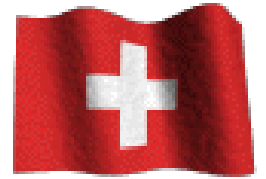






- Switzerland, our country





The Company



PIBOMULTI, founded in 1979, has enjoyed continuous growth and now counts over 120 highly skilled people in our employ ! We are specialized in the engineering and manufacturing of multi spindle heads, right angle and adjustable angle heads, turret heads and spindle speed multipliers. Our products are designed to stand up to the rigors of high production as well as the demands of die and mould making. Our turret heads and multi spindle heads, in particular, can reduce the multiple clamping required for all sizes of intricate parts. All of the PIBOMULTI products are designed with the latest technology in mind and are of the highest quality available. PIBOMULTI provides the answers for increased productivity in your operations. Our products can be engineered to fit transfer machines, special machines, machining centers and lathes of all sorts and sizes. Machine tool builders around the world have placed their trust and reputation on PIBOMULTI accessories of their machines. Our tools have been utilized in all kinds of industry - as miniature as watch making and as large as Shipbuilding! We have enjoyed a very strong relationship with the auto making industry in particular. Large Industrial Groups or small shops - all of our customers have remained loyal to PIBOMULTI over the years and have learned to trust that quality, delivery and service are the hallmarks of our company.

ANGULAR HEADS **SPINDLE SPEEDERS** **MULTISPINDLE HEADS**
TURRET HEADS **ALTERNATING SPINDLES** **WATCH INDUSTRIE**

PIBOMULTI

SWISS

MADE



GERMANY

PIBOMULTI
SWISS MADE



AUSTRIA

Le Locle

Neuchâtel

Basel

Zürich

Bern

Lausanne



FRANCE

Genève

Lugano



ITALY





Tel +41 (0)32 933 06 33 Fax +41 (0)32 933 06 30
-CH – 2400 Le Locle
info@pibomulti.com



More 7'000 m²

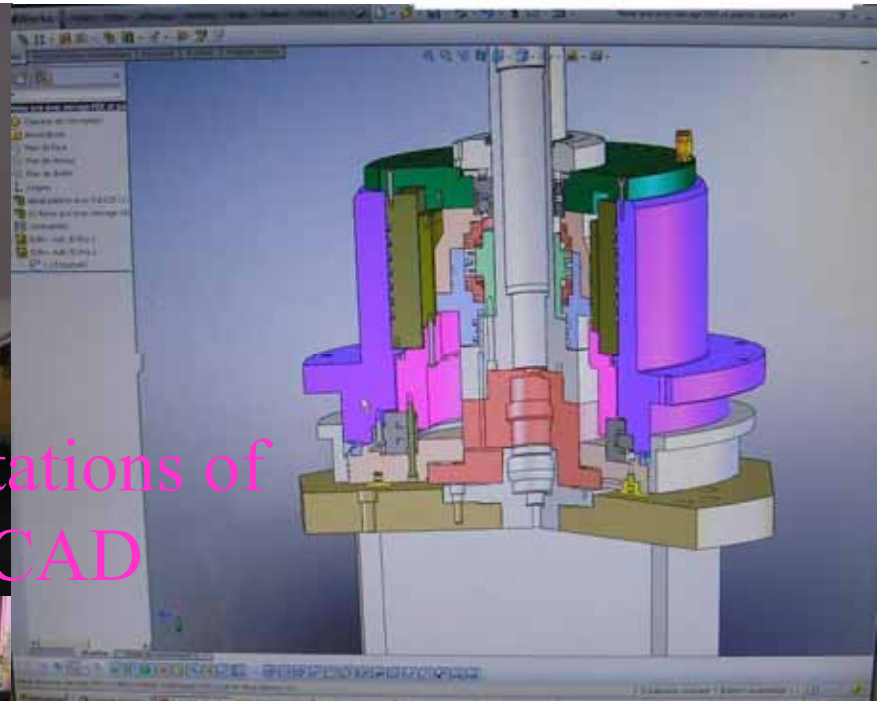
Physical Plant and Equipment

PIBOMULTI produces ninety percent of our entire production on site in our own facilities. Only the necessary heat treating of components is out-sourced to other firms. With this method of production we are able to guarantee flexibility in our production schedule and maintain the exacting delivery schedules and level of quality that our customers demand and expect. We have acquired and maintain a large inventory of modern, first class machine tools in our production facilities. These machine tools along with our highly skilled and qualified staff of toolmakers and tool engineers have enabled PIBOMULTI to become regarded as being among the first rank of manufacturers in the driven tool industry.

Design and execution means



19 stations of
CAD



Design and execution means



Skill
Accuracy
Cleanness

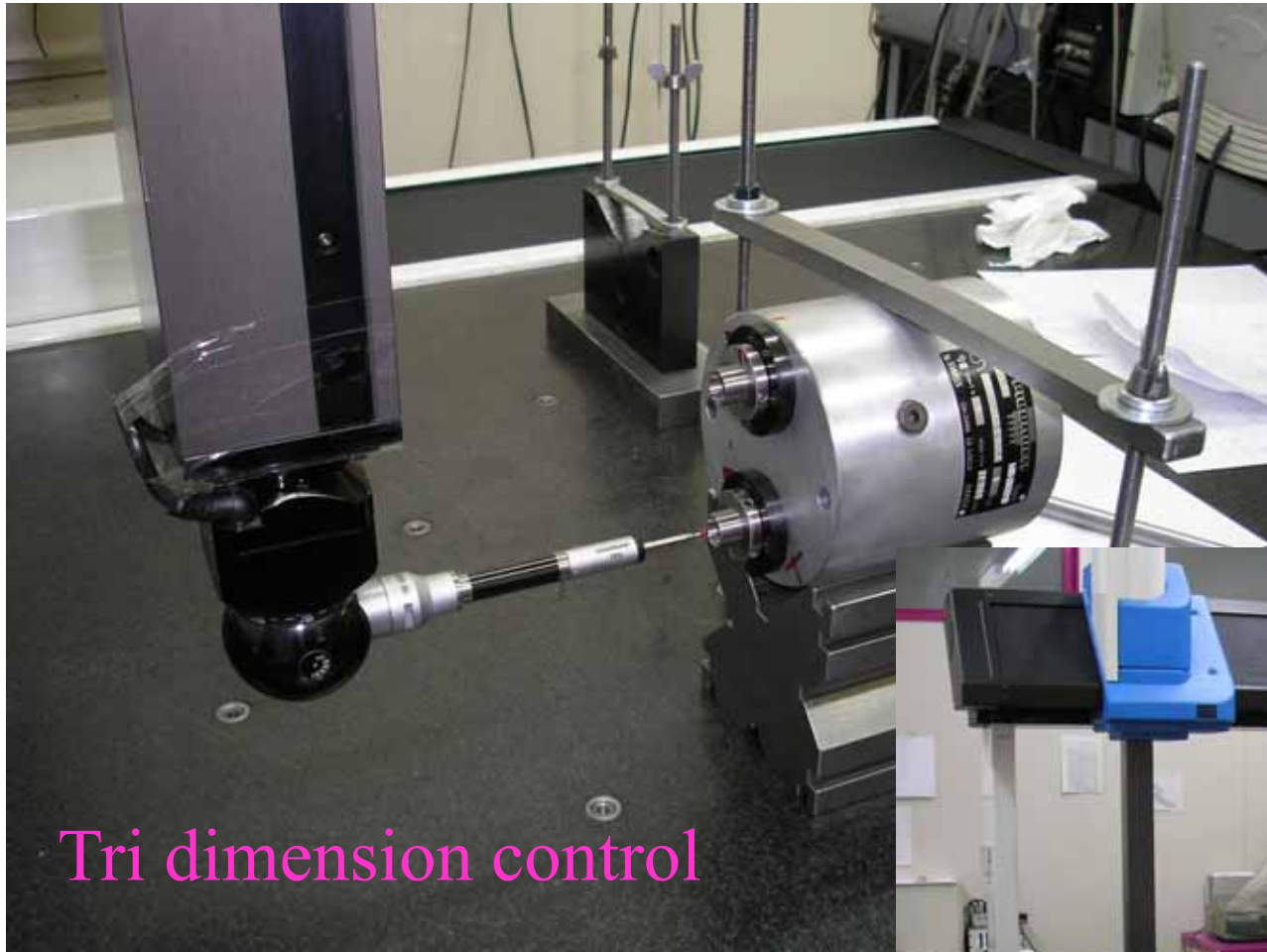


Design and execution means



Accuracy

Air-conditioned
plant



Tri dimension control



Application field





Our product line

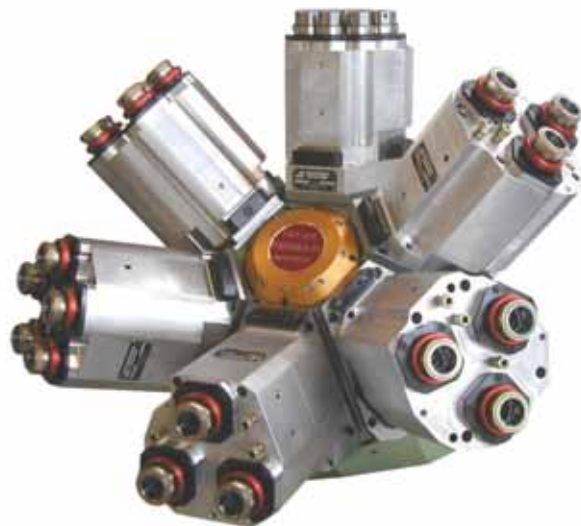
1- Angular head

2- Spindle speeder

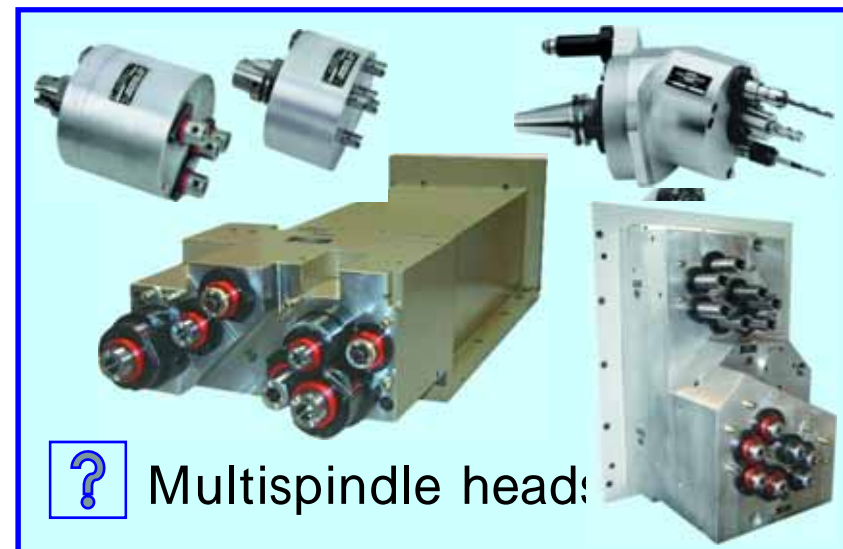
3- Turret head

4- Multispindle head

5- Special purpose machine,
thanks to our sister company



Pibomulti Products line



Angular Heads

Angular Heads



? With collet output



? With shank output



? With integrated speeder



? For diameter



? With adjustable angle



? Specials

Angular Heads



Strong with 30 years of technical experience and production, PIBOMULTI offers you the solutions for effective machining in order to reduce machining time. Angular heads of more than 2 meters and power exceeding 100 kW or miniatures of a few millimeters only with a weight of a few hundred grams. Your machining problems will be resolved.



