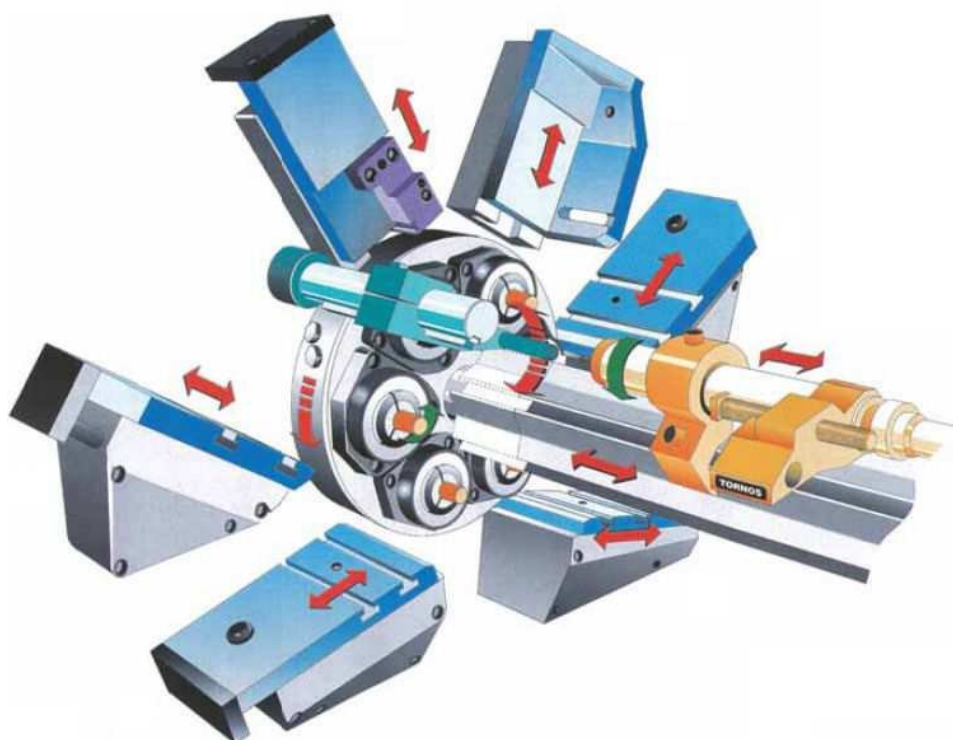




TURLO S.r.l.
Via Monte Rosa 5
13019 VARALLO SESIA (VC) ITALY
Tel (0039) 0163 54446
Fax (0039) 0163 54226
Email: mail@turlo.it website: www.turlo.it

SPARE PARTS AND ATTACHMENT FOR MULTISPINDLE MACHINES

TORNOS AS14 TORNOS SAS16



Edizione catalogo / Catalogue issue: 05/2017

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



TORNOS AS14 - SAS16

STANDARD CAMS AND MACHINE GEARS



Speed gears - Pignon de vitesse



Feed gears - Pignon d'avance



Threading gears - Pignon pour tarudage

FRONTAL DRILL-HOLDERS



drill-holder - Perceur fixe

AS27/3	collet-pince: W12	pos.1-2-3-4-5-6	(R1X100)
AS27/29	collet-pince: W20	pos.1-2-3-4-5-6	(R1X400)
AS27/26	collet-pince: ESX16	pos.1-2-3-4-5-6	(R1X300)
AS27/3-1	collet-pince: ESX25	pos.1-2-3-4-5-6	(R1X200)



AS31/26



BS31/1



AS31/4



AS31/1



AS31/2

Independent non-rotating spindle
Broche indépendante non tournante

AS27/8	collet - pince: ESX16	pos.3-4-5-6	(R1E100)
AS27/8	collet - pince: ESX25	pos.3-4-5-6	(R1E200)
AS27/8	collet - pince: ESX32	pos.3-4-5-6	(R1E300)
AS27/36	collet - pince: ESX16	pos.1-2	(R1E400)



Forks for non-rotating spindles

Fourchettes pour broches non tournantes

WE CAN BUILD FIX OR ROTATING SPINDLE
BASED ON CUSTOMER'S DRAWING



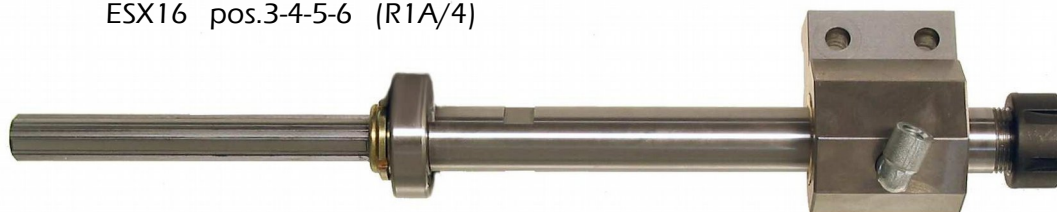
TORNOS AS14 - SAS16

ROTATING DRILL-HOLDERS



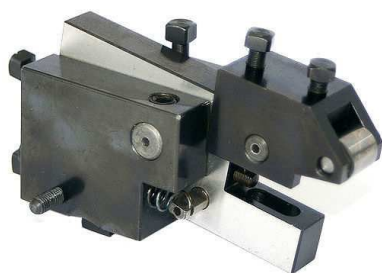
AS27/2 Rotating spindle on centre block
Broche tournante sur glissière
ESX16 pos.3-4-5-6

AS27/1 Independent rotating spindle
Broche tournante indépendante
ESX16 pos.3-4-5-6 (R1A/4)



