

TURNING AND MILLING TABLES

TMT

WITH DIRECT DRIVE AND HIGH PRECISION BEARINGS



TECHNICAL CHARACTERISTICS	3
TMT-P 300 Table.....	4
TMTI-T 700 and TMTI-F 700 Tables.....	6
TMT-T 700 and TMT-F 700 Tables.....	8
TMTI-T 1000 and TMTI-F 1000 Tables.....	10
TMT-T 1000 and TMT-F 1000 Tables.....	12
TMT 1400 Table	14
TMTL-T 1400 and TMTL-F 1400 Tables	16
TMTU 1000 Table	18

TECHNICAL CHARACTERISTICS

TMT series of turning and milling tables with Direct Drive was developed with the goal to get a precise, strong and reliable product.

Being equipped with Direct Drive motors they can reach high accuracy and repeatability in positioning, removing all the backlash, inaccuracies and vibrations that can be typical of gear transmission.

This technical solution is also important because it let us use the table as angular positioning system.

Our tables are compatible with most common drive and control systems for Machine tools.

The different models have following names:

TMT-P – Table for precision angular positioning

TMT-F – Table for milling

TMT-T – Table for turning

TMTU – Universal Table can work both in vertical and horizontal position and also as a indexing system.

We have designed some of our models to be embedded in customer machine (E.g. TMTI-F)

Some models have a lighter version (E.g. TMTL-T) that have smaller dimensions with same table diameter, clearly with lower performances (lower max. weight).

All the tables are equipped with a hydraulic holding brake, with the exclusion of TMT-P 300 that have only the predisposition.

All our products are under development and improvement, if you have special requirements it is possible to contact our technical office that will give you all the needed explanations.

If the product you need is not in our catalogue, we can develop new solutions, our expertise in Direct Drive solutions let us assist the customer in the development of custom designs.

Please note – All technical information are up to date at press time, products can be modified and improved, so it is better to contact technical office for technical and dimensional verifications.

TMT-P 300 Table