Near the limit of feasibility

- The performance
- The quality
- Machining analysis
- Angular heads adaptec to the operation
- Innovative, high efficiency
- Strong and compact
- Important diversity
- Adaptable to any machine
- High technologie
- Collant through the tool

Angular Heads with collet output



Other spindle on request

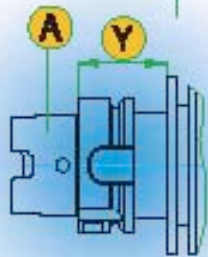
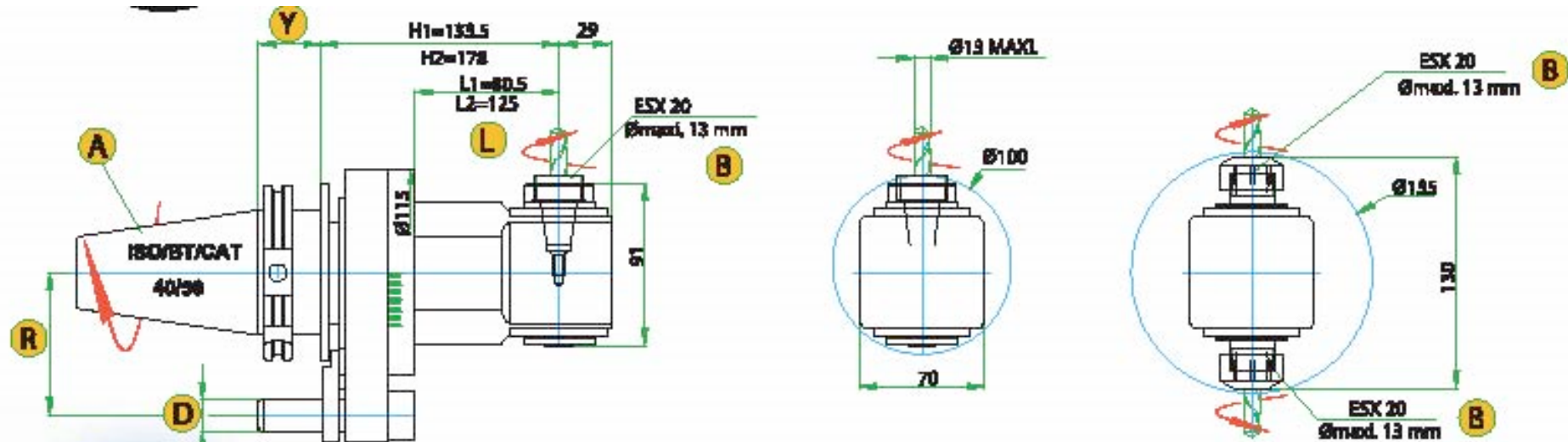


Collets $\varnothing 1$ mm to $\varnothing 26$ mm
Input shank ISO30 to ISO50
Input shank HSK40 to HSK 100
Torque 4.3 Nm to 80 Nm
Power 1 kW to 6 kW



CEP model series

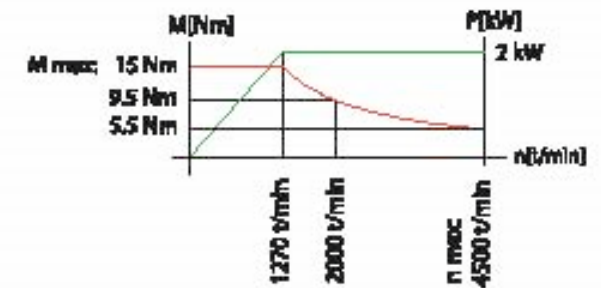
Angular Heads with collet output



HSK 63/100

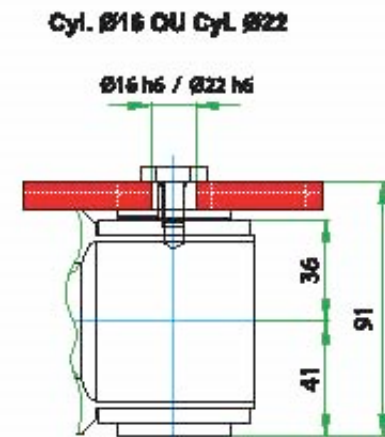
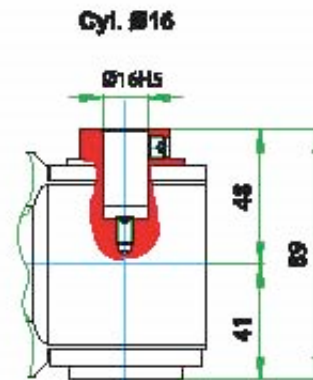
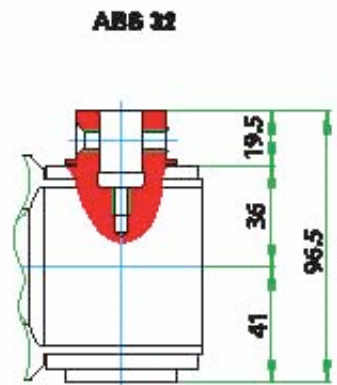
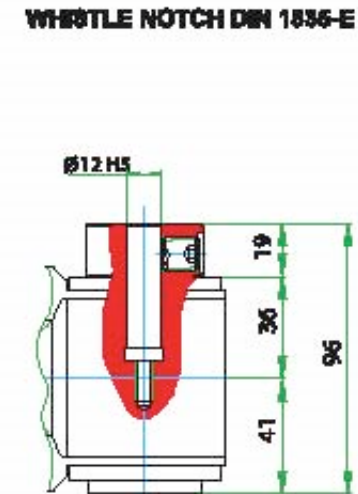
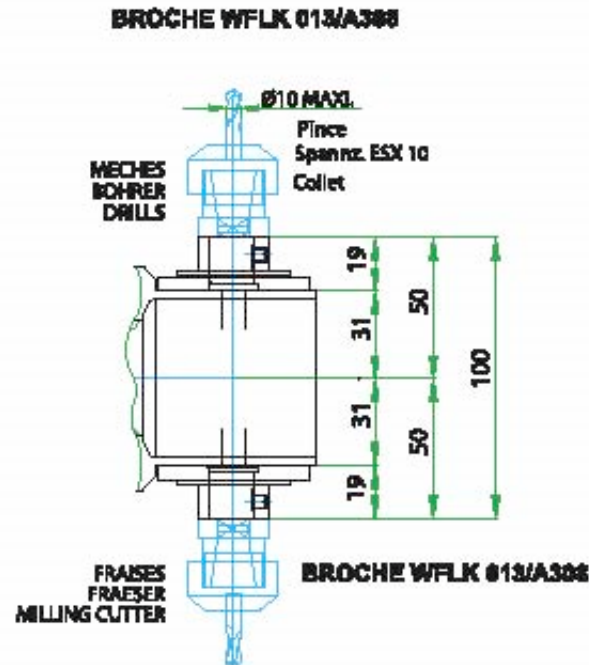
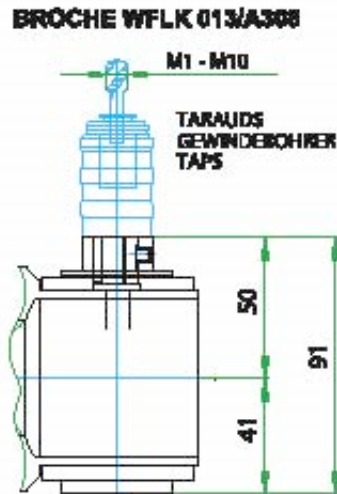
voir page / siehe Seite / see page 38-40

	kW	Nm		
4500 <small>v/min</small> <small>v/min</small> <small>rpm</small>	2.0 kW	15 Nm	1 à 1	≈ 6 à 10 kg



Example CEP13

Angular Heads with collet output



Type of other spindle for a CEP13

Angular Heads with integrated speeder



Angular Head high speed

18'000 r.p.m

Output collets \varnothing 10mm max

Input shank ISO or HSK

Integrated ratio $i = 1$ to 5

Torque 3 Nm

Power 2 kW



CMP model serie

Angular Heads for diameter



Collets : $\varnothing 1$ mm to $\varnothing 13$ mm
Input shank: ISO30 to ISO50
or HSK40 to HSK 100
Torque: 1.6 Nm to 18 Nm
Power: 0.2 kW to 2 kW

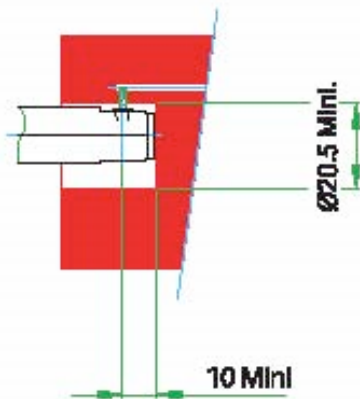


Only with collet output
1 or 2 output



CDP model serie

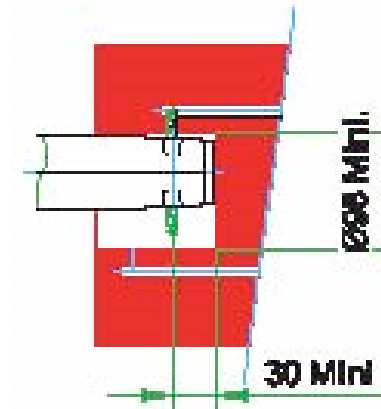
Angular Heads for diameter



Example CDP02 (the smaller)

Collets $\varnothing 2$ maxi

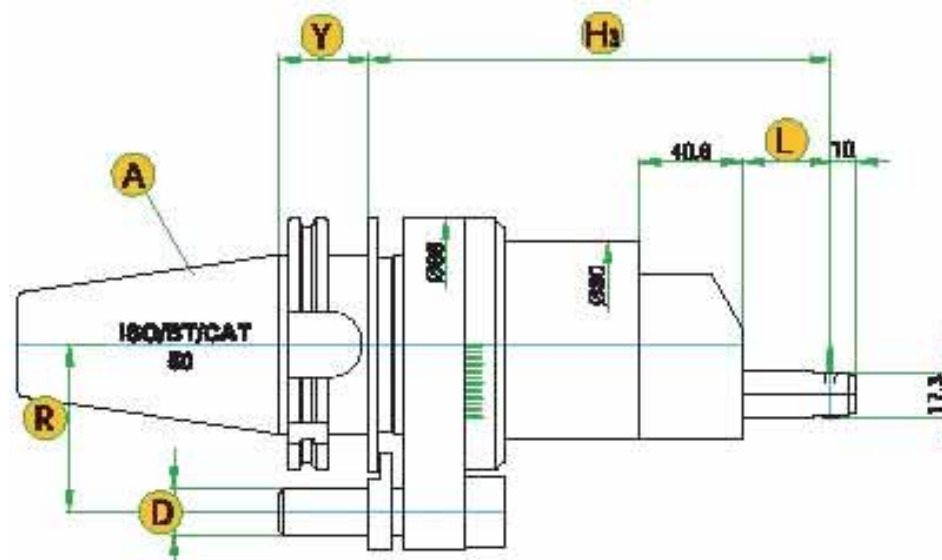
8'000 r.p.m output



Example CDP13 (the biggest)

Collets $\varnothing 13$ maxi

4'500 r.p.m output



Angular Heads for modular output



Output shank ISO or HSK

Input shank ISO or HSK

or flange adaptation

Torque 40 Nm to 204 Nm

Power 4 kW to 14 kW

CEC model serie

Angular Heads for adjustable angle



CTAR 07



CTAR 10



FTAR 50

Output collets $\varnothing 1$ mm to $\varnothing 25$ or
output shank 40 to 50

Input shank ISO30 to ISO50 or HSK40 to HSK12!