Forks for rotating spindles
Fourchettes pour broches tournantes

SHAVING TOOL-HOLDERS PORTE-OUTILS À CALIBRER KALIBRIERWERKZEUGE CALBRADOR/AFEITADOR



AS30/16
pos.5



AS30/27
pos.3-4



AS30/24
pos.2

UNIVERSAL TOOL-HOLDERS PORTE-OUTILS UNIVERSEL PORTA-FERRAMENTA UNIVERSALE



AS30/81
Pos. 1-2-3-4



AS30/80
Pos. 1-2-3-4



AS30/26
Pos. 3-4-5



AS30/25
Pos. 1-2

TOOL-HOLDERS

PORTE-OUTILS POUR BURIN À QUEUE D'AIGLE



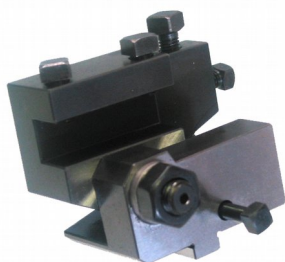
AS30/92
Pos. 1-2-3-4-5



AS30/93
Pos. 1-2-3-4-5

TOOL-HOLDERS

PORTE-OUTILS À CHARIOTER SUR GLISSIÈRE



AS30/3
Pos. 5



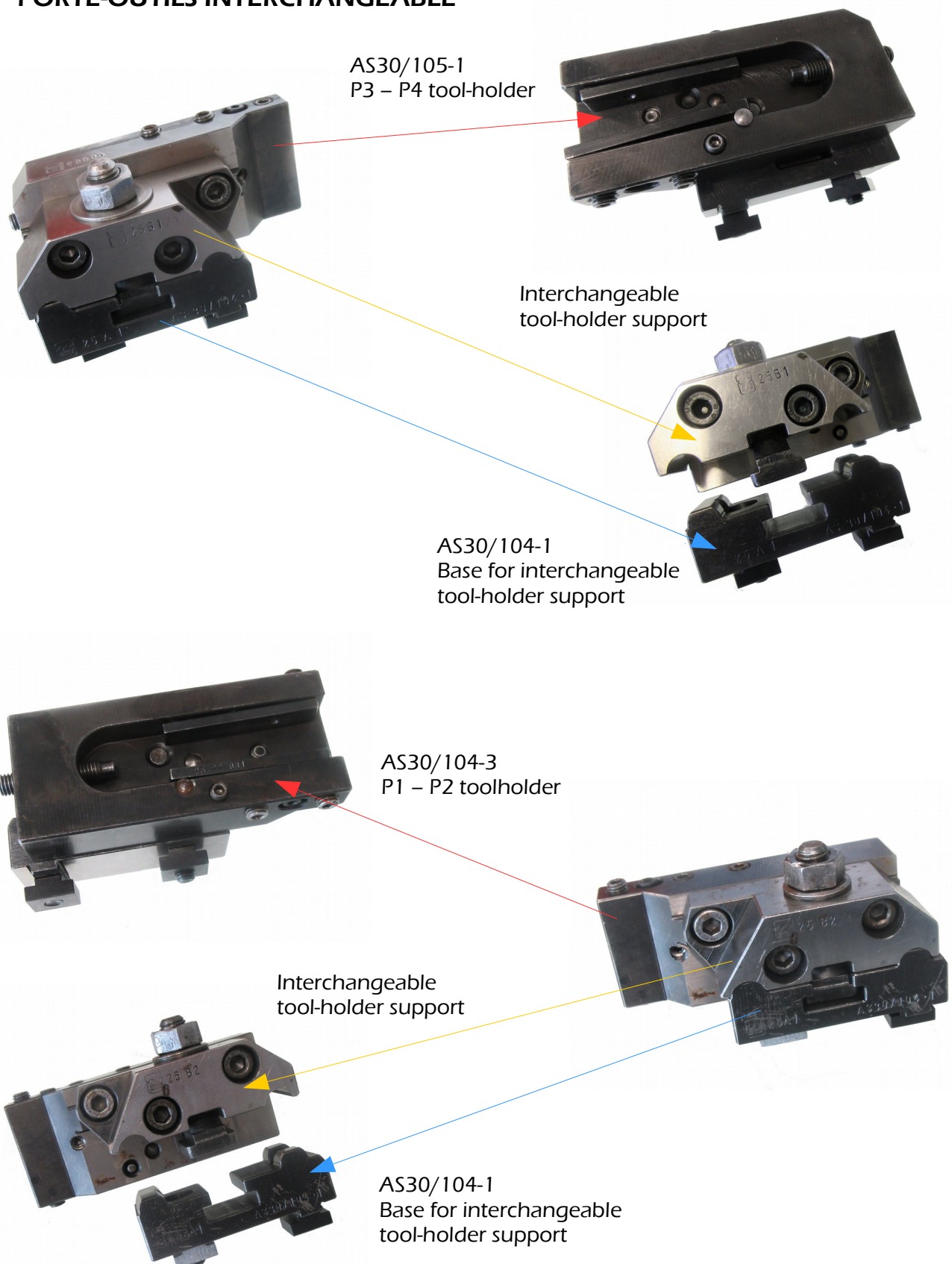
AS30/5
Pos. 6

TOOL-HOLDERS

PORTE-OUTIL POUR BURIN DROIT

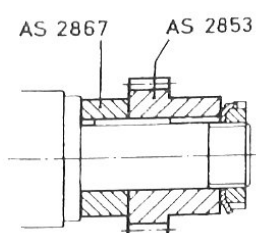
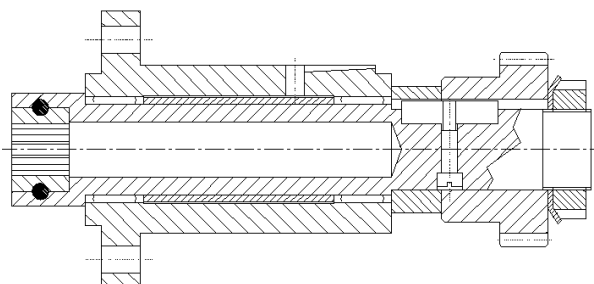
PORTE-OUTIL POUR BURIN DE COUPE

