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### SPARE PARTS AND ATTACHMENT FOR MULTISPINDLE MACHINES



# Attachments for German GILDEMEISTER multispindle machines

6-spindles machine: 8-spindles machine:

GILDEMEISTER AS25 GILDEMEISTER AA32 GILDEMEISTER AS32 GILDEMEISTER AA48 GILDEMEISTER AS48 GILDEMEISTER AA67

GILDEMEISTER AS67 GILDEMEISTER AS82 GILDEMEISTER AS100

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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





casting clutch-box

pushing lever

driving

acted by the cam

The threading attachment is used to make frontal internal or external threads.

The threading attachment can be used in the middle and top stations:

In case of 6-spindle machines they are pos.3-4-5-6

In case of 8-spindle machines they are pos.5-6-7-8

We can supply the complete attachment:

- driving made by red casting clutch-box with electromagnetic clutches inside and all shafts and gears required to drive the threading spindle.

- threadind spindle inside casting support sliding on the base fixed on frontal station.

- Pushing lever + cam and safety microswitch.

The microswich stops the machine in case of tool blocked in the component

- Electric Power Unit that drives the electromagnetic clutches.

note that Gildemeister AS25 has a different design of attachment

base fixed on frontal station

threading spindle



safety microswitch

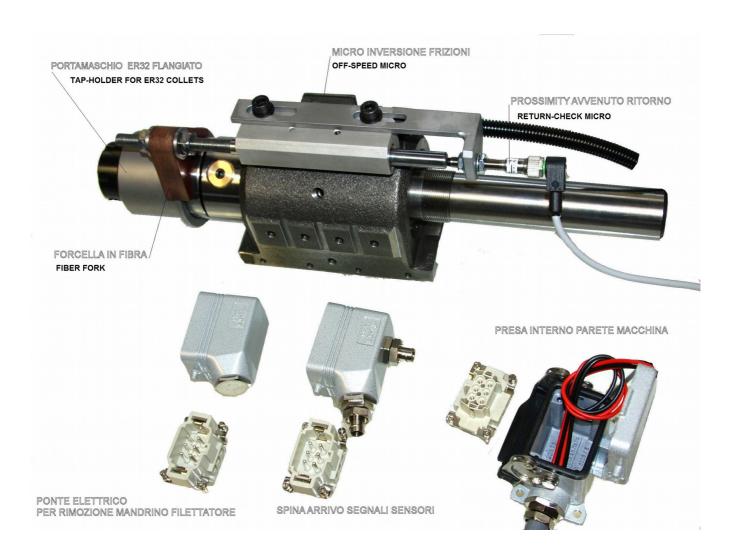


PARA ROSQUEADOR

### for GILDEMEISTER multispindle machines

ACCESSORIES FOR THREADING ATTACHMENT ACCESSORI PER IL FILETTATURE FUR GEWINDESCHNEIDEINRICHTUNG POUR TARUDEUR PARA ROSCADOR





In case you need to have a precise control of the threading operation you may require the control threading set to fit on your threading spindle, even on original Gildemeister spindle.

When tool is doing the threading is also moving forward the fiber-fork with the rod on top. The off-speed micro, constantly pressed against the rod, will set the threading off-speed when it will be realesed finding a hole along the road. The return-check micro will give the "ok" to machine for indexing at the end of the cycle, and will not in case the tool remains stopped inside the component.