Speed output until 10'000 r.p.m

Torque until 350 Nm

Power until 14 kW

CTAR model serie

Angular Heads for adjustable angle



FTAR 40



CTAR 50



FTAR 50

FTAR model serie (flange adaptation)

Angular Heads for adjustable angle



Couple max.
Drehmoment max.
Torque max.

1500 Nm

FTARH50-NC30

1 MOTEUR BROCHE NC = 2 AXES

1 Spindel NC Motor = 2 Achse

1 spindle NC motor = 2 axis

**2'000
rpm**

**30
kW**

Angular Heads for adjustable angle



FTARH50-NC30

Torque 1'500 Nm
Power 30 kW
Rotation 360°
Orientation $\pm 120^\circ$
Speed 2'000 tr/min
Spindle output ISO/BT 50
Trou Coolant
Automatic tool clamping
Cast iron body

Angular Heads for adjustable angle



Universal

Angular heads



Special Angle Heads



Drilling in borings



Drilling in pockets



Special Angle Heads



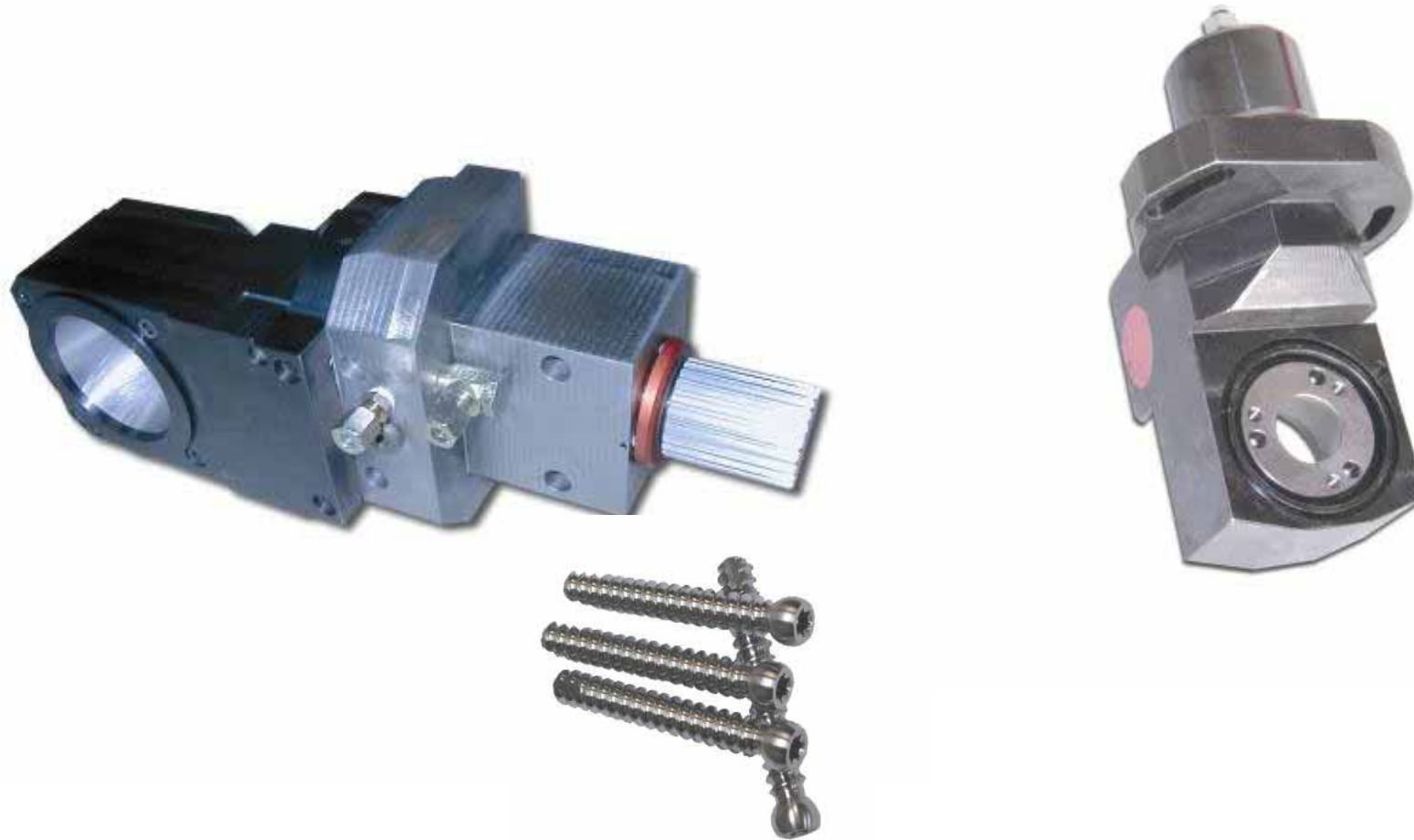
Aero Space

Special Angle Heads



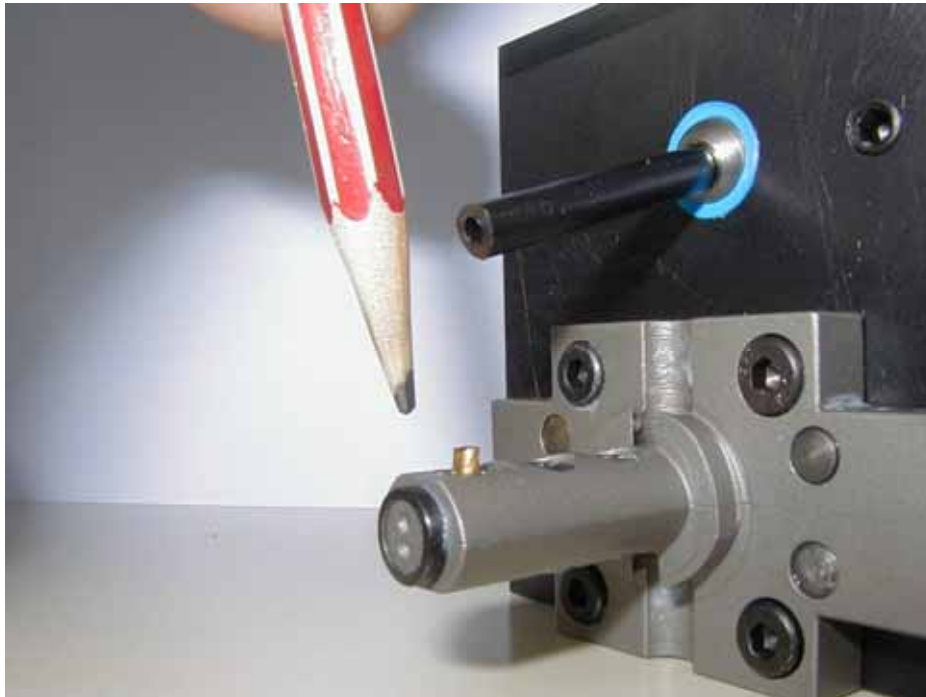
Aero Space

Special Angle Heads



Medical

Special Angle Heads



Connector industry

Special Angle Heads

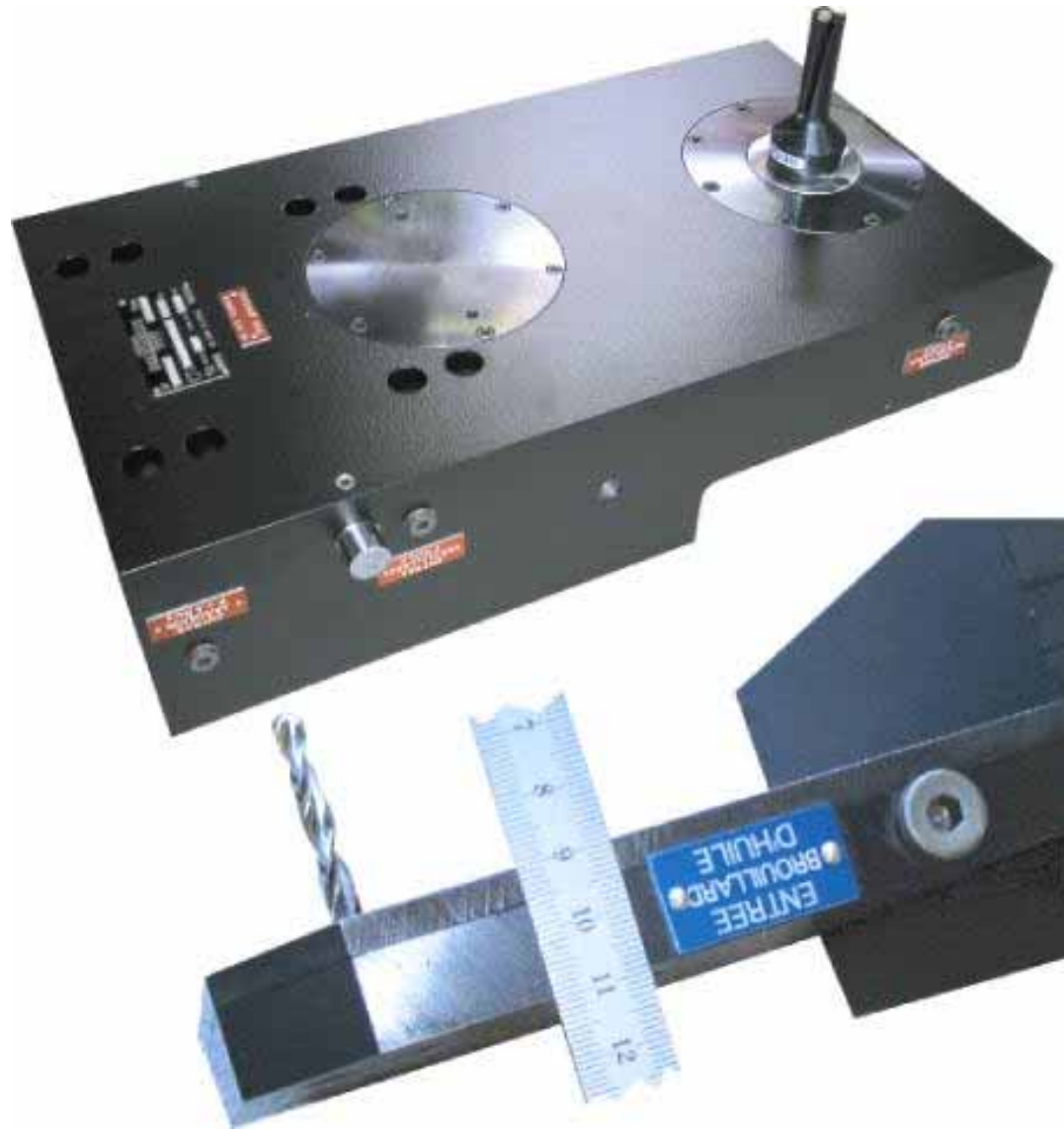


Special Angle Heads



On external station with the tool storage, rotary, pneumatic for reversal of the angular head

Special Angle Heads



Energy

Special Angular Heads



Milling heads

Special Angle Heads



Milling heads

Special Angular Heads



Milling heads

Special Angular Heads



Special Angular Heads



Special Angular Heads



2000 Kg

2 Meters

100 kW



Spindle Speeders

Spindle Speeders



High speed precursor, PIBOMULTI, has developed for more than 30 years spindle speeders, which have proved their performance in different machining situations such as drilling, milling, tapping and even grinding. Every model is adapted to a specific job. The mechanical drive concept provides excellent transmission of torque, and this in a limited space.