INTERCHANGEABLE TOOL-HOLDERS PORTE-OUTILS INTERCHANGEABLE

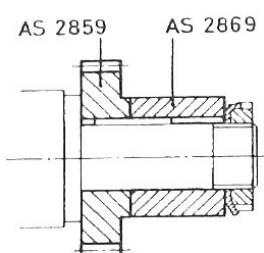


DRIVING QUILLE

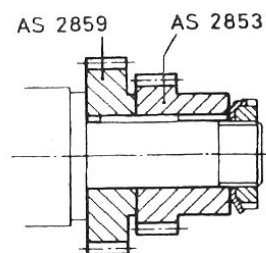
AS 28/1A



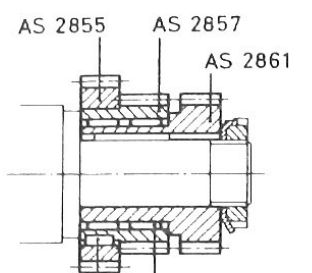
AS 28/1B



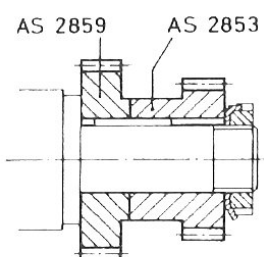
AS 28/1C



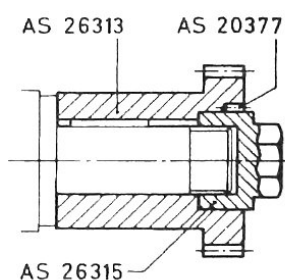
AS 28/1D



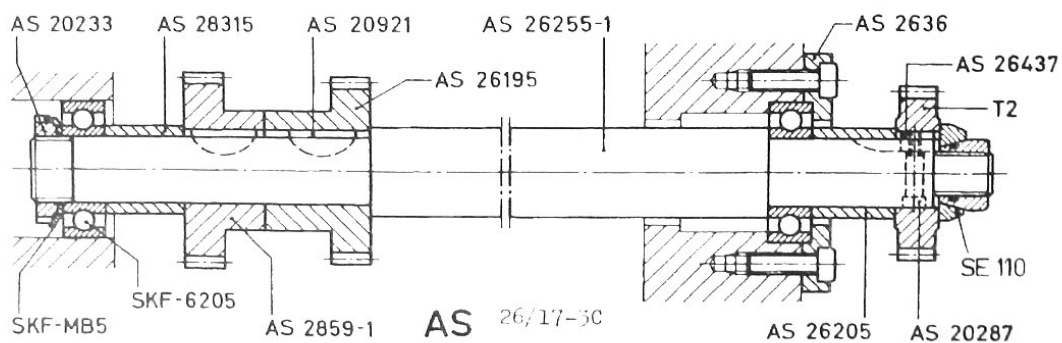
AS 28/1E



AS 28/1F

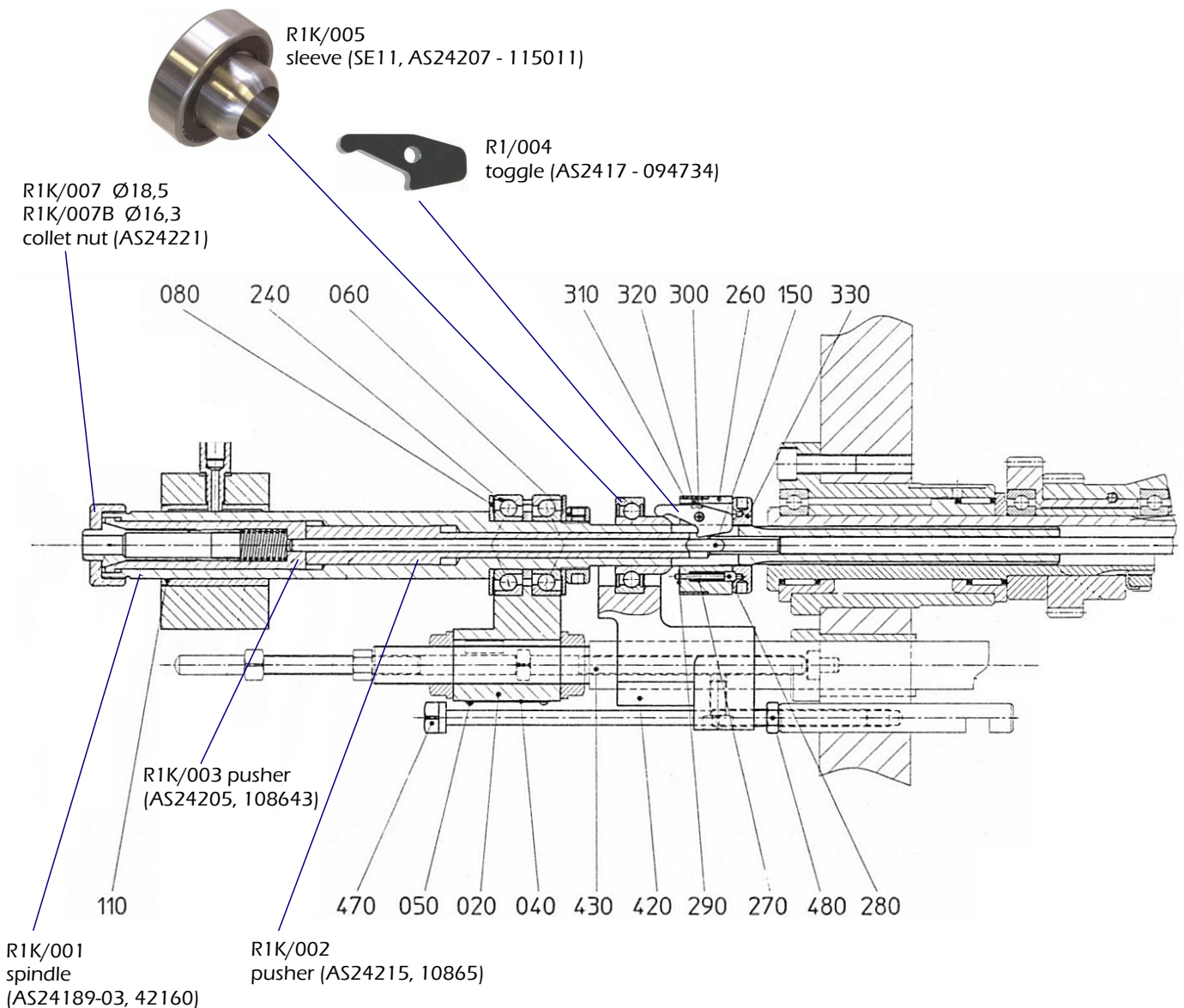


AS 28/1H

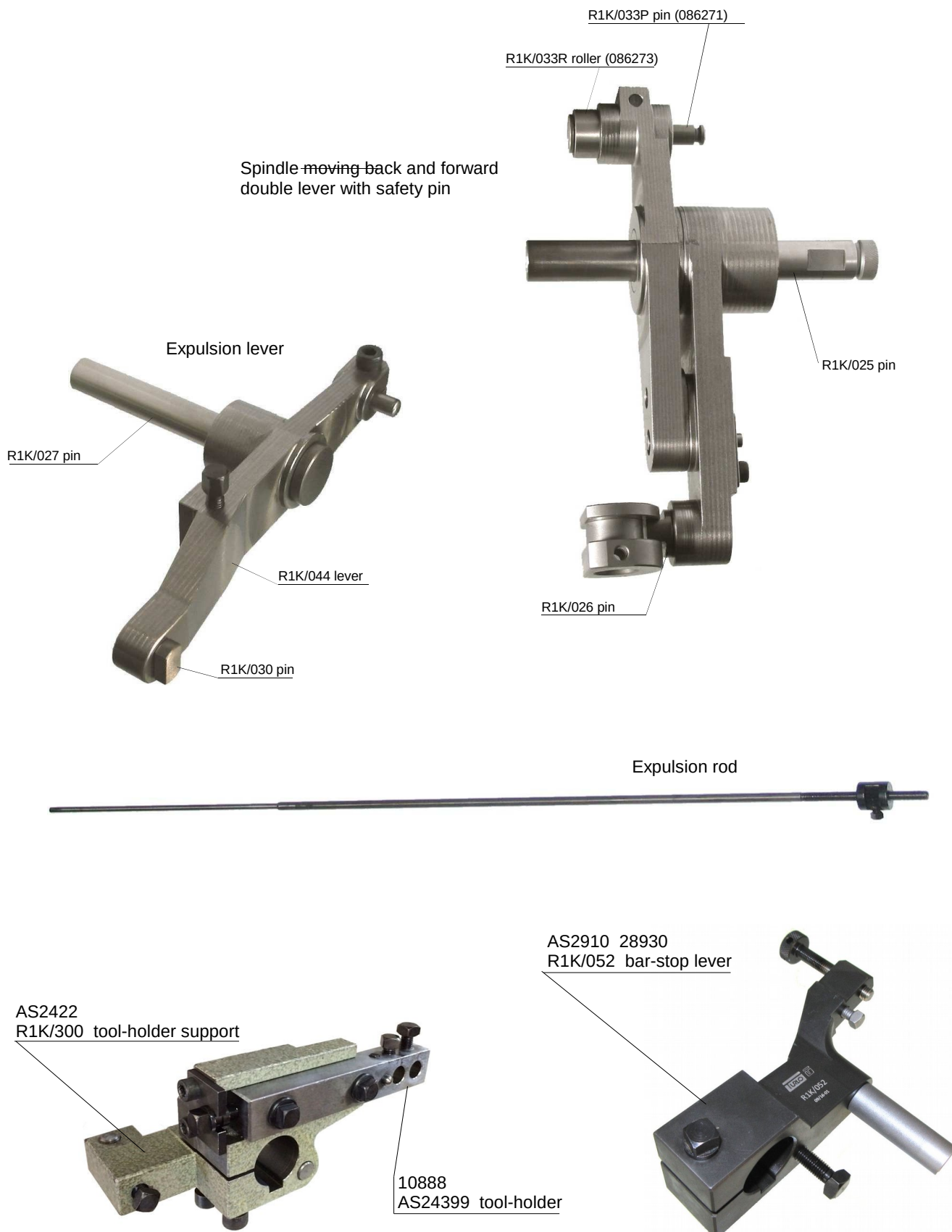


AS24/3 PICK-UP ATTACHMENT CONTRE BROCHE ABGREIFEINRICHTUNG

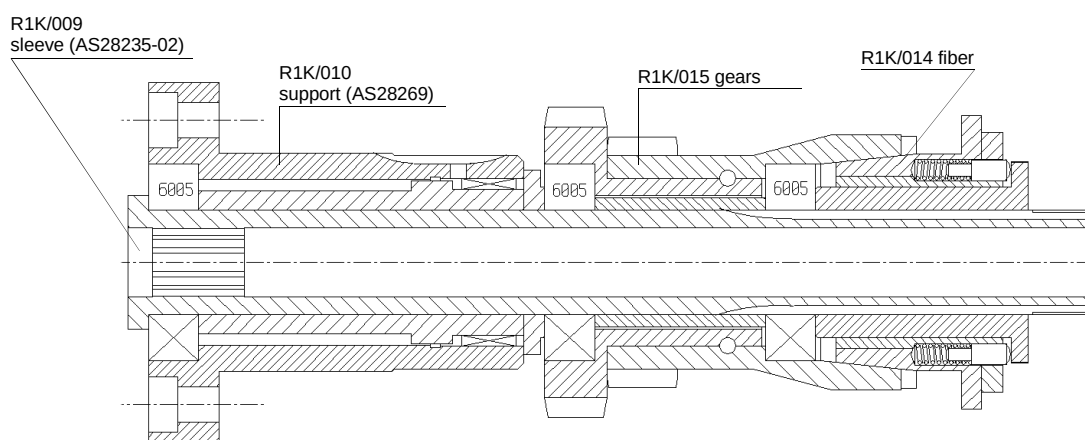
The pick-up attachment is used on cutting-off position frontally.
Its spindle rotates at the same speed than the bar, its collet clamps the part during the cutting-off.
Still with part in the collet, it goes backward, allowing the positioning of the reprise tool-holder in front.
Going forward against 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.



