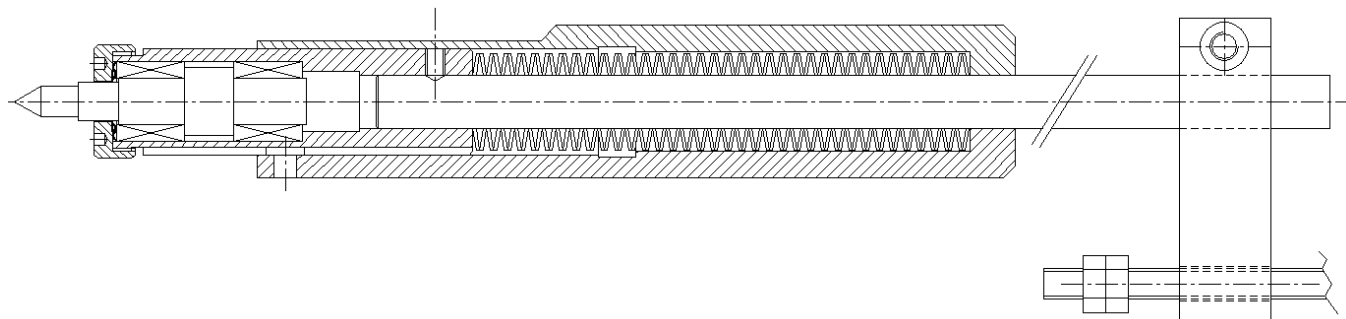


This rotating spindle drills off-centre holes in a very easy way.
The interaxis is customized.



**for PITTLER - DAM
multispindle machines**

**ROTATING LIVE CENTER WITH COMPENSATION
CONTROPUNTA ROTANTE ELASTICA**



MORSE 2 taper