High speed everybody

- Trouble free life
- Greased for long life
- Good stability
- Precision
- Near perfect concentricity: < 0.005 mm
- Compact design
- Quiet operation
- Prevent the premature wear on machine spindles
- Maximize tool outputs
- Lubrification centrale

Spindle Speeders



From HSK32 to HSK125

From ISO30 to ISO60



Collet from ER11 \varnothing 0.50 to ER50 \varnothing 34 mm

Through coolant pressure 50 bars

$n = 50'000$ r.p.m

Spindle Speeders



Up to 50'000 RPM

Spindle Speeders



Ratio $i = 1$ to 5

$N_{max} = 30'000$ r.p.m

Power 2 kW

Torque 7 Nm

Collet ER11 $\varnothing 7$ maxi

Input taper BT30



Model X 635

Spindle Speeders



Ratio $i = 1$ to 10

$N_{max} = 50'000$ r.p.m

Power 2 kW

Torque 5 Nm

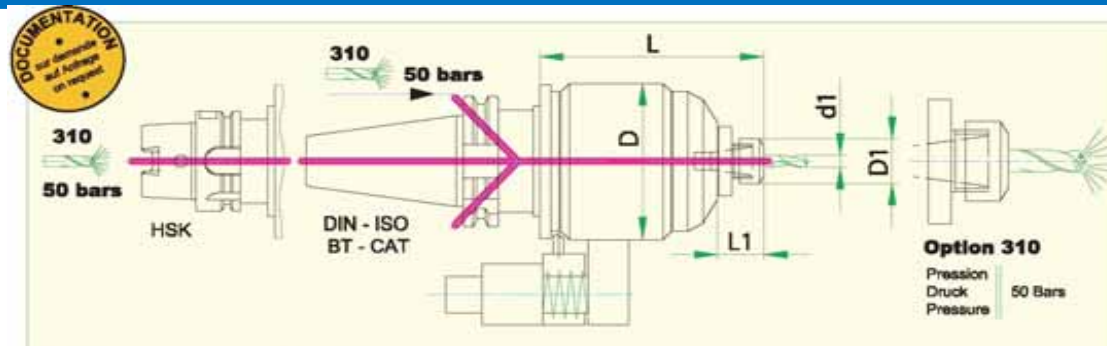
Collet ETS14 $\varnothing 8$ maxi

Input taper ISO40



Model X9810-50

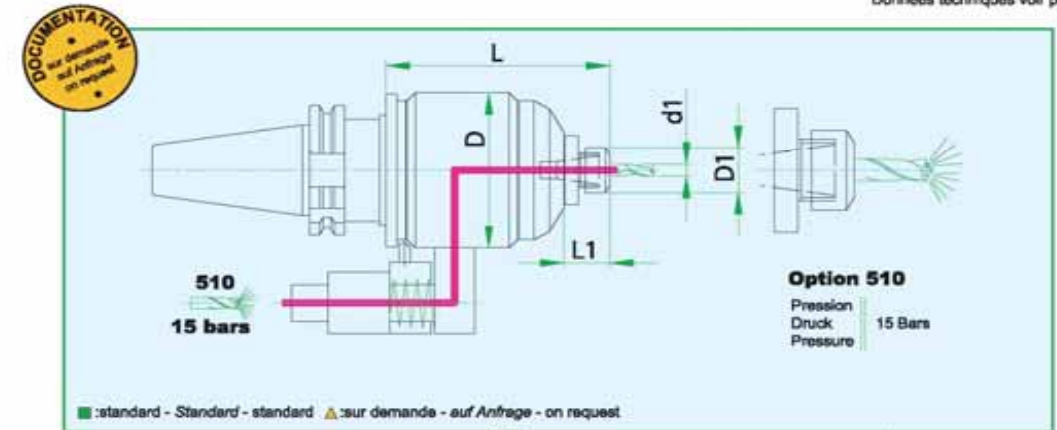
Spindle Speeders



■ : standard - Standard - standard ▲ : sur demande - auf Anfrage - on request

Type	Caractéristiques / Angaben Features				Arrosage / Kühlmittel Coolant n max	Fraise / Zange Collet	Dimensions					DIN - ISO - BT - CAT					HSK						
	n	n max	kW	Nm			d1	D	D1	L	L1	kg	30	35	40	45	50	60	32	40	63	80	100
X635	1+5	25'000	30'000	1.7	7	-	ER11	0.5 - 7	63	19	99	23	2	■	■	■	■	■	■	■	■	■	■
X766	1+6	25'000	30'000	2.8	8	25'000	ETS14	0.5 - 8	76	22	102	21	3.1	▲	▲	■	■	■	■	■	■	■	■
X9810	1+10	36'000	40'000	2	5	36'000	ETS14	0.5 - 8	98	22	115	21	5	▲	▲	■	■	■	■	■	■	■	■
X9810-50	1+10	44'000	50'000	2	5	44'000	ETS14	0.5 - 8	98	22	115	21	5	▲	▲	■	■	■	■	■	■	■	■
X765	1+5	18'000	22'000	3.5	12	18'000	ER16	0.5 - 10	76	32	111	30	3.5	▲	▲	■	■	■	■	■	■	■	■
X988	1+6	16'000	20'000	4.5	18	16'000	ER20	1 - 13	98	35	124	32	5.5	■	■	■	■	■	■	■	■	■	■
X1055	1+5	14'000	17'000	6.4	29	13'000	ER25	1 - 16	105	42	137	35	6.5	■	■	■	■	■	■	■	■	■	■
X1057	1+7	15'000	18'000	4	5.7	15'000	ER20	1 - 13	105	35	122	32	5.2	■	■	■	■	■	■	■	■	■	■
X1205	1+5	12'000	15'000	7	34	12'000	ER32	2 - 20	120	50	141	38	10.5	■	■	■	■	■	■	■	■	■	■
X1505	1+5	10'000	12'000	8	39	10'000	ER50	4 - 34	150	78	177	51	15	▲	▲	■	■	■	■	■	■	■	■
XM1506	1+6	10'000	12'000	8	24	-	Weldon 25	10 - 40	150	60	264	35	-	■	■	■	■	■	■	■	■	■	■
X1905	1+5	8'000	10'000	10	10	-	OZ1838	10 - 40	190	-	225	-	29	■	■	■	■	■	■	■	■	■	■

Données techniques voir page 47



■ : standard - Standard - standard ▲ : sur demande - auf Anfrage - on request

Type	Caractéristiques / Angaben Features				Fraise / Zange Collet	Dimensions					DIN - ISO - BT - CAT				
	n	n max	kW	Nm		d1	D	D1	L	L1	kg	40	45	50	
076-5-510	1+5	16'000	18'000	3	5.6	ER16	0.5 - 10	76	32	116	28	3	■	■	■
120-6-510	1+6	10'000	12'000	6	12	ER25	1 - 16	120	42	175	37	9	■	■	■
150-6-510	1+6	8'000	11'000	8	20	OZ1837	5 - 32	150	78	237	51	20	■	■	■

Spindle Speeders



Models for lathes

Spindle Speeders



Ratio $i = 1$ to 5

$N_{max} = 18'000$ r.p.m

Power 2 kW

Torque 3 Nm

Collet ETS16 $\varnothing 10$ max

Input VDI25-30-40-50

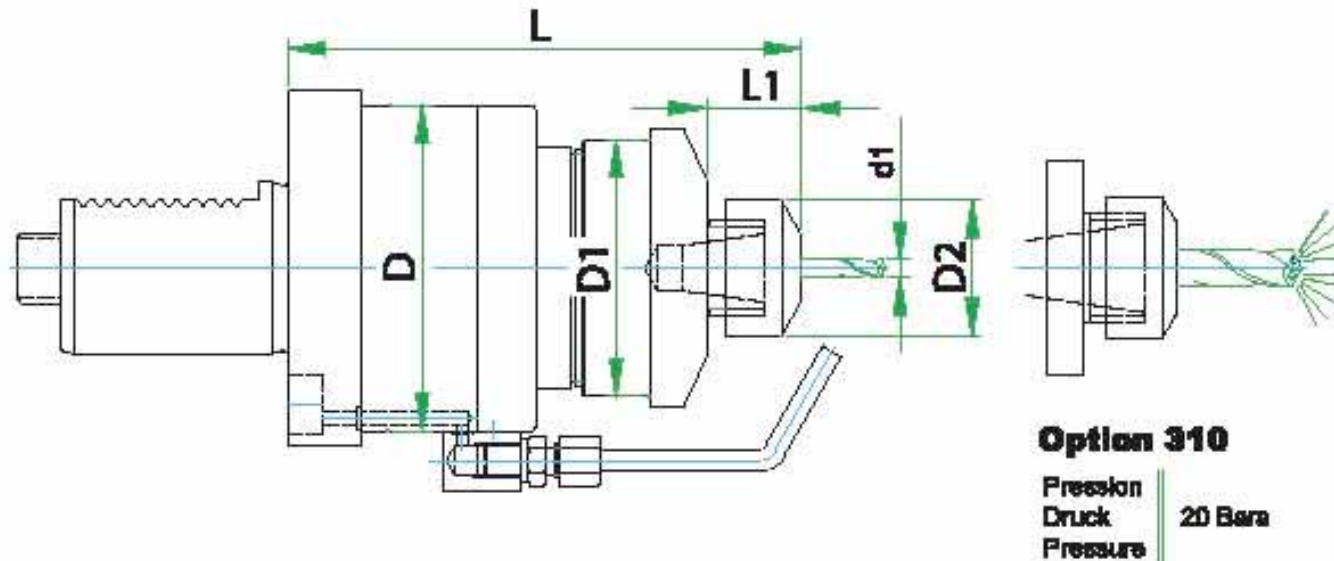


Angle speeder for lathe

Model TTE10X5



Spindle Speeders



■ : standard - Standard - standard ▲ : sur demande - auf Anfrage - on request

Type	Caractéristiques / Angaben Features		Pinza Zange Collet	Pinza Zange Collet	d1	Dimensions				adaptation VDI					Entrenamiento según máquina Antrieb gem. Maschine Drive as per machine		
	n	n max.				kW	Nm	D	D1	D2	L	L1	20	25		30	40
X635T	1+5	25'000	30'000	2	7	ESX12	0.5 - 7	63	48	19	98	17	■	■	■	▲	Entrenamiento según máquina Antrieb gem. Maschine Drive as per machine
X9810T	1+10	38'000	40'000	2	6	ETS14	0.5 - 8	98	51	22	120	15.6	■	■	■	▲	
X765T	1+5	18'000	22'000	4	12	ESX16	0.5 - 10	76	60	32	120	30	■	■	■		
X1056T	1+5	8'000	12'000	6.4	20	ESX25	1 - 16	105	80	-	120	10.5	■	■	■		
X1205T	1+5	12'000	15'000	7	34	ESX32	2 - 20	120	92	50	175	38	■	■	■		