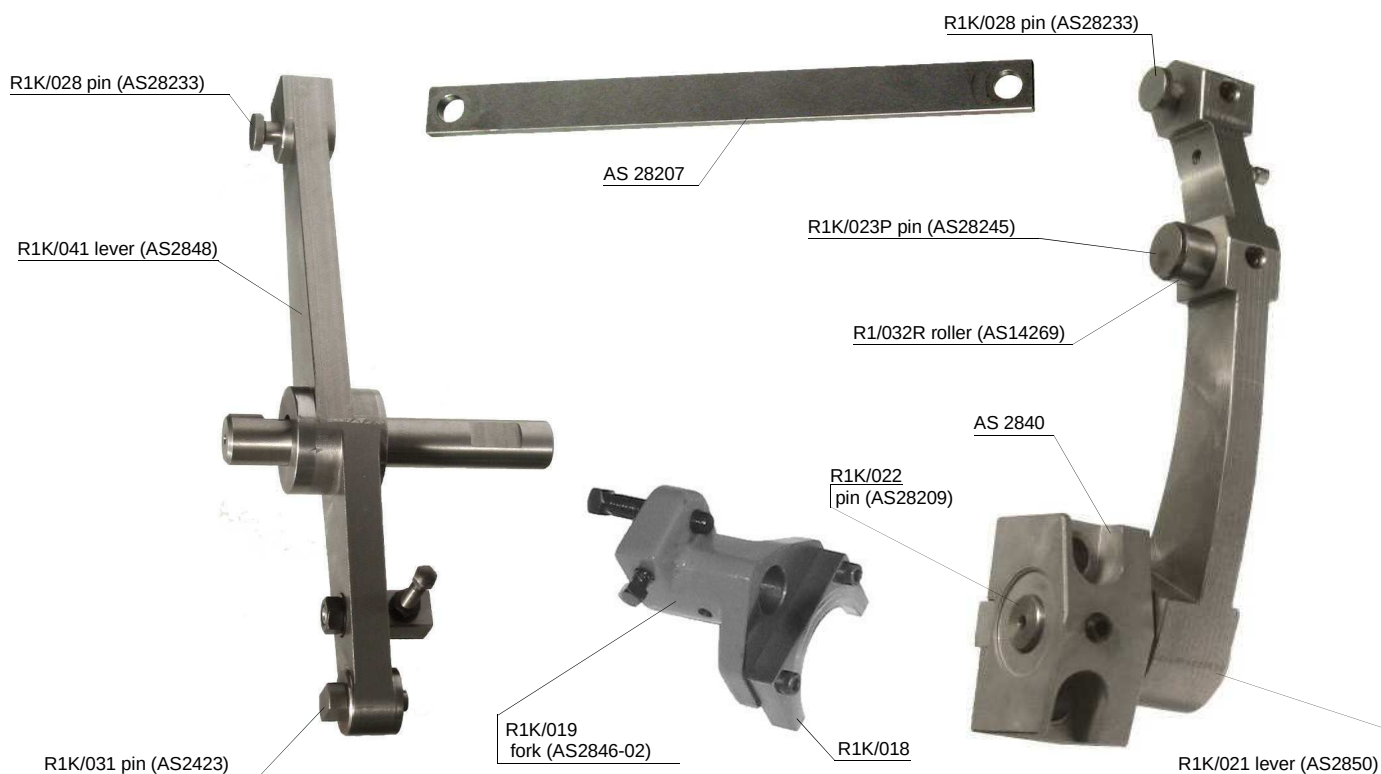
AS24/3 PICK-UP ATTACHMENT CONTRE BROCHE ABGREIFEINRICHTUNG



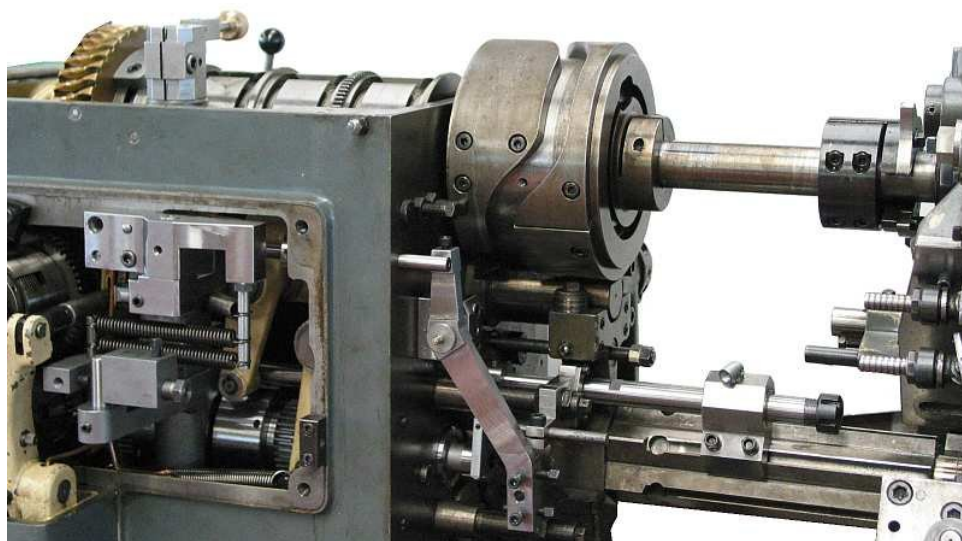
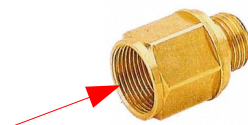
AS28/26 PICK-UP DRIVING WITH BRAKE QUILLE AVEC FREIN POUR CONTREBROCHE



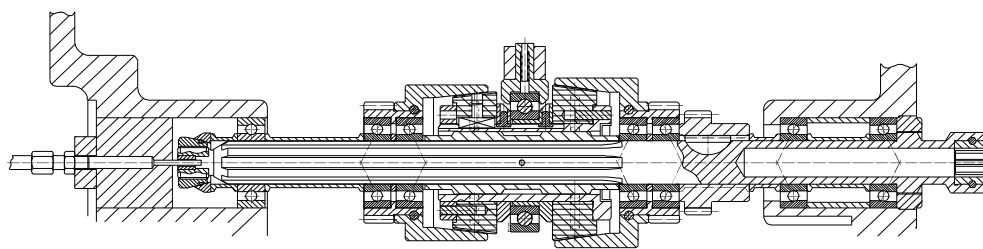
This driving unit is designed to stop the rotation of the pick-up spindle just before the expulsion of the component, in order to avoid any damage to the same component. Otherwise it could hit some part of the machine at a very high speed. This is possible thanks to a mechanical fiber clutch that disconnects the driving and allows the brake to stop the spindle.



FULL THREADING ATTACHMENT
APPARECCHIO FILETTATORE
GEWINDESCHNEIDEINRICHTUNG
TARUDEUR
ROSCADOR
ROSQUEADOR COMPLETO



This attachment is used to make internal threads by a tap or external threads by a die.
 We supply it complete with everything necessary (clutches, shafts, gears, threading spindle, cams, ratio gears, safety micros, instruction book).
 Its design is based on the original attachment, AS26/18 so we can even supply our parts like spares for your original attachment.



AS 26/18-2
 Driving Shaft with threading clutches on
 to fit in pos.4



Mid-Shaft for off-speed

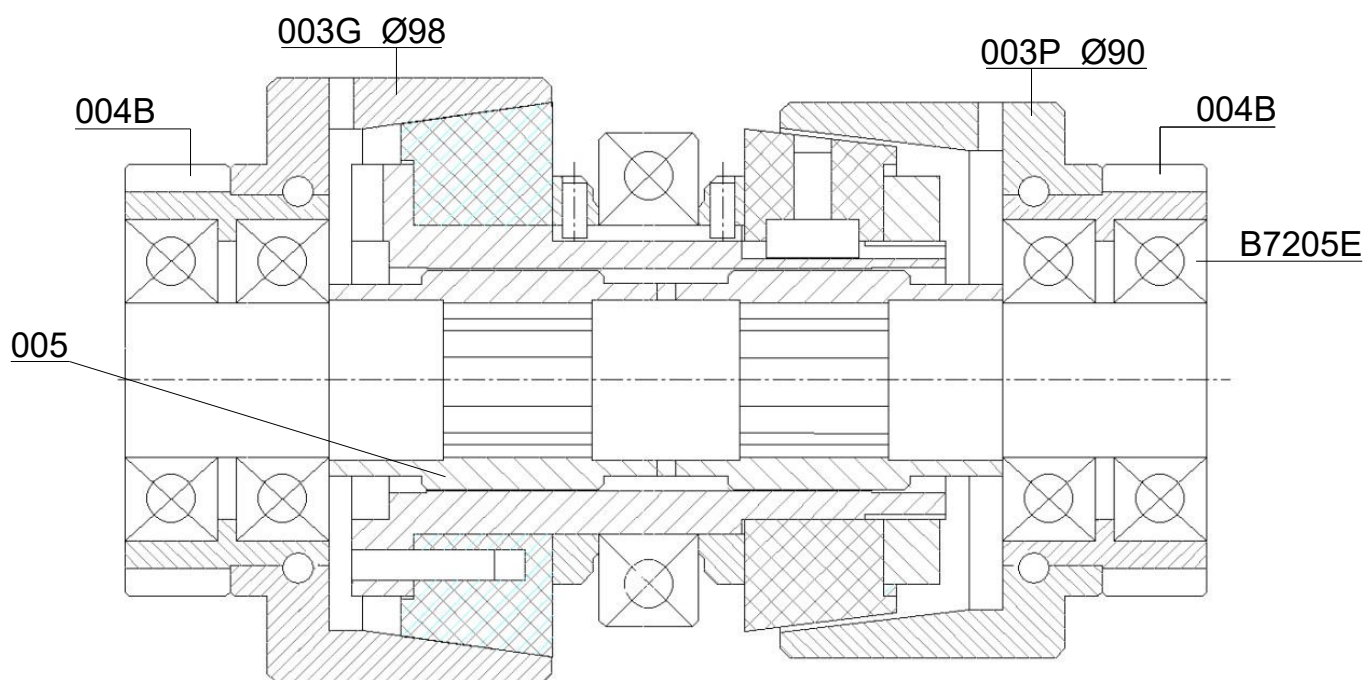
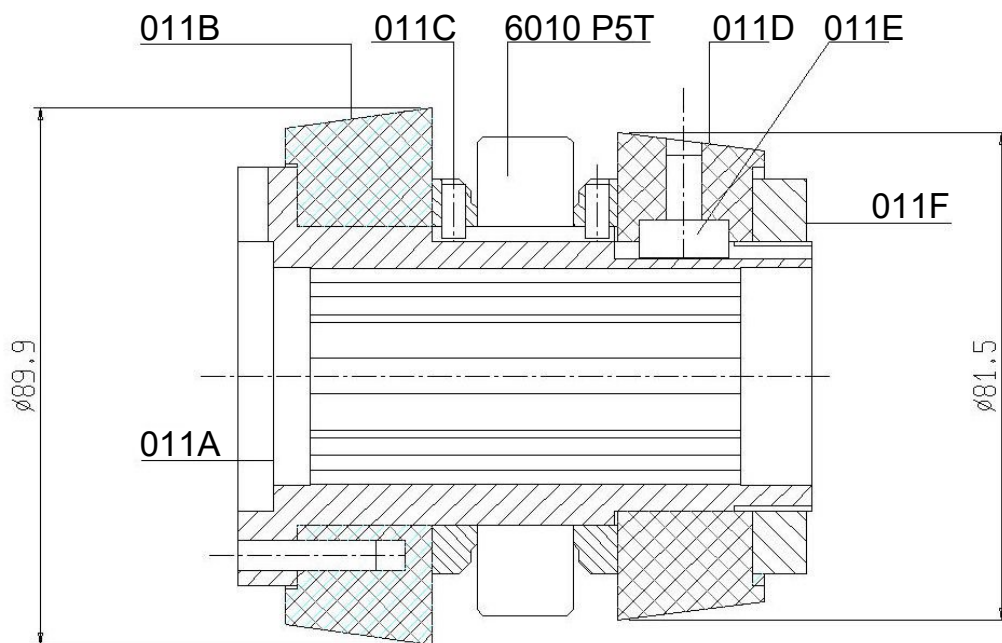
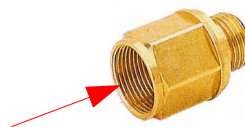