#### **ACCESSORIES FOR THREADING ATTACHMENT**

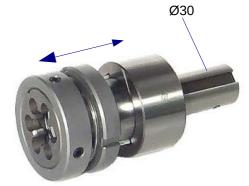
ACCESSORI PER IL FILETTATURE FUR GEWINDESCHNEIDEINRICHTUNG

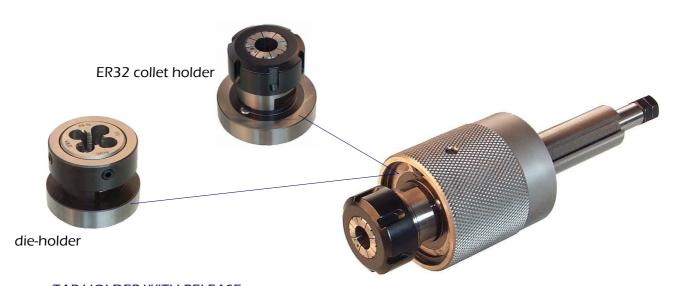
POUR TARUDEUR
PARA ROSCADOR
PARA ROSQUEADOR

TAP-HOLDER WITH EXTRACTION PORTAMASCHIO CON ESTRAZIONE PORTA-MACHO COM ALLUNGAMENTO



DIE-HOLDER WITH EXTRACTION PORTAFILIERA CON ESTRAZIONE PORTA-HILERA COM ALLUNGAMENTO





#### TAP-HOLDER WITH RELEASE

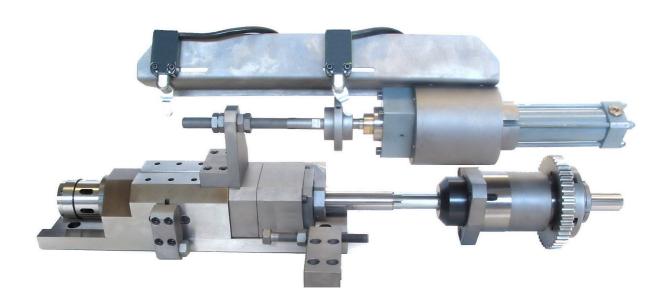
PORTAMASCHIO A SGANCIAMENTO PORTA-MACHO COM DESCARGA

with this kind of tap-holder you can set exactly the length of the thread before doing the job. After having reached the pre-set length, the tap-holder will start to rotate free. It is needfull when you have two threading operations on the same machine.



#### **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.

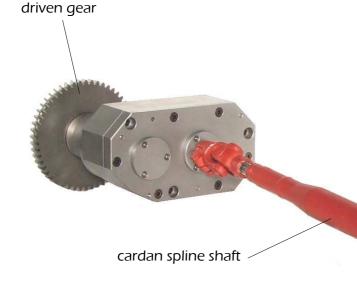
The attachment is supplied together with the hydraulic unit.



#### POLYGON-GENERATING ATTACHMENT

APPARECCHIO POLIGONATORE
MEHRKANTDREH
APPAREIL A POLYGONER
POLIGONADOR
GERADOR DE POLÍGONOS







tool-head

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

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

polygon tool

1 cutter = 2 flats at 180° (key)

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

3 cutters at  $120^{\circ} = 6$  flats at  $60^{\circ}$  (hexagons).

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.



#### 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.



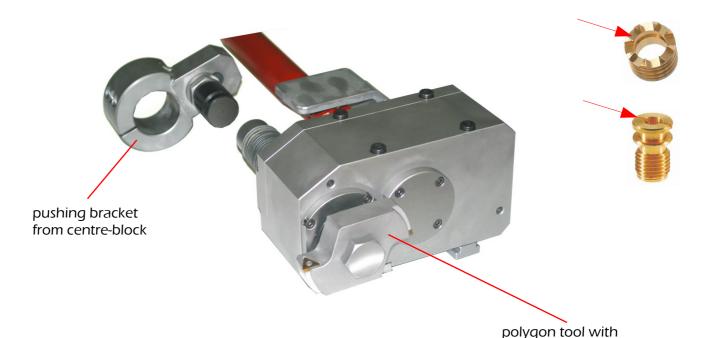
We also can supply smaller drill-holders in order to make drilling operations in the same station where you are fitting the attachment.



standard inserts

#### 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



This polygon head has got an extractable tool-arbor.

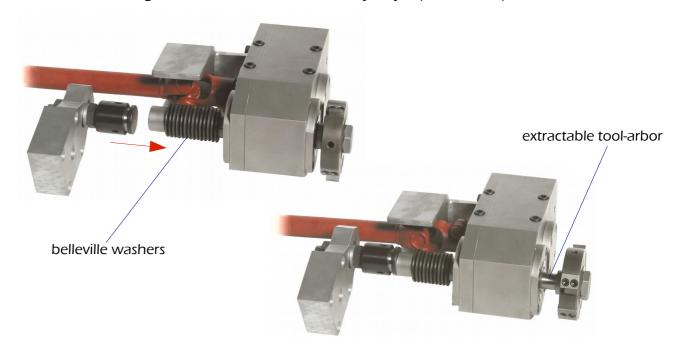
The tool-arbor back end is outside the head,

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.