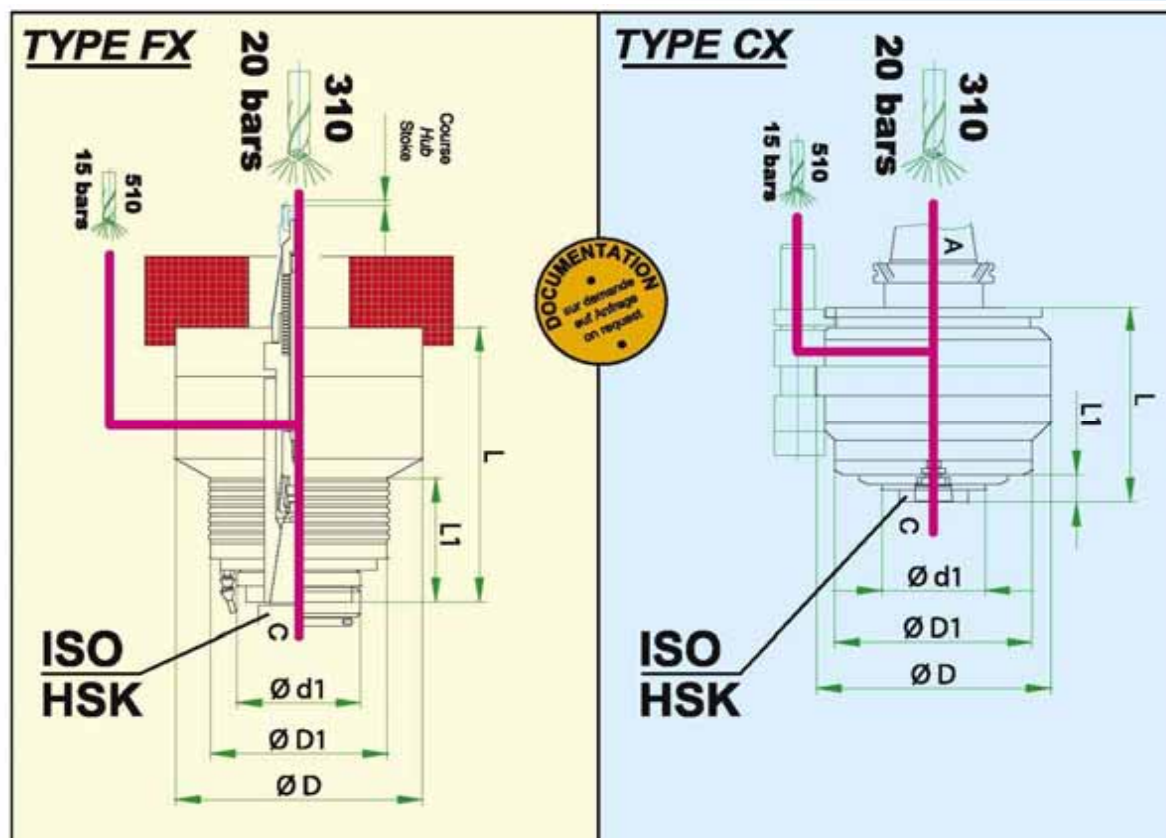
Sur demande, exécution flasqué et/ou avec arrosage par le centre.
 Ausführung mit Flansch und/oder mit Innenkühlung auf Anfrage.
 Upon request, flange execution and/or with coolant thru.

Spindle Speeders



Model FX __ (flange adaptation)

Spindle Speeders



Caractéristiques / Angaben Features						Dimensions						
Type	⚙️	n	n max.	kW	Nm	C	d1	D	D1	L	L1	kg
FX190-05	1+5	10'000	12'000	10	130	ISO30/HSK50	121	190	150	210	130	30
FX210-04	1+4	8'000	10'000	12	260	ISO40/HSK83	142	210	185	240	138	45
FX300-04	1+4	6'000	8'000	20	405	ISO50/HSK100	160	300	220	346	156	110
FX375-06	1+6	4'000	5'000	30	830	ISO50/HSK100	180	375	250	385	129	190

Données techniques voir page 47

■ : standard - Standard - standard ▲ : sur demande - auf Anfrage - on request

Caractéristiques / Angaben Features						Dimensions						A ISO - BT - CAT		
Type	⚙️	n	n max.	kW	Nm	C	d1	D	D1	L	L1	kg	50	60
CX1905	1+5	8'000	10'000	10	190	ISO30/HSK50	121	190	160	230	80	29	■	■
CX2104	1+4	8'000	10'000	12	260	ISO40/HSK83	150	210	186	240	80	38	■	■
CX3504	1+4	4'000	5'000	30	1000	ISO50/HSK100	190	350	290	400	197	185	■	■

Données techniques voir page 47

Option 310

Pression / Druck / Pressure 20 bars
Arrosage central avec entrée centrale.
Innere Kühlmittelzufuhr mit Eintritt durch das Zentrum.
Thru coolant with center input.

Option 510

Pression / Druck / Pressure 15 bars
Arrosage central avec entrée latérale.
Innere Kühlmittelzufuhr mit seitlichem Eintritt.
Thru coolant with side input.

Special Spindle Speeders



6'000 RPM
500 Nm

1'300 mm



Quill type
stroke 200 mm



Special Spindle Speeders



Spindle speeder in machining, 40'000 RPM

Special Spindle Speeders



Input on shank or flange



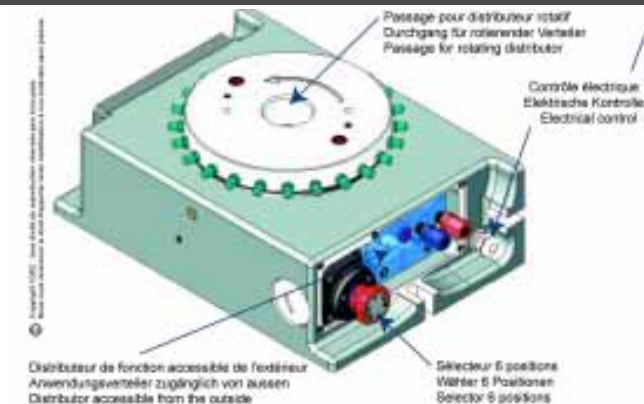
INDEX-TABLE
new generation

PI 170



PI 170

Working plate	mm	Ø 170-400	
Operating pressure	bar	4-5	
Divisions on selector dial		3-4-6-8-12-24 (ou autres)	
Indexing accuracy	mm	± 0.01 - Ø200 → ± 20"	
Axiale force in the center	Nm	12000	
Torque in locked position	Nm	5 bars 122	20 bars 488
Admissible radial force at plate level	Nm	20000	
Indexing time for 120°	sec.	0.6	
Divisions per minute, for 3 divisions per revolution	div./min	50	
Weight	kg	35	



Turret Heads

Turret heads



On this turret head with 2, 3, 4, 6 or 8 stations, each spindle is driven separately at the working position either through the machine or a driving unit. Each station can be adapted to the work to be done. The universality of this turret head allows also the fitting of multispindle heads, angular heads or spindle speeders upto 40'000 rpm. The turret rotation without uplift, is quick and precise. It does insure a good protection against impurities.



Wide Flexibility

- Construction in cast iron, rigid and compact
- Turret rotation without uplift
- External coolant on working spindle only
- The indexing of the turret is driven hydraulically
- Optional, hydraulically turret locking
- Modular spindles and tool holders equipped with either high speed ball bearings with ou without coolant through the center