Mid-Shaft for in-speed



TORNOS AS14 - SAS16

FULL THREADING ATTACHMENT
APPARECCHIO FILETTATORE
GEWINDESCHNEIDEINRICHTUNG
TARUDEUR
ROSCADOR
ROSQUEADOR COMPLETO



SINGLE PARTS OF THE THREADING ATTACHMENT



External disconnection lever



Cam lever

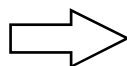


Cams



Mid-lever

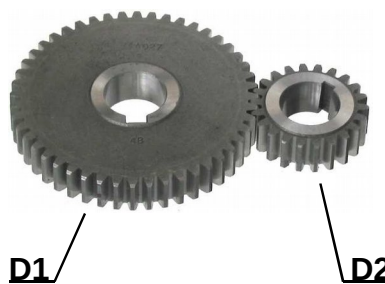
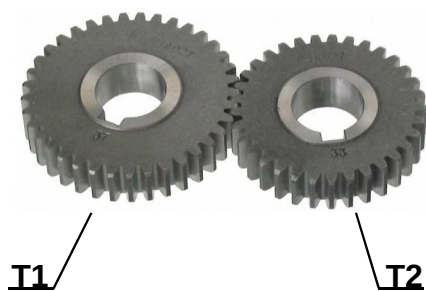
Rotating disconnection lever



SINGLE PARTS OF THE THREADING ATTACHMENT

Standard Threading Ratio Gears are available

IN-SPEED					OFF-SPEED				
ratio	right		left		ratio	right		left	
	T1	T2	T1	T2		D1	D2	D1	D2
2	30	40	48	22	2	48	22	30	40
4	37	33	46	24	4	46	24	37	33
6	39	31	45	25					
9	40	30	44	26					



The D2 gear can have a straight bore (older Tornos design) or a taper bore (newer Tornos design), that lasts much more. Of course the shaft must be different too.



Mid-Shaft for off-speed



R1A/034B

POLYGON-GENERATING AND THREAD-MILLING ATTACHMENT

APPARECCHIO POLIGONATORE E FRESAFILETTI

MEHRKANTDREH UND GEWINDEFRESEINRICHTUNG

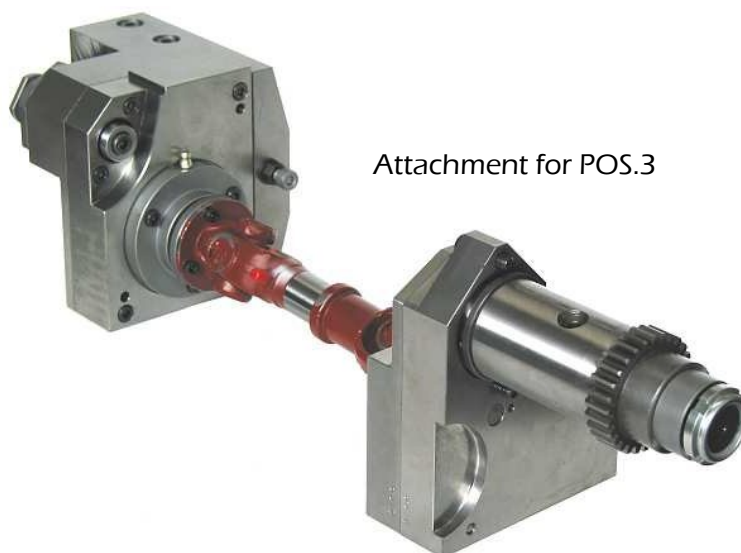
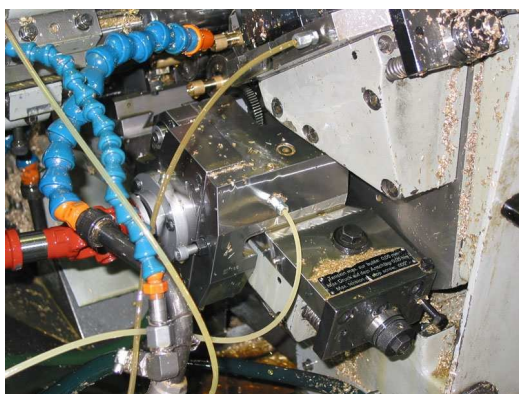
APPAREIL A POLYAGONER ET FRESAIR LES FILETS

POLIGONADOR Y FRESADOR DE ROSCAS

GERADOR DE POLÍGONOS E FRESADOR DE ROSCAS



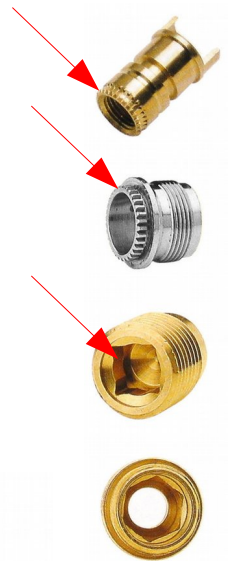
This attachment is designed to mill flats (polygons) with a ratio speed of 1:2, or threads with a ratio speed of 1:1, on the external side of the component. You can change the ratio speed by replacing a couple of gears inside the Driving Gear-Box.





TORNOS AS14 - SAS16

BROCCIATORE SINCRONO
SYNCHRO BROACHING ATTACHMENT
MEHRKANTSTOBENRICHTUNG
APPAREIL A MORTAISER
BROCIADOR SINCRONIZADO



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.

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.

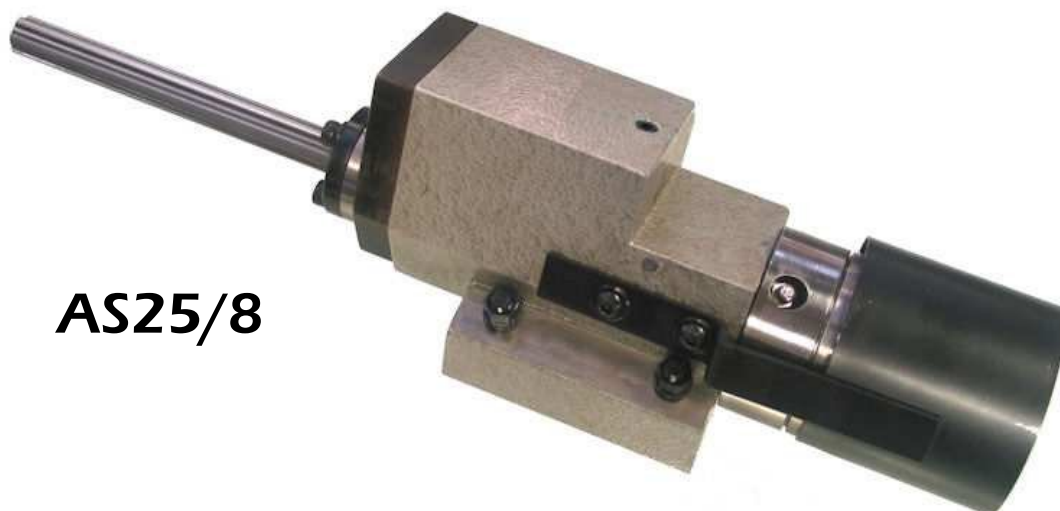
The standard tool-spindle has a $\varnothing 9$ mm bore.



TORNOS AS14 - SAS16

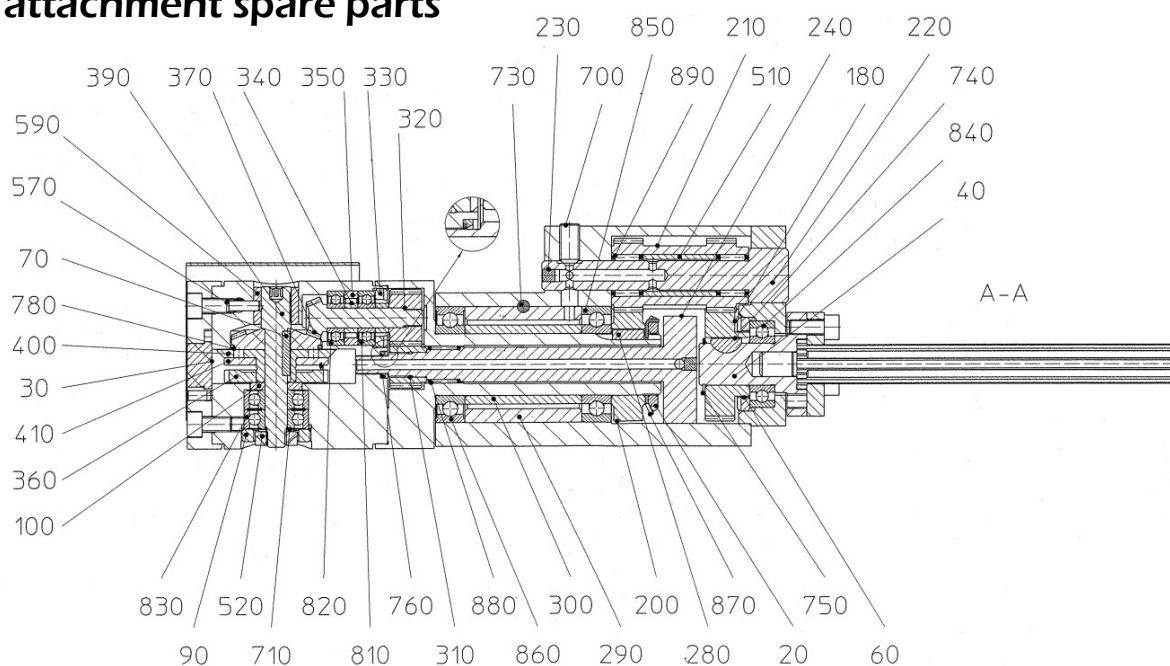
FRESATORE FRONTALE SINCRONO
SYNCHRO FRONTAL MILLING ATTACHMENT
APPAREIL A FRAISER FRONTAL
FRESADOR FRONTAL
FRONTAL FRAESEINRICHTUNG
FRESADOR FRONTAL SINCRONIZADO

The attachment head rotates at the same speed 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).