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

- Adjusteable 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.



#### 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.



#### 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** 



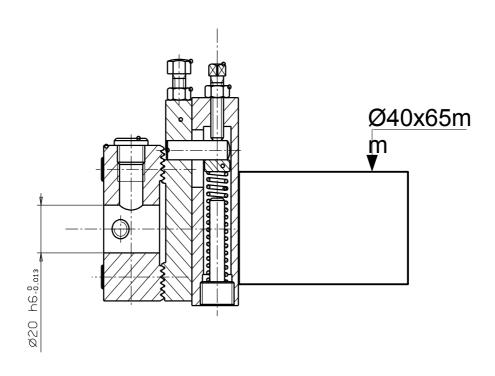
This attachment is designed to make polygons or geometrical profiles inside or outside the component, provided that they can be reached frontally.

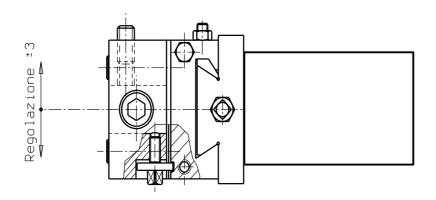
It has to be fitted on the centre block of the machine (or upper indipendent longitudinal slides). The tool rotates at the same speed than the bar.

The tool spindle axis is slightly inclinated in order to reduce the axial load during the broaching. The standard tool-spindle uses ER type collets.



### RECESSING HEAD TESTINA PER RECESSI

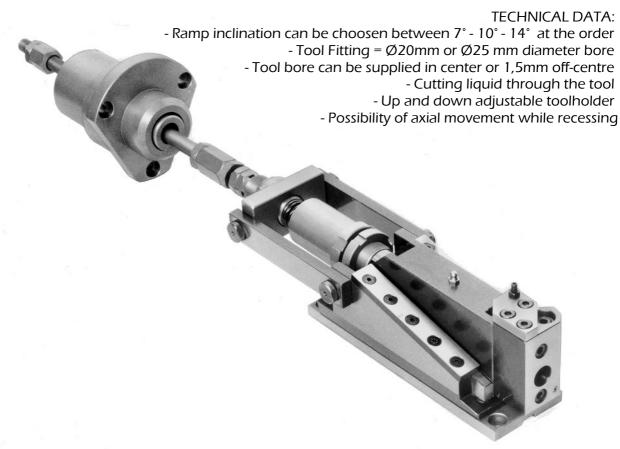






#### RAMP RECESSING ATTACHMENT

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



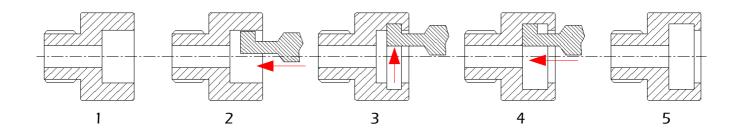
This attachment is used to make recesses inside the component.

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 inclinated 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.