Turret heads



Turret heads



Power: 5 kW to 45 kW

Torque : 30 Nm to 2'500

Weight : 30 kg to 2'500 kg w/o tools

Station : 3 to 12



Turret heads With multi spindle heads



TRI 304

Turret 4 positions



TRH806

Turret 6 positions

With 6 multi spindle heads

More than 1'000 Kg

Turret heads



TRH 308



Turret heads



Mastery of the production

Turret heads



TRHRA

Turret heads



Alternated spindle head



Chips to chips time
0.5 second

Turret heads

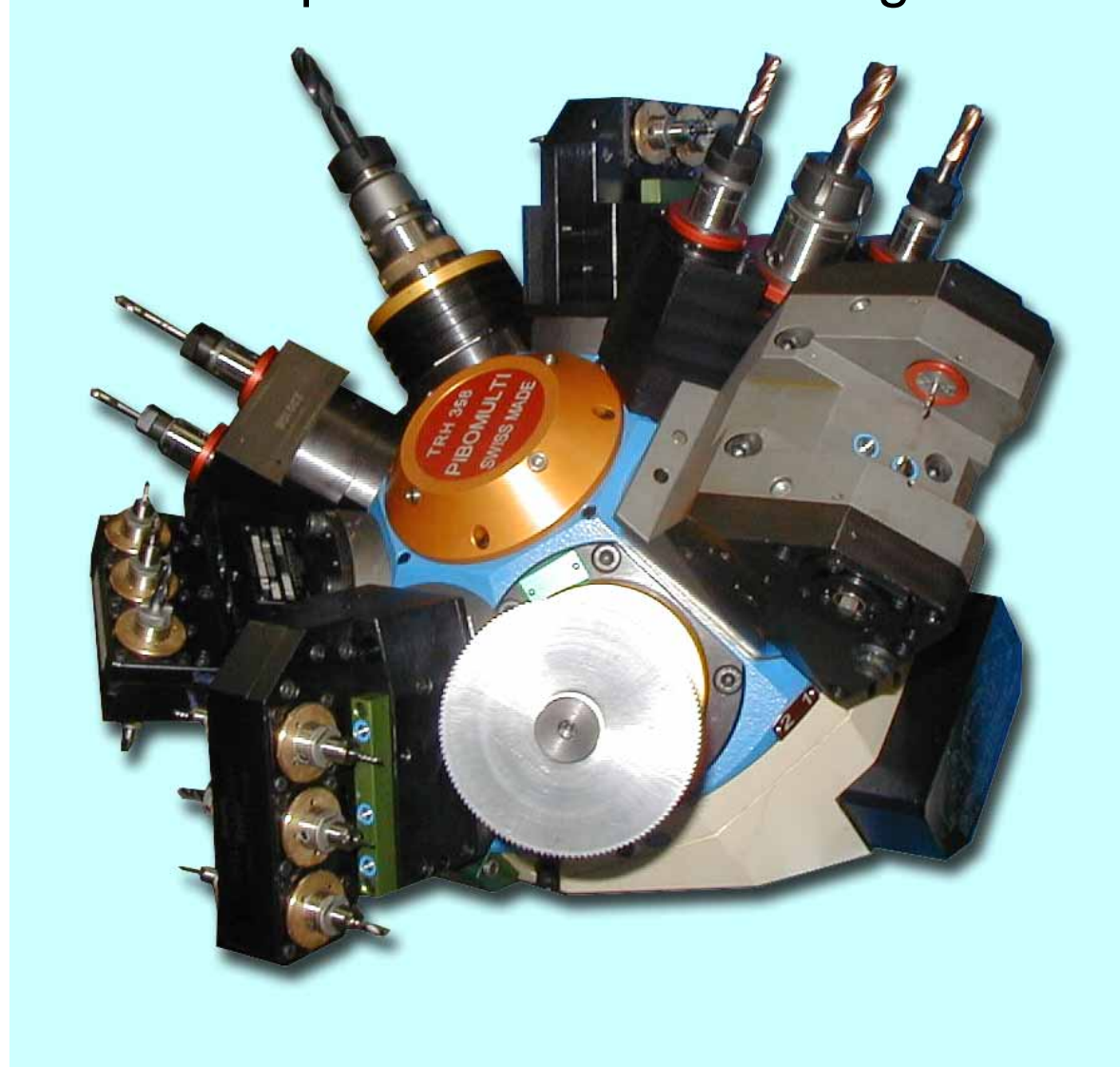


TRH 806

Turret heads



With multi spindle heads And angular heads



Turret heads

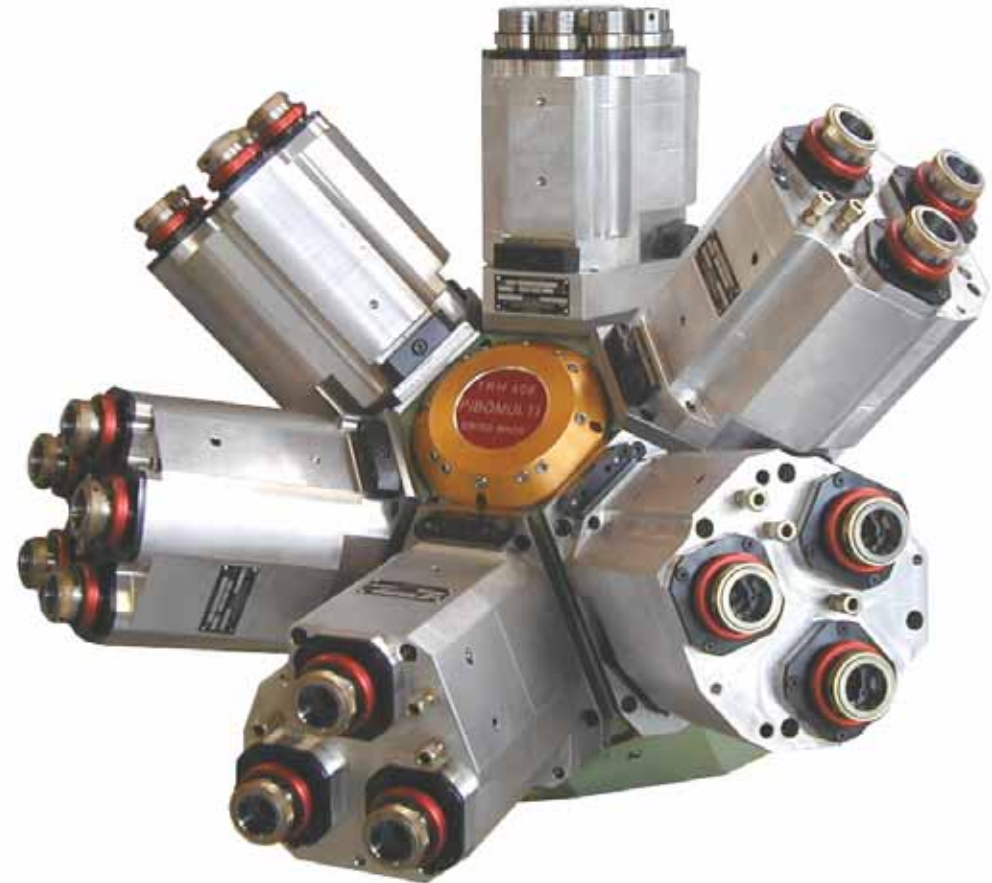


With multispindle heads



4 Multispindles— 184 spindles

Turret heads



Coolant through spindle 80 bars

Turret heads



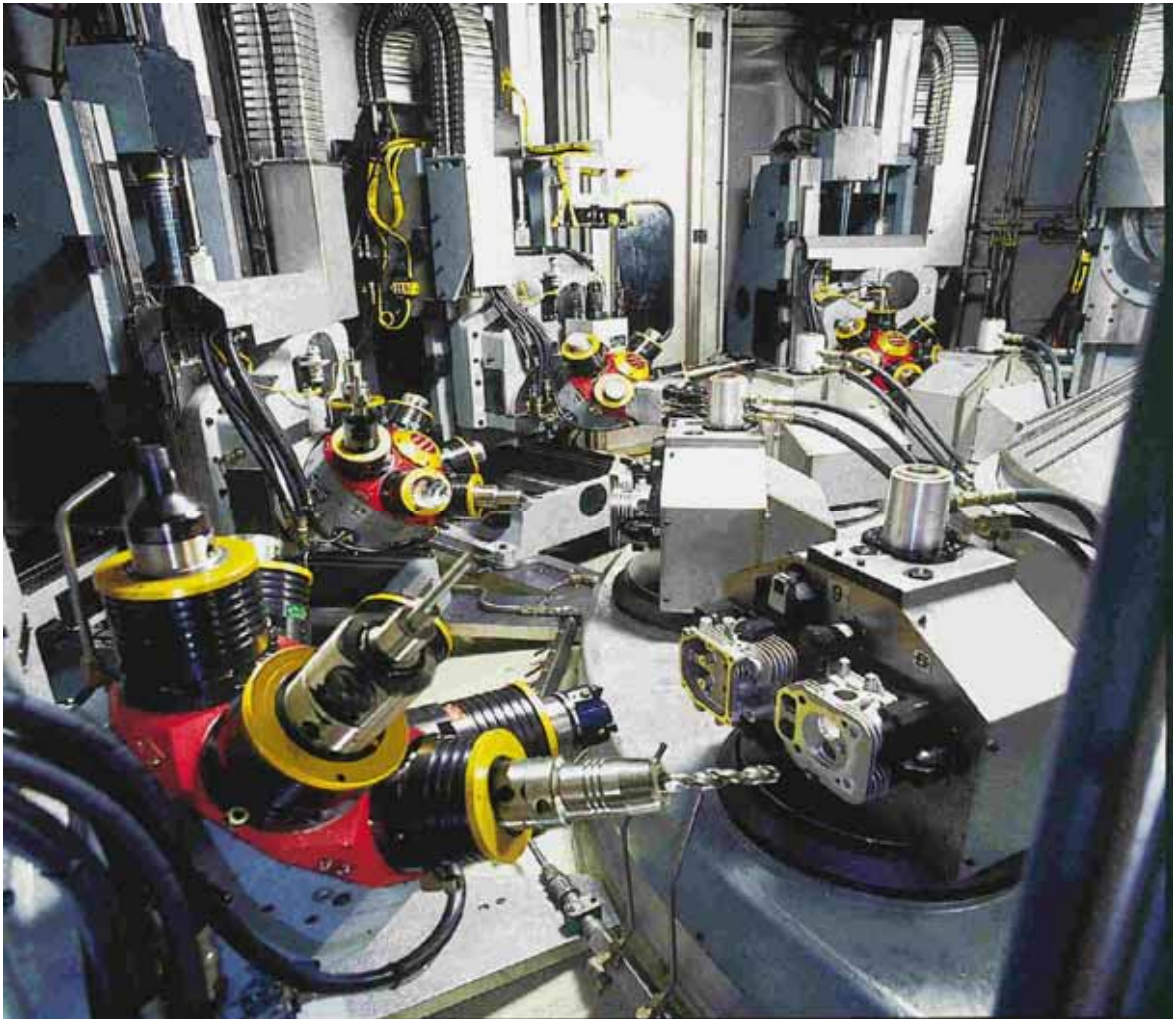
Multispindle head for drilling and tapping
with integrated tool break control

Turret heads



Mastery of the production

Turret heads



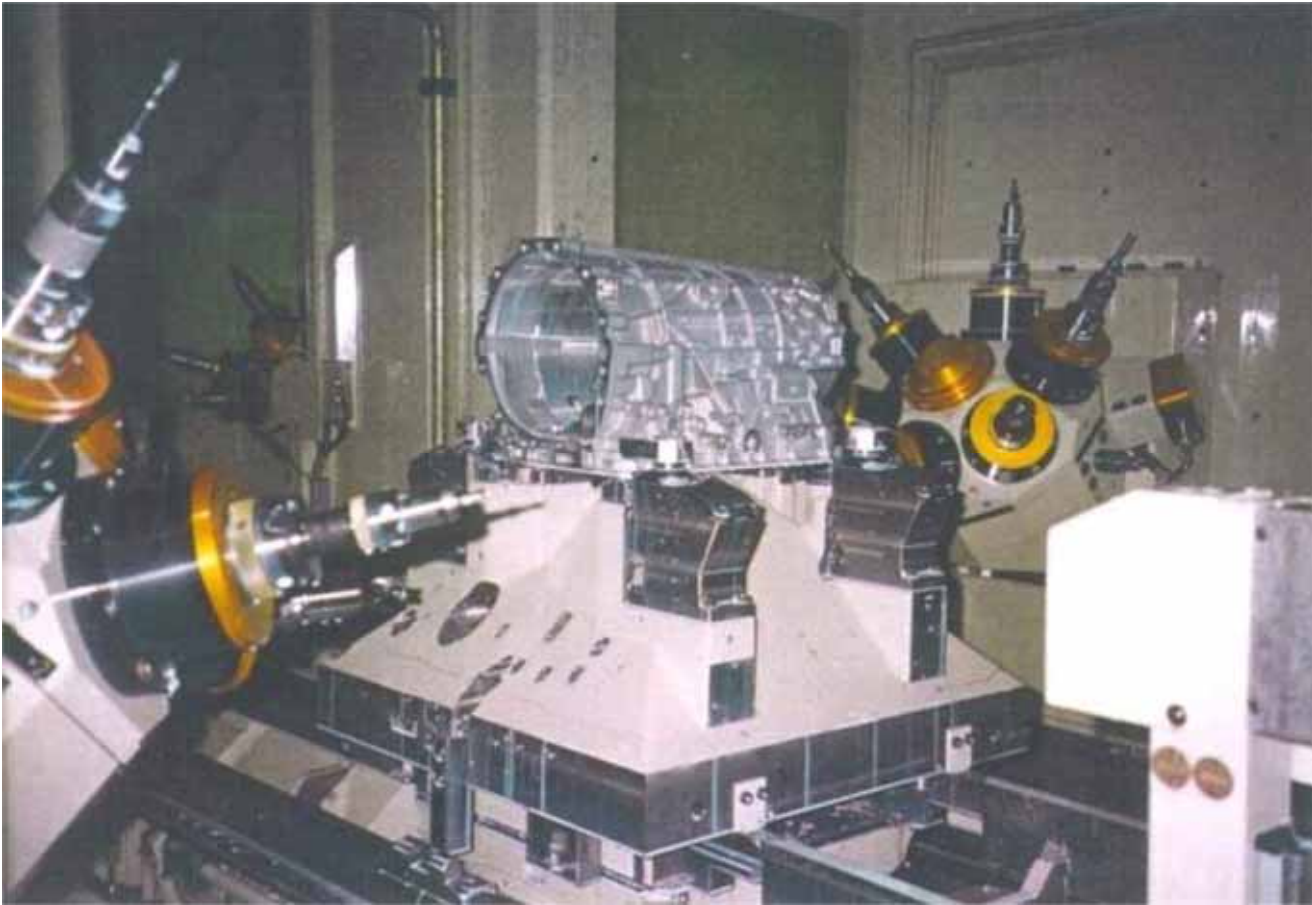
Mastery of the production

Turret heads



Mastery of the production

Turret heads



Mastery of the production

Tools for Turret heads



Spindle for collet



Spindle HSK



Adjustable angle head



Adjustable angle head

With tool holder



Multi Spindle head



2 output angle head

Multispindle head

Multi Spindle Heads



Less than one kilo or more than one hundred the same thought of perfection is applied all the way when multispindle heads are designed and produced. This tool generation is in complete accord with the requirements of modern machining specifications and is adapted to the most recent technologies.