AS25/8

attachment spare parts





TORNOS AS14 - SAS16

APPARECCHIO RECESSITORE
RECESSING ATTACHMENT
APPAREIL A CHAMBRER
CAJEADOR
ABRIR CANAIS INTERNOS



AS32/7

General spare part

R1/091 (086578)
Return block
Patin de recul



R1/090 (086232)
Feed block
Patin d'avance

R1/004 (AS2417)
Pick-Up Toggle
Chiens pour contre-broche



R1K/005
Pick-up sleeve - bobinos pour contre-broche
(SE11, AS24207, 115011)

R1/053
Pulley shaft - Poulie arbre



R1/031R
Roller (AS1365)



R1K/026
Pin



R1/031P
Pin (AS1311)



R1K/033P
Pin (086271)



R1K/030
Pin



R1K/028
Pin (AS28233)



R1K/023P
Pin (AS28245)



R1/032R
Roller (AS14269)



R1K/031
Pin (AS2423)



General spare part

R1/001
Toggle Sleeve
Bobinos
(AS12185-1)



R1/011
Toggle holder -
Porte chiens



R1/018
Bush



R1/003
Toggle - Chiens
(AS12149)



R1/040P
Pin (AS11339)



R1/040R
Roller (AS11337)

AS12583
spindle gear
Pignon de broche



AS12191-1
Centre gear
Pignon central

R1/050
Centre Shaft - Arbre central



R1/180
Spindle - Broche



General spare part



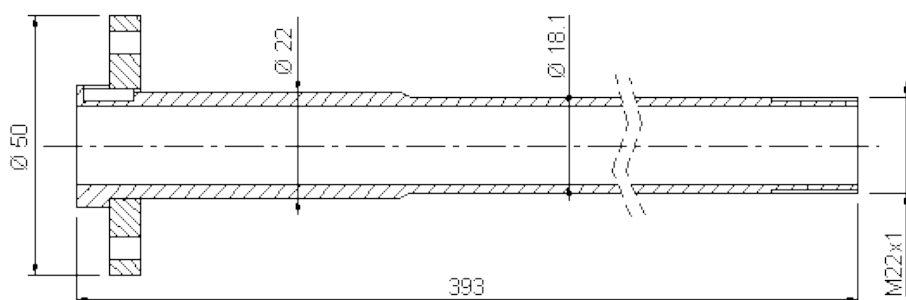
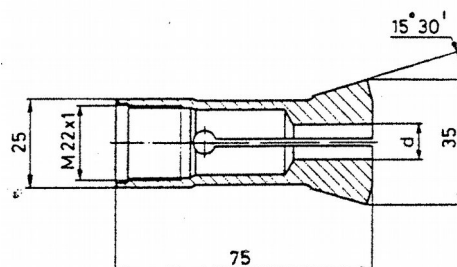
R1/012D

R1/012C

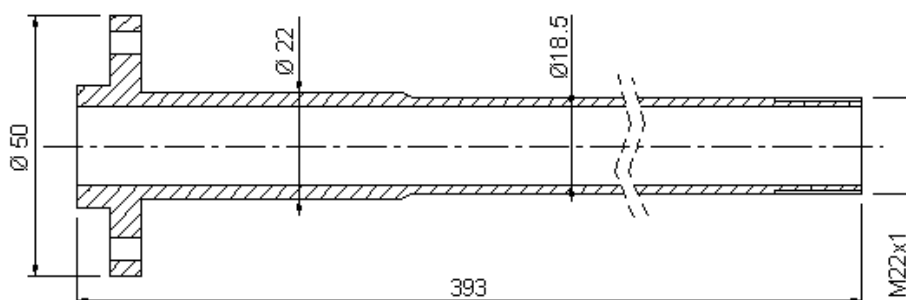
Ring and tooth for AS12/10-4 feed tube

Bague pour orienter le tube d'avance

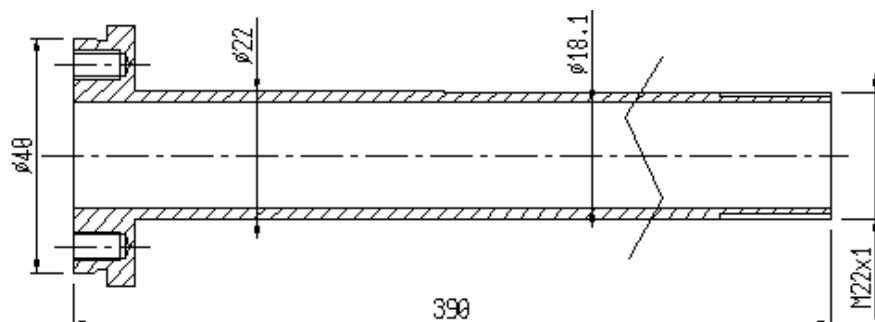
AS12115 collet - pince



R1/010B (AS12/10-1)
Standard collet tube
Tube de serrage standard

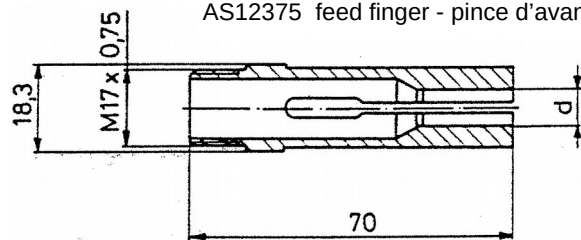


R1/010V (AS12/10-2)
Collet tube for max 15mm dia. bar
Tube de serrage, capacité 15mm

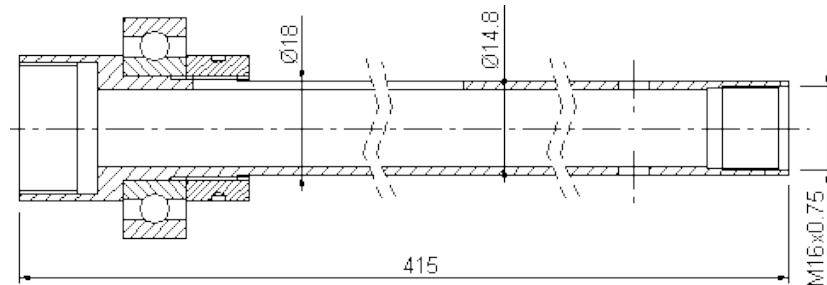
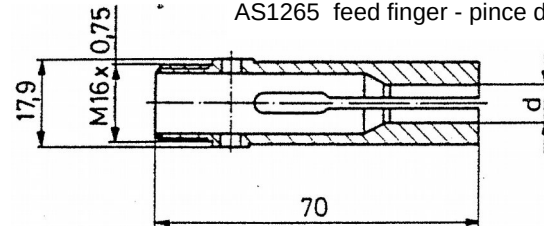


R1/010L
Collet tube
Tube de serrage

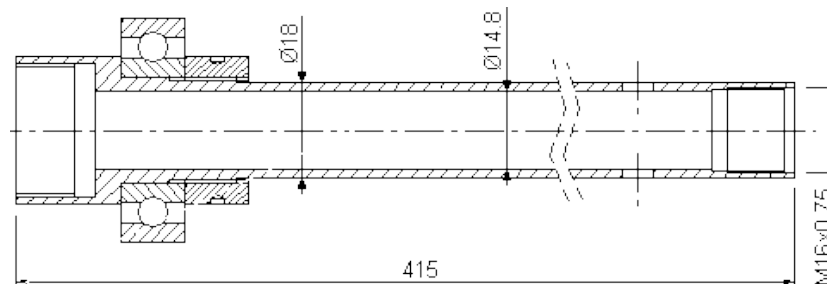
AS12375 feed finger - pince d'avance



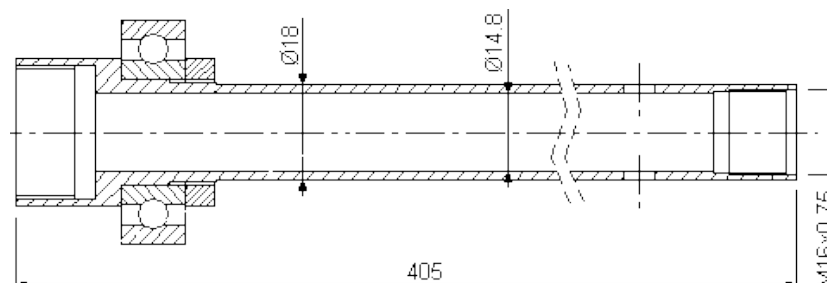
AS1265 feed finger - pince d'avance



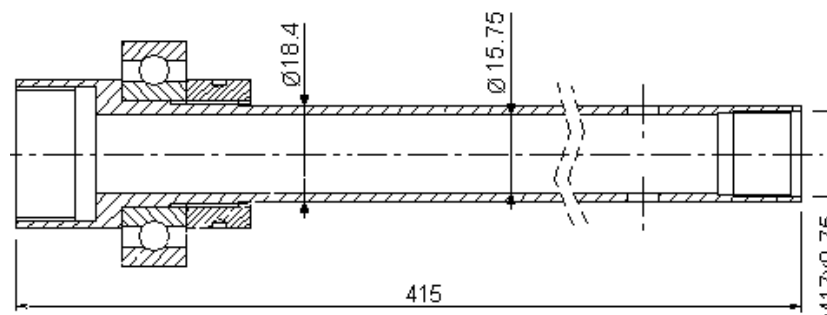
R1/012 (AS12/10-4)
Phaseable Feed tube - with slot
Tube d'avance orientable