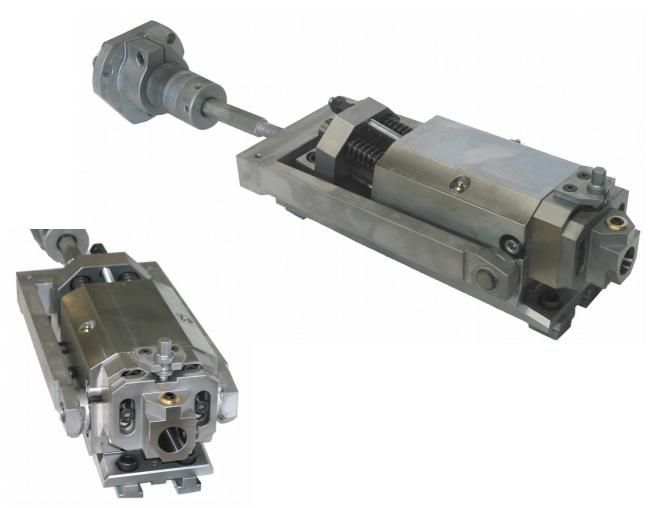




#### RAMP RECESSING ATTACHMENT - HEAVY DUTY VERSION

APPARECCHIO RECESSITORE A RAMPA TIPO PESANTE INNENAUSDREHSCHIEBER APPAREIL A CHAMBRER CAJEADOR

ABRIR CANAIS INTERNOS E ACIONAMENTO TIPO RAMPA



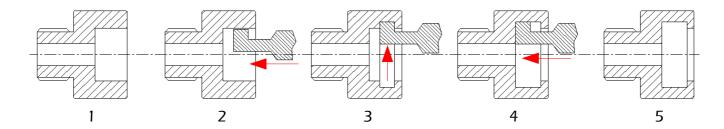
This attachment is used to make recesses inside the component.

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 inclinated ramp (in case of 10° ramp: 1 mm upwards every 5,6 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.





### ROTATING RAMP RECESSING ATTACHMENT APPARECCHIO RECESSITORE ROTANTE

#### **TECHNICAL DATA:**

- Ramp inclination = 12°
- Tool Fitting = ER32 collet
- High pressure coolant through the tool



This attachment makes recesses inside the component by using a profiled milling tool. The rotating tool produces small chips, easy to be taken off by high pressure coolant.



#### THREAD CHASING ATTACHMENT

FILETTATORE A PETTINE
GEWINDESTREHLER
APPAREIL À PEIGNER LES FILETS
ROSQUEADOR POR PENTES

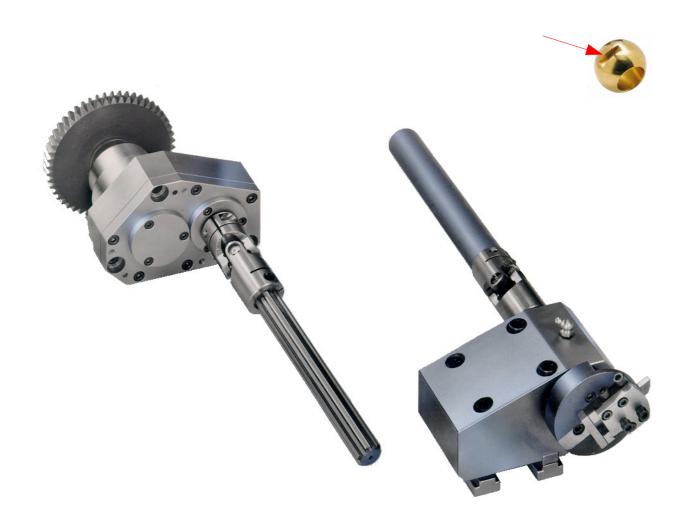


#### THREAD CHASING ATTACHMENT

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



### 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

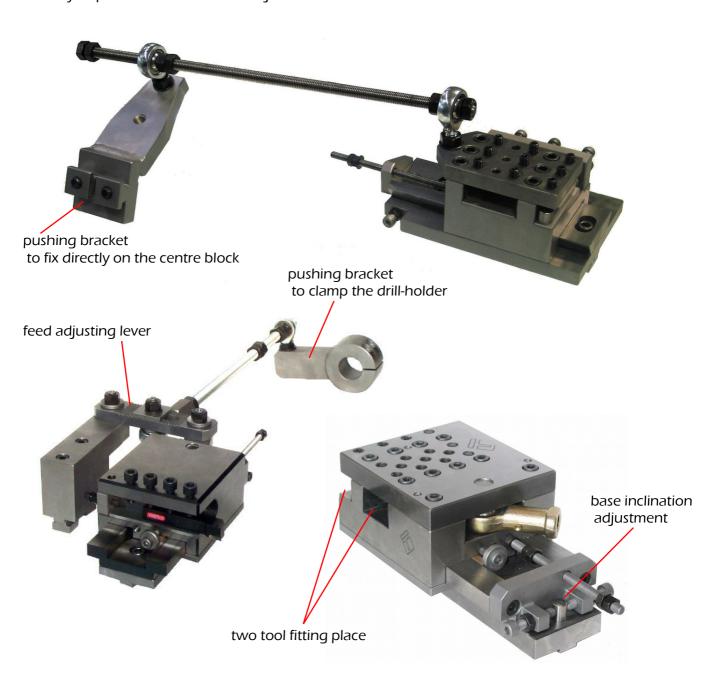
The axial chariot can be used on machine cross slides to make long turning operations.