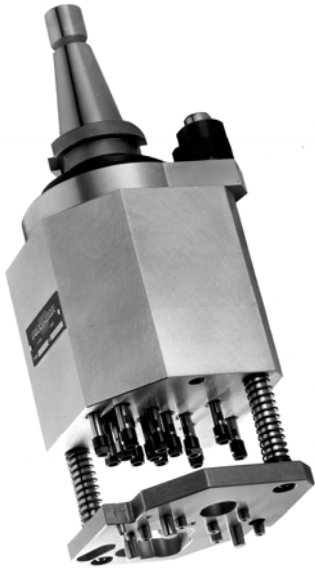
The same Thought of perfection

- Precision spindles
- High precision bearings
- Dust protections according to speed requests
- Speed and power adapted to the machining
- Coolant through the tools

Multi Spindle Heads



Head for machining center



Input shank ISO - HSK



Multi Spindle Heads



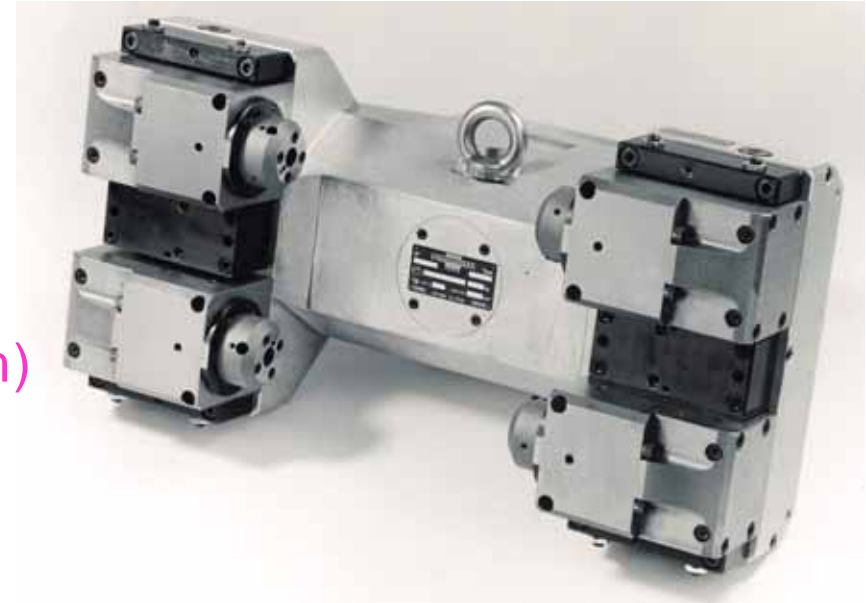
Head for turning



Synchronized head



Multi Spindle Heads



Reduced center distance (from 4.5 mm)
Rotation speed up to 40'000 RPM
All dimensions
A few hundred range to 1 ' 000 kg
Deliverable with coolant through center



Multi Spindle Heads

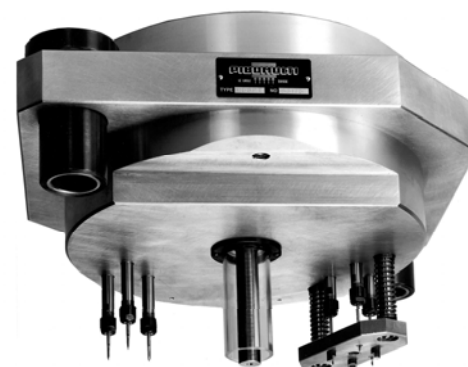


Machining of 2 faces
simultaneously with only one
driven unit

Watch industry
Micro mechanic industry



Multispindle heads with angle for
adaption on unit of transfer machine



Multi Spindle Heads



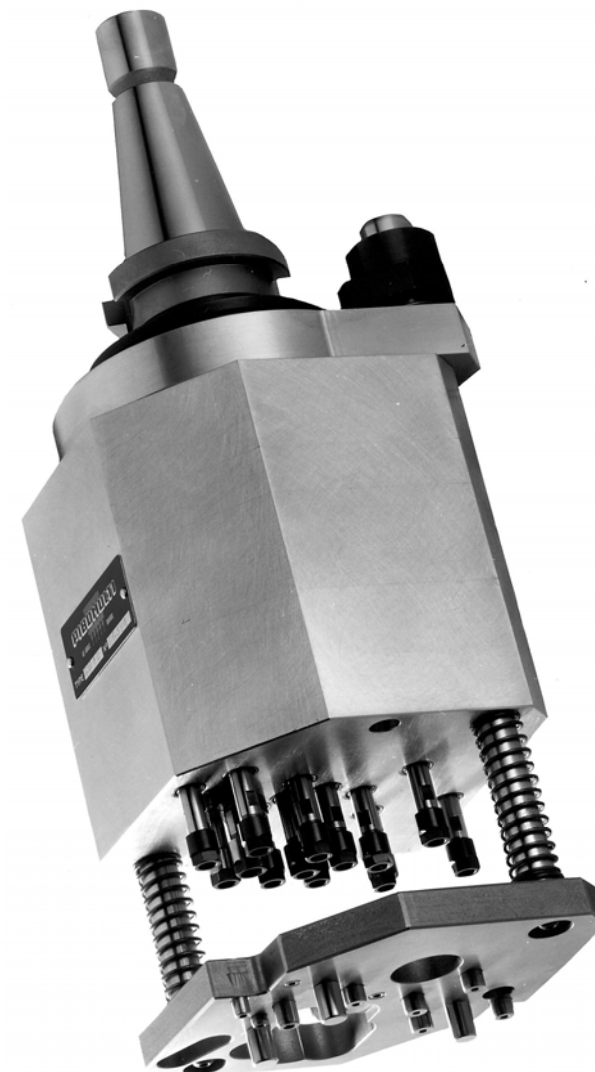
Watch industry
Micro mechanic industry



Multi Spindle Heads



Multispindle head
for machining center



Multi Spindle Heads



Multispindle head
for transfer machine - AUTOMOBILE



Tapping



Drilling

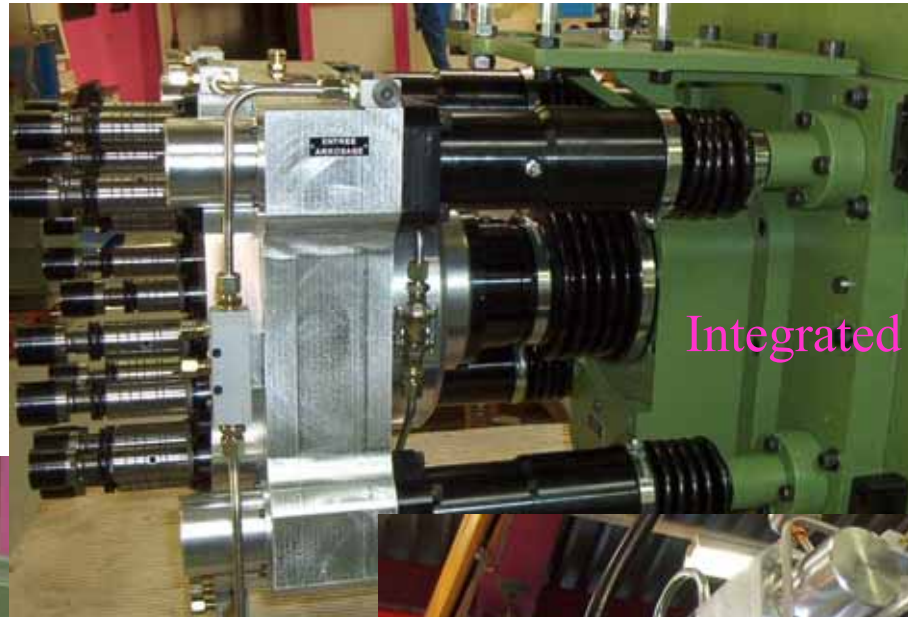


Multi Spindle Heads



Transfer machine - AUTOMOBILE

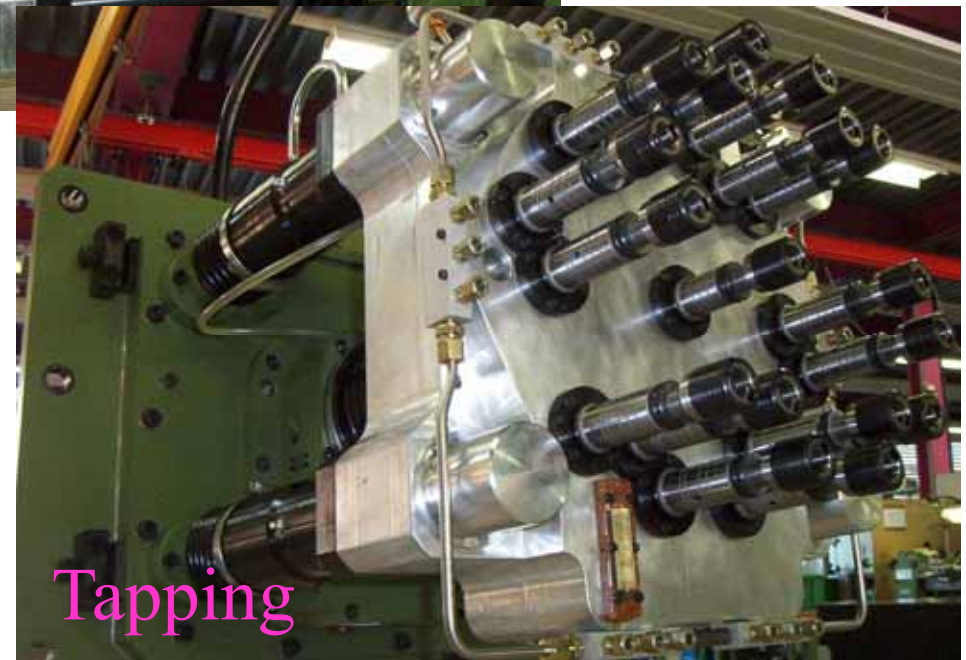
Tool holder with
Quick change



Integrated lead screw



Drilling

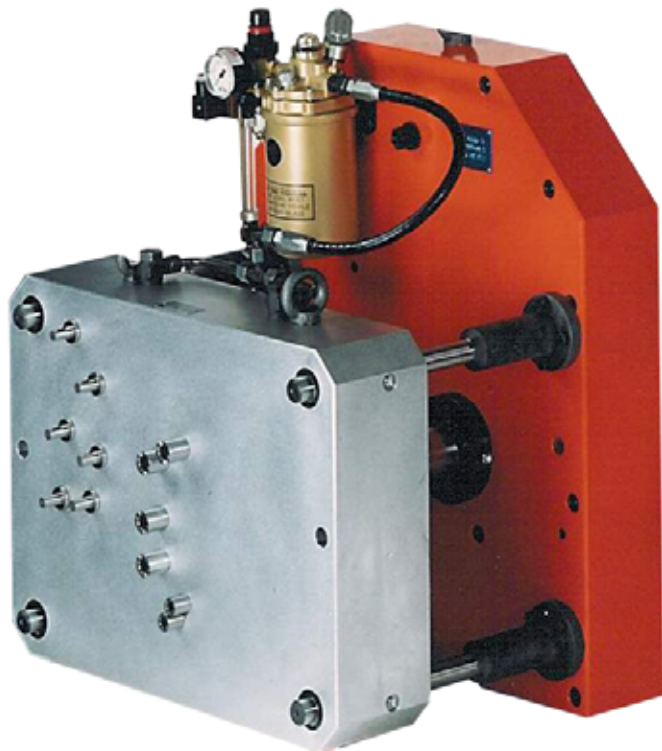


Tapping

Multi Spindle Heads



TRANSFERT – PRODUCTION AUTOMOBILE



With electrical control

Tapping head with lead screw

Multi Spindle Heads



TRANSFERT – PRODUCTION AUTOMOBILE

With tool guide

Motorized head

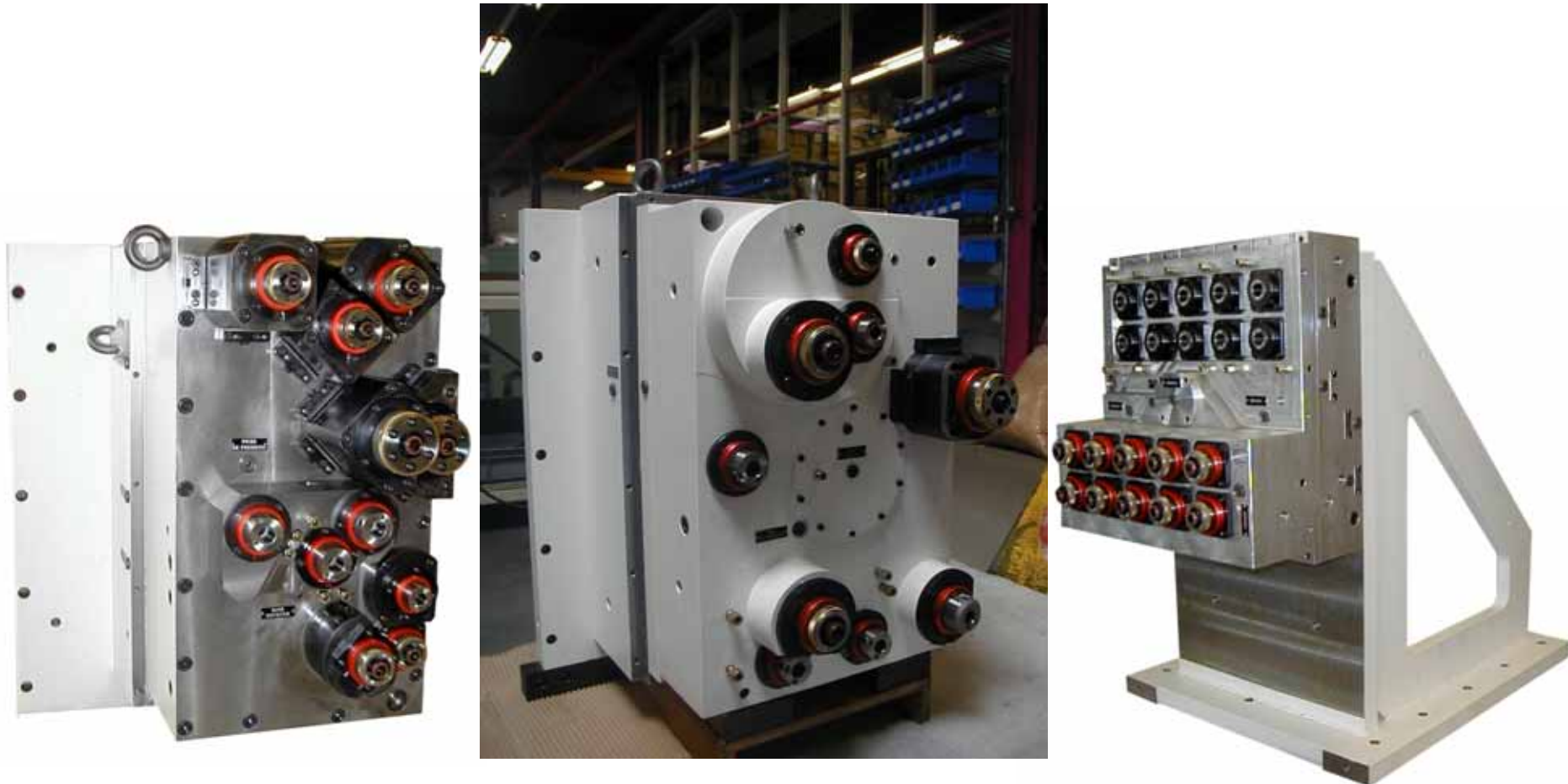


Multi Spindle Heads



TRANSFERT – PRODUCTION AUTOMOBILE

Spindle with all sizes

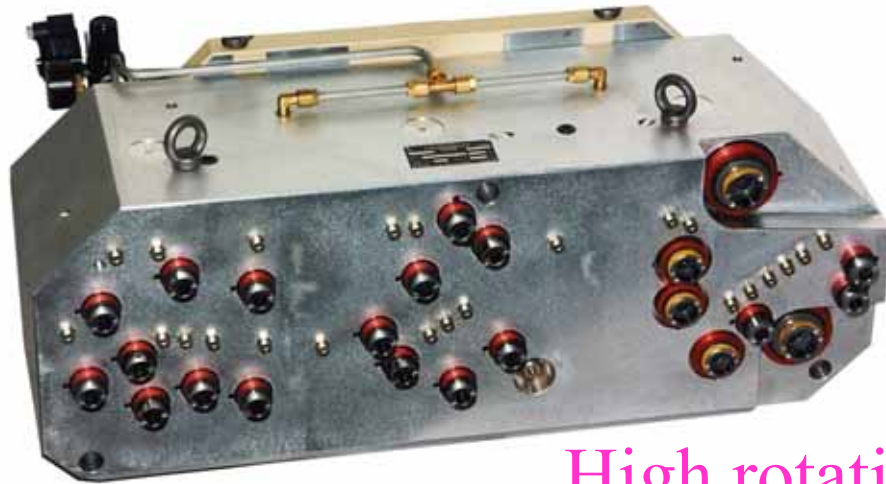


Neat construction, assured reliability

Multi Spindle Heads



TRANSFERT – PRODUCTION AUTOMOBILE



High rotation speed -
10'000 RPM



Multi Spindle Heads



For drilling
For tapping
For milling



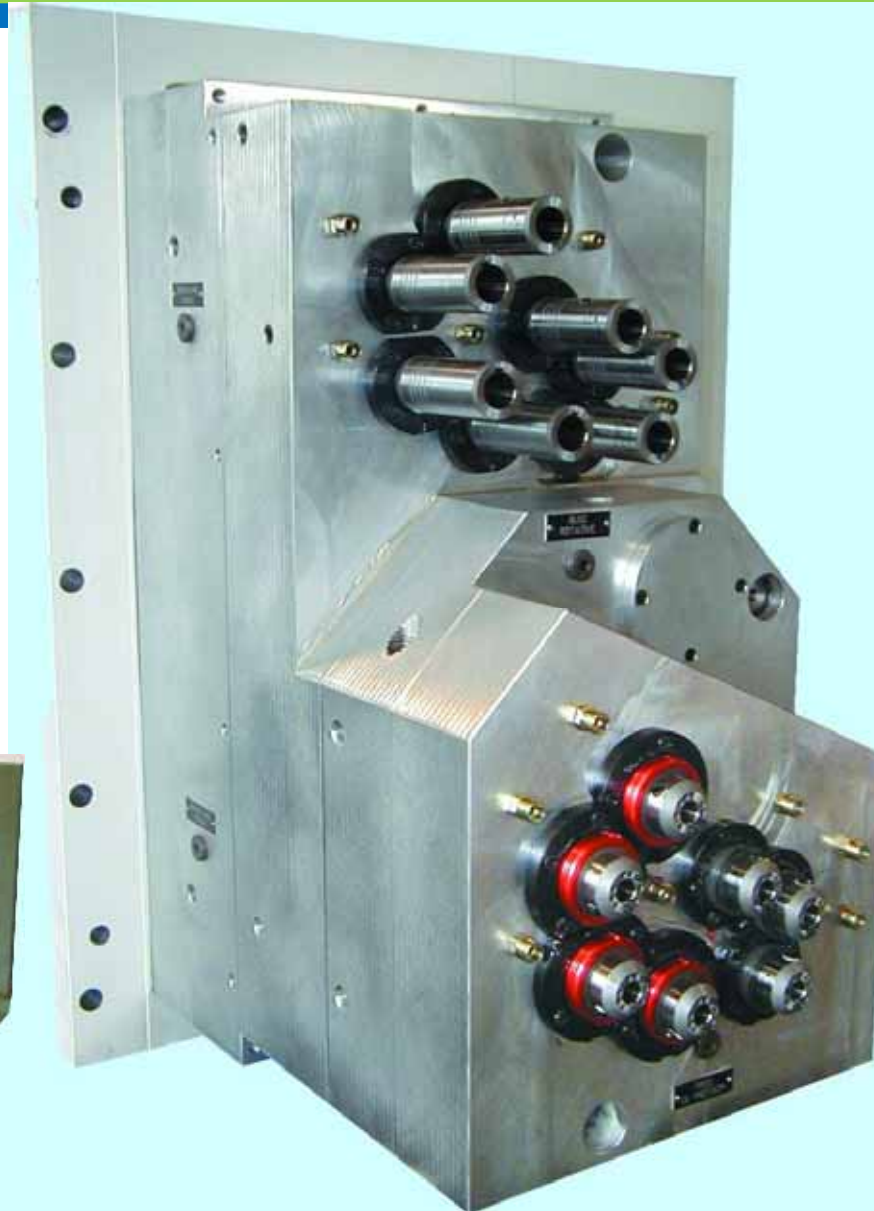
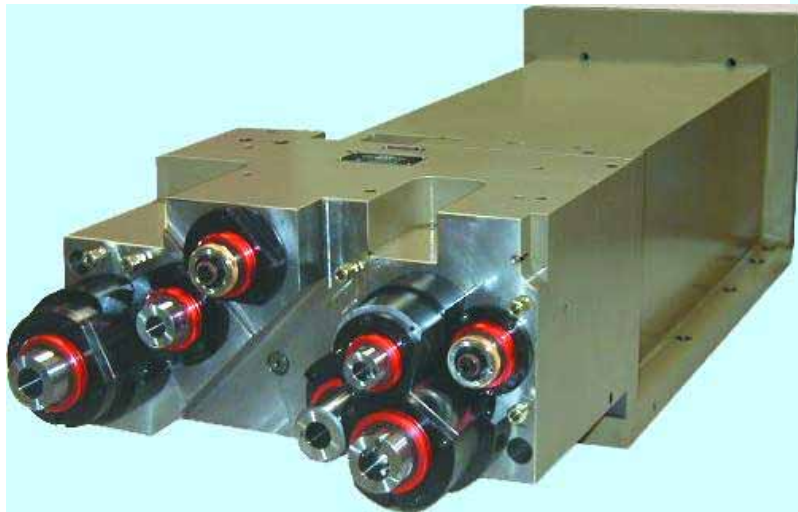
Spindles with collets, quick change tools holder, TR, reduction socket, WE, ABS, HSK, Whistlenotch etc. etc.

Multi Spindle Heads

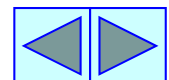


Head for high production
Transfer machine
Automobile industry

Tapping



Drilling



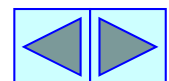
Multi Spindle Heads



Small head for transfer machining



Head for turning center VDI adaptation



PIBOMULTI

SWISS

MADE

PIBOMULTI

SWISS

MADE