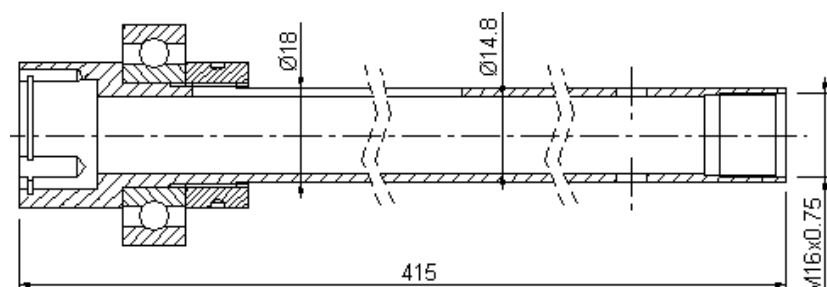
R1/012B (AS12/10-3)
Feed tube
Tube d'avance standard



R1/012E (AS12/10-6)
Feed tube for 85mm stroke
Tube d'avance, ravitaillement 85mm



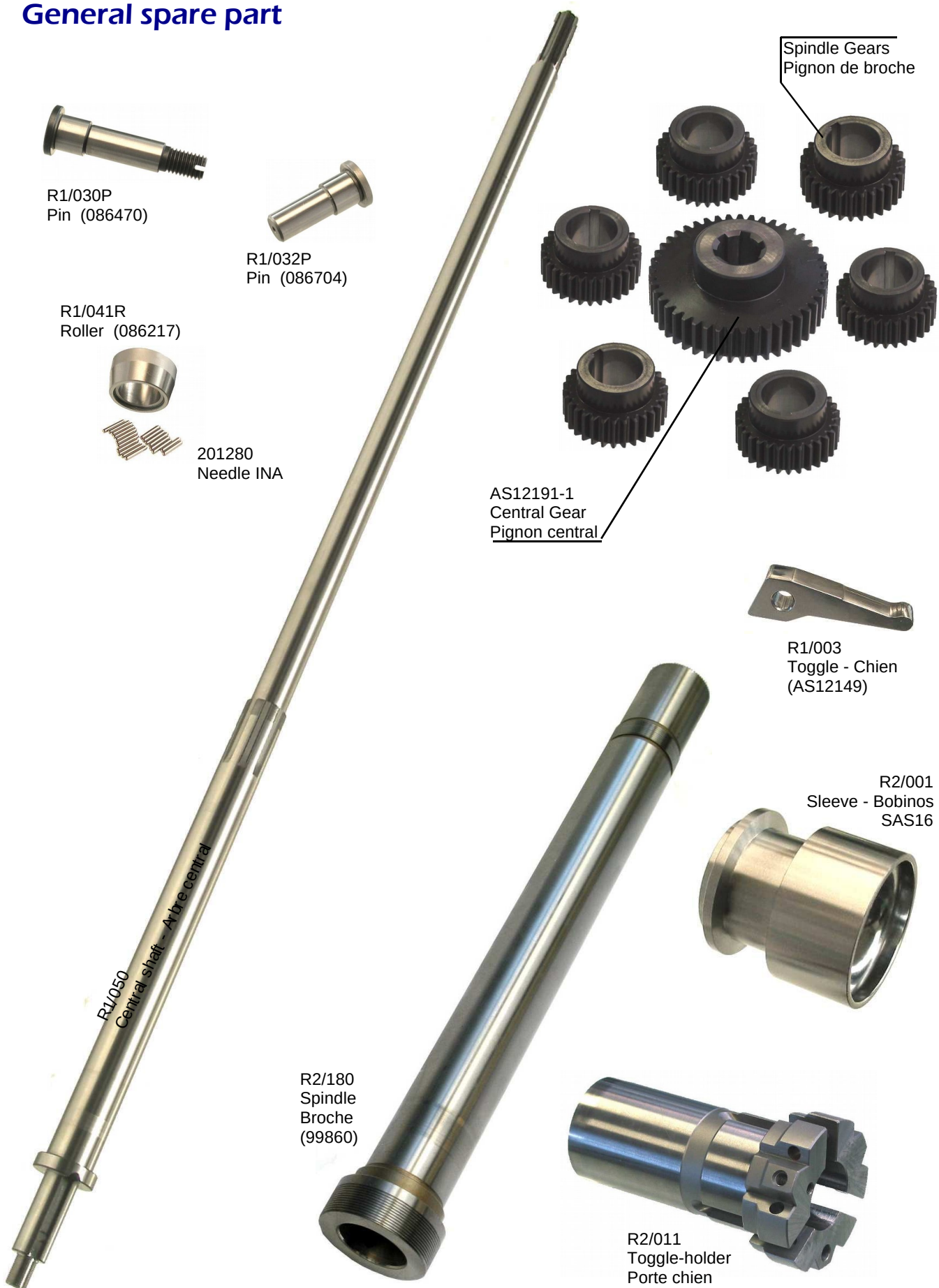
R1/012V (AS12/10-5)
Feed tube
Tube d'avance, capacité 15mm



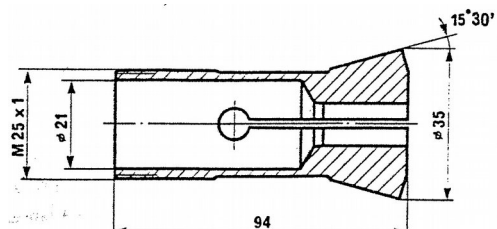
R1/012L
Phaseable Feed tube - with slot
without back thread

Tube d'avance orientable

General spare part

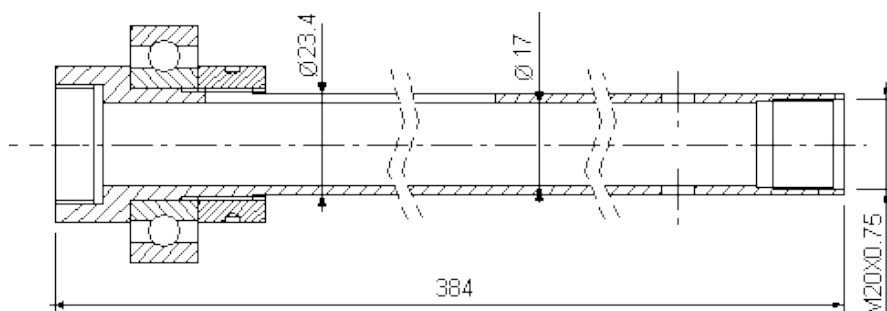
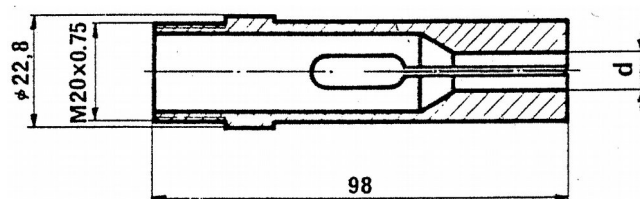


General spare part

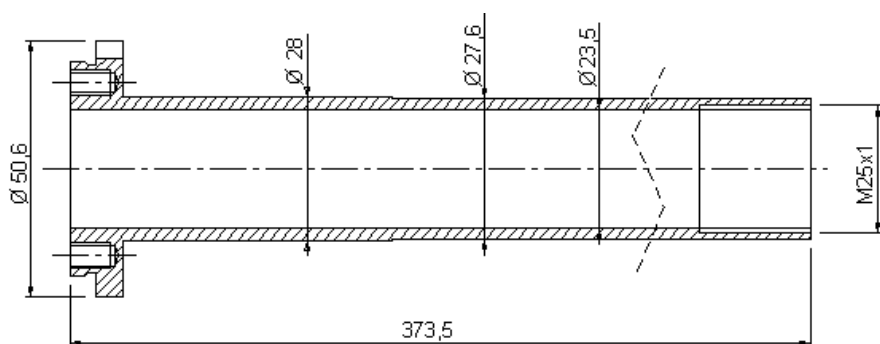


AS12607 collet - pince de serrage

AS12611
feed finger - pince d'avance



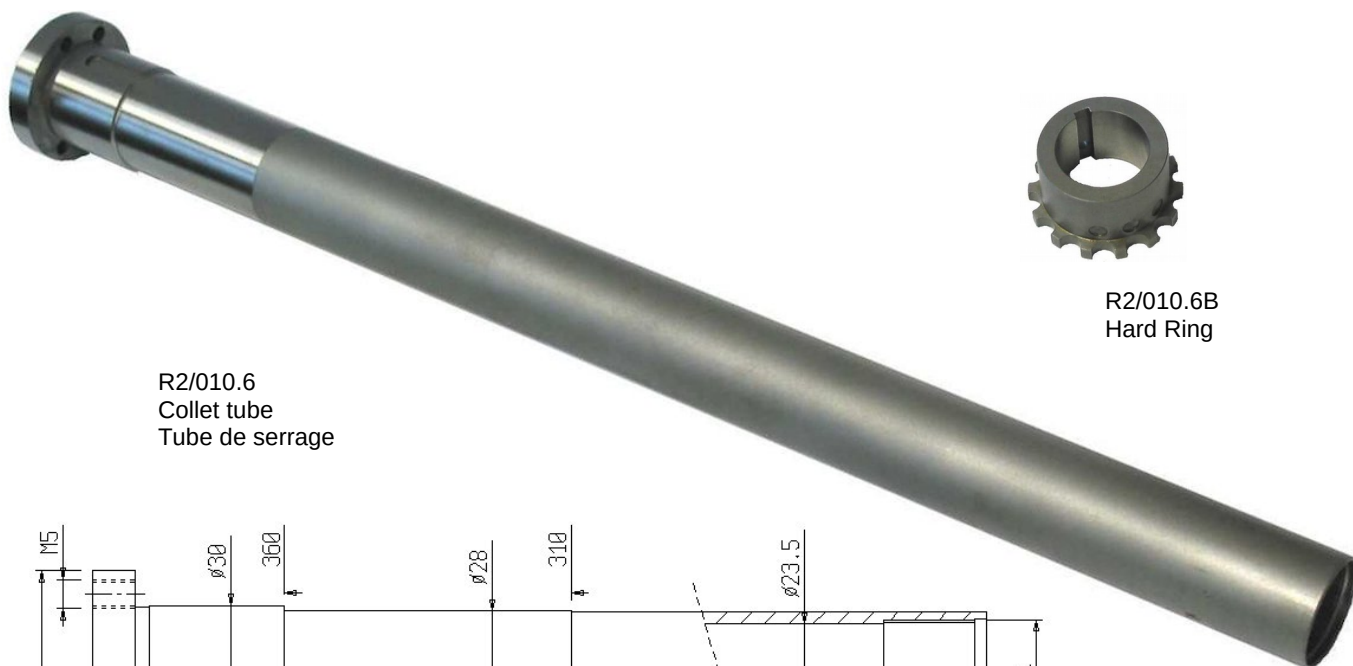
R2/012 (AS15/11-32)
Standard feed tube
Tube d'avance standard



R2/010 (AS15/11-26)
Collet tube for max 16mm dia. bar
Tube de serrage, capacité 16mm

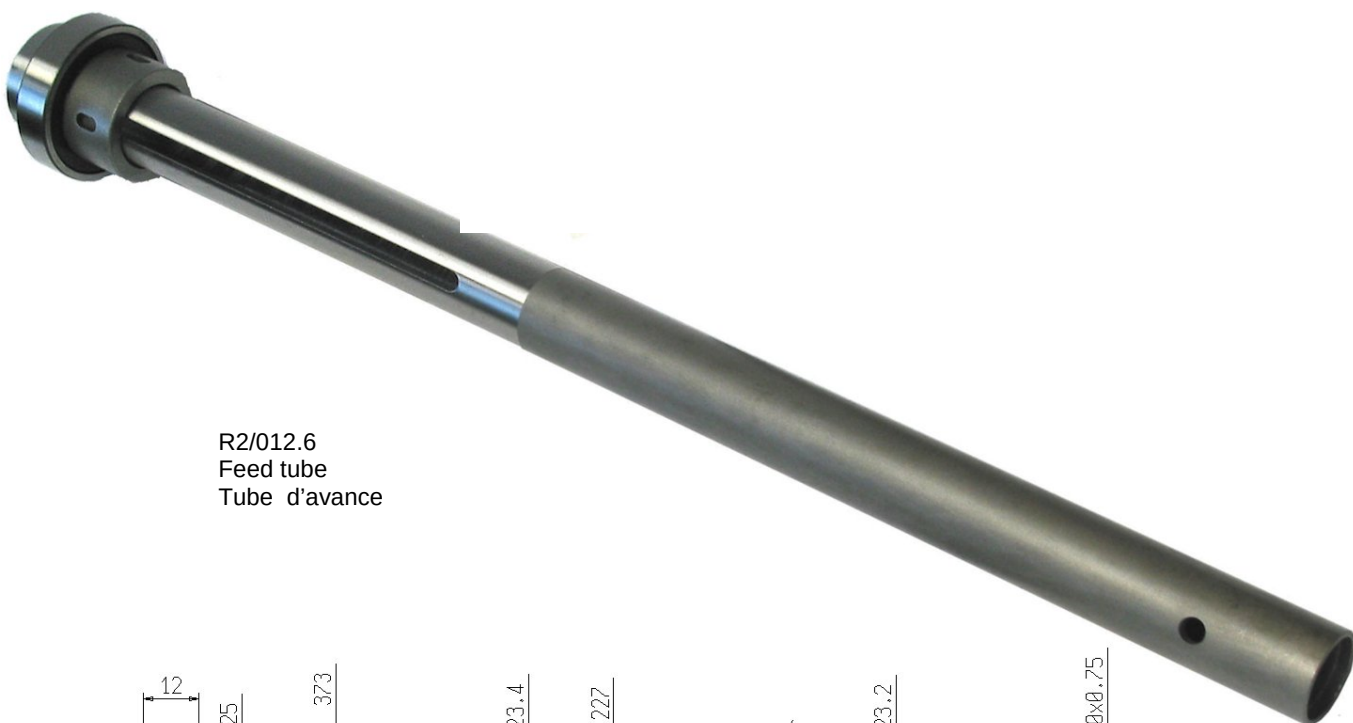
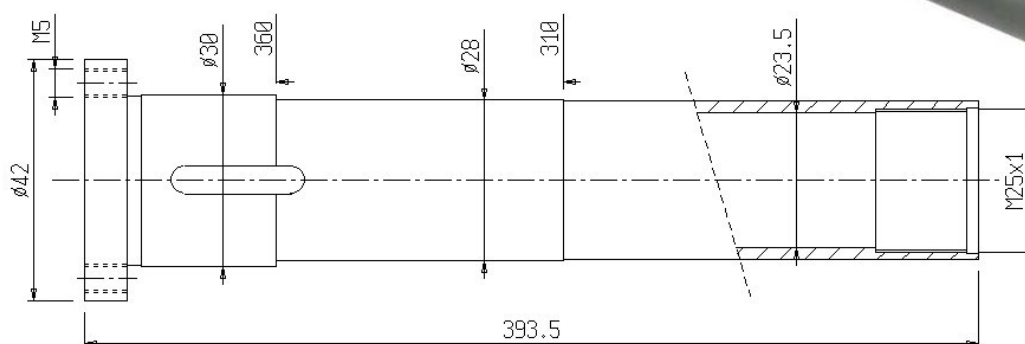


R2/012C
Ring set to phase the feed tube
Bague pour orienter le tube d'avance

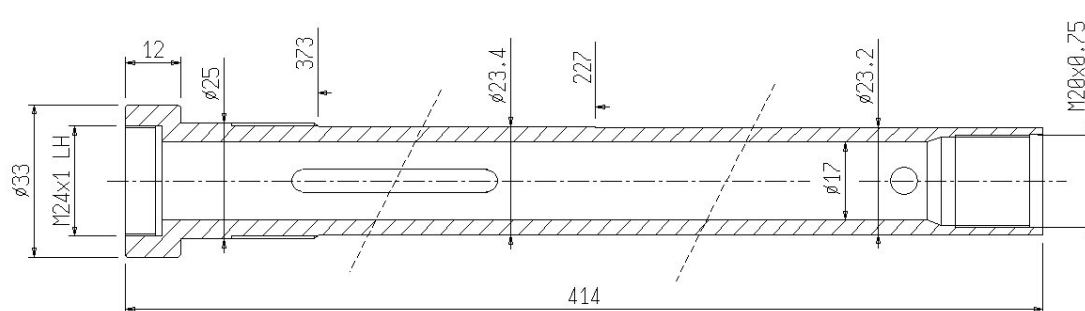


R2/010.6
Collet tube
Tube de serrage

R2/010.6B
Hard Ring



R2/012.6
Feed tube
Tube d'avance



Second-hand occasions

We work together with many machine dealers,
therefore we have the chance to supply second-hand equipments in good conditions.



AS25/8
Slotting attachment
Fraisage en bout

AS27/2
Rotating spindle fixed on centre block
Broche tournante sur glissiere

