



### TLT-180 COLIBRÌ DD TILTING ROTARY TABLE

Technai Team S.p.A. was established in 1993 upon a sound basis of both mechanical and electromagnetic engineering skills. Today is widely regarded as one of the major specialists in Direct Drive technology applied to Machine Tool and Industrial Automation.

Its product range is divided into two main categories:

Components, that is torque motors elements, and Systems like milling heads, rotary and tilting tables, rotary actuators and individual dedicated function's modules.

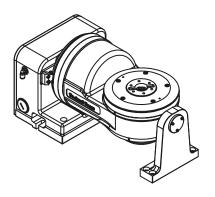
#### PRODUCT OVERVIEW

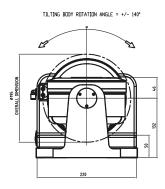
Colibrì 180 is a high dynamic 2-Axes tilting and rotary table, powered by Direct Drive torque motors.

The product is small, compact and extremely lightweight.



# The table is made of two modules, each one equipped with torque motor, bearing, encoder and clamping device. The customer is left only the connection of the utilities (electrical and pneumatic) and of water cooling system, if present.





TECHNICAL DATA	
Techincal Direct Drive servo motor Rotary and tilting axis	MK-CI 140-30-WA
Continuos torque / Max torque (natural air cooled)	8.6 Nm / 38 Nm
Feedback encoder type Renishaw	Signum - sin / cos 1Vpp / RS 422
Feedback resolutions	0.0001°
Positioning accuracy	+/- 20 sec.
Positioning repeatability	+/- 3 sec.
Max allowable axis accelleration	50 rad/sec^2
Max programmable speed (rotary/tilting)	200 rpm / 100 rpm
Typical position gain (kv)	10 -:- 20
Max allowable work piece volume	Dia. 180 x H100 mm
Allowable load	6 Kg
Total Weight	25 Kg



## APPLICATION FIELDS

Colibrì 180 is designed to meet the increasing demand for extremely high dynamic 5-axes interpolation machining operations in the most diverse industrial sectors.

Among others we can mention:

- Eyewear
- Engraving
- Jewellery
- Orthodontics molding
- Soft materials machining

## MAJOR INNOVATIONS AND BENEFITS

TLT 180 Colibrì reaches outstanding speed-acceleration performance as required by High Speed Cutting technology on full 5 axes surface programming.

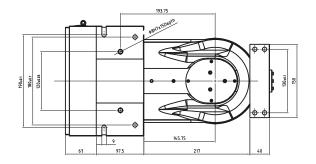
**Integrated Direct Drive technology** 

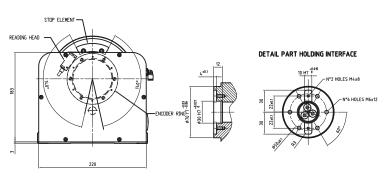
Compact and lightweight

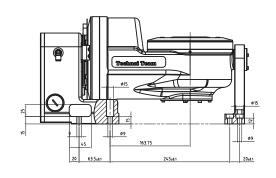
Ease and speed of installation

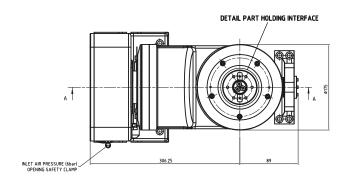
Maintenance free

Positioning accuracy









#### **CONFIGURATION OPTIONS** under request

- Safety clamp on tilting axis
- Integrated 3-way pneumatic distributor for tool holder clamping device
- Tailstock support for superior structural rigidity
- Integrated digital servo drive axis controller



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