

# **Heads & Accessories**

### for milling, boring, portal machines & vertical lathes

### We give solid shape to your ideas.

We design and create series and prototype products for the development of special machining operations on machine tools. We work with passion and competence, we realize your wishes.

## HISTORY

Treccani Engineering started activity in 2011 in Verona (Italy).

Over the years we have developed various types of accessories used in different fields and carried out several research and development activities on new heads for special machining.

During our 12 year-activity we have created products for various national and international customers.



## PURPOSE AND RELIABILITY

We aim to develop support activities to prop up customers in the realisation of new products and the optimisation of existing products.

We can guarantee to the customer **quality** and **reliability** respecting the requested functionalities in the technical specifications defined following our experience.

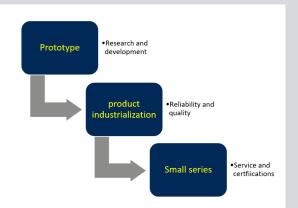
The competence and in-depth experience that guide us make us the right partner for an all-round collaboration that develops from the idea to the finished product. We are experienced partners who translate customers' ideas or needs into feasible designs and prototypes realised with competence and expertise.



# PRODUCTION AND SERVICES

We are able to produce batches of small **series** with the realization of the initial prototype and subsequent industrialization.

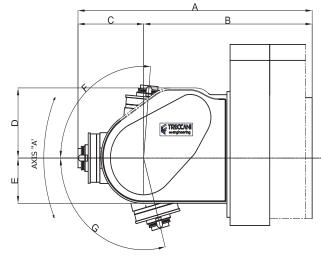
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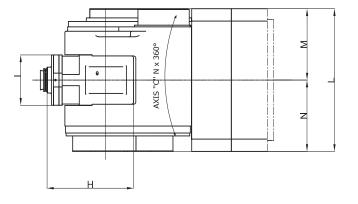


## H2T - TILTING MILLING HEAD

CODE	DESCRIPTION	POWER MAX	MAX TORQUE	MAX SPEED	WEIGHT	Dim	Dim	Dim	Dim	Dim	Dim	Dim	Dim	Dim
		Kw	Nm	rpm	Kg	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (degree)	G (degree)	H (mm)	l (mm)
H2T25C	Tilting Milling Head	25	800	5000	750	1030	700	330	290	187	95	120	550	268
Н2Т37С	Tilting Milling Head	37	1200	5000	1200	1130	780	350	300	188	95	105	550	268
H2T50C	Tilting Milling Head	37	1500	2500	1500	1250	890	360	220	340	95	105	550	274









#### **TILTING MILLING HEAD**

DESCRIPTION	UNIT	H2T25C	H2T37C	H2T50C
CUSTOMER MACHINE INTERFACE		Manual/Automatic	Manual/Automatic	Manual/Automatic
AUTOMATIC PICK UP FUNCTION		Standard	Standard	Standard
RATION		1:1	1:1	1:1
SPINDLE TAPER		ISO 50 or HSK A100 or BT50	ISO 50 or HSK A100 or BT50	ISO 60 or HSK A100 or BT60
AUTOMATIC TOOL CLAMP/UNCLAMP		Spring/Hydraulic cilinder	Spring/Hydraulic cilinder	Spring/Hydraulic cilinder
TOOL LOCKING FORCE	Ν	18.000	18.000	22.000
INDEXING ANGLE RANGE C-AXIS	deg.	± 185	± 185	± 185
INDEXING POSITION C-AXIS	deg.	continuous	continuous	continuous
INDEXING POSITION ACCURACY C-AXIS	second	5"	5"	5"
INDEXING ANGLE RANGE A-AXIS	deg.	+95° / -105°	+95° / -105°	+95° / -105°
INDEXING POSITION A-AXIS	deg.	continuous	continuous	continuous
INDEXING POSITION ACCURACY A-AXIS	second	5"	5"	5"

#### Main technical hydraulic characteristics

- Air of pressurization for the head inside and for the spindle flange.
- Grease lubrication for the movement transmission and of the spindle bearings.
- Hydraulic cooling oil system of the head.
- External feeding of water to the tool 10 bar 30 l/min;
- Electrical connectors for head automatic changing or hole for the cables for head manual changing;
- Liquid connectors STAUBLI for head automatic changing or hole with seal for head manual changing;

#### Main technical mechanical characteristics:

- Main structures in cast iron;
- Bearings of axis with preloaded roller;
- Indexing position axis:
- continuous positioning
- > driving system C axis with double pinion and wheel gear with recover mechanical or electrical backlash
- > driving system A axis with double pinion and wheel gear with recover mechanical or electrical backlash
- Direct measure of the angular position for C and A axis for for continuous positioning and machining
- Limit switch on C and A axes for end stroke, zeroing, locking and unlocking.
- Automatic clamping of the head on the face of the machine with reference pin and pull stud.
- Inner feeding water through the spindle 20 bar 15 l/min;
- For head changing there is an anti-rotation device to keep the power take-off in position
- Interfacing with the customer machine is defined according to the type of fixing according to two possibilities:
  - manual with screws and reference pins
  - automatic with attachment beads and reference pins



## **MECHANICAL PARTS TEST**

Test of each component through measuring machines that certify the dimensions and guarantee the precision of the components.



## MECHANICAL COMPONENTS PROCESSING

Execution of mechanical processes using certified machining centers with special equipment to guarantee the required accuracies.



## MECHANICAL AND COMMERCIAL PARTS ASSEMBLY

Partial assembly of mechanical and commercial parts using special equipment.





Continuous verification of the accuracies to be guaranteed in order to improve the functionality of the fully assembled head.

## **ASSEMBLED HEAD TEST**

Final inspection and testing according to a defined test sheet to guarantee the accuracies specified in the head's technical documentation.





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## **APPLICATION FIELDS**



