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.

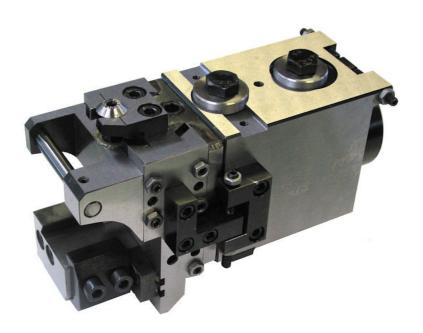
The chariot has the same feed than the centre block unless you prefer the version with adjustable feed lever.

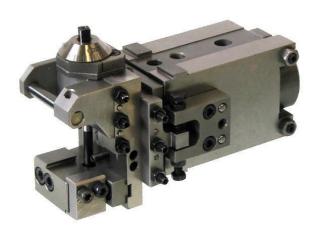




#### **SHAVING TOOL-HOLDER**

CALIBRATORE
KALIBRIERWERKZEUGE
PORTE OUTILS Á CALIBRER
CALIBRADOR/AFEITADOR





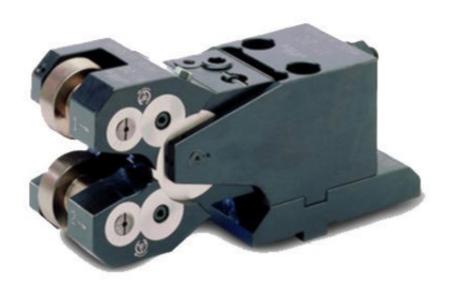


The shaving tool-holder is used to have very precise diameter.

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.



### 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

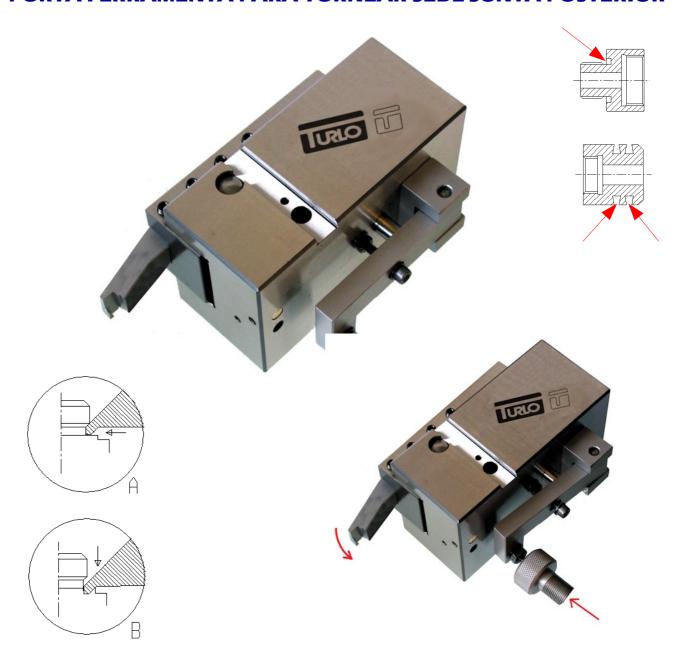
Siamo in grado di fornire rullatori di filetti tangenziali Fette nuovi o usati.

I modelli sono i seguenti: T12, T18, T27

Possiamo fornire supporti per adattarli a qualsiasi macchina



# 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.

Tipically 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.



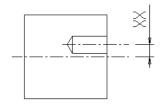
The new roller with interchangeable characters



# for WICKMAN multispindle machines

#### **OFF-CENTRE DRILLING SPINDLE**

### FORATORE ECCENTRICO FURADOR FORA CENTRO





Thi rotating spindle drills off-centre holes in a very easy way.

The interaxis is customized.



### ROTATING LIVE CENTER WITH COMPENSATION CONTROPUNTA ROTANTE ELASTICA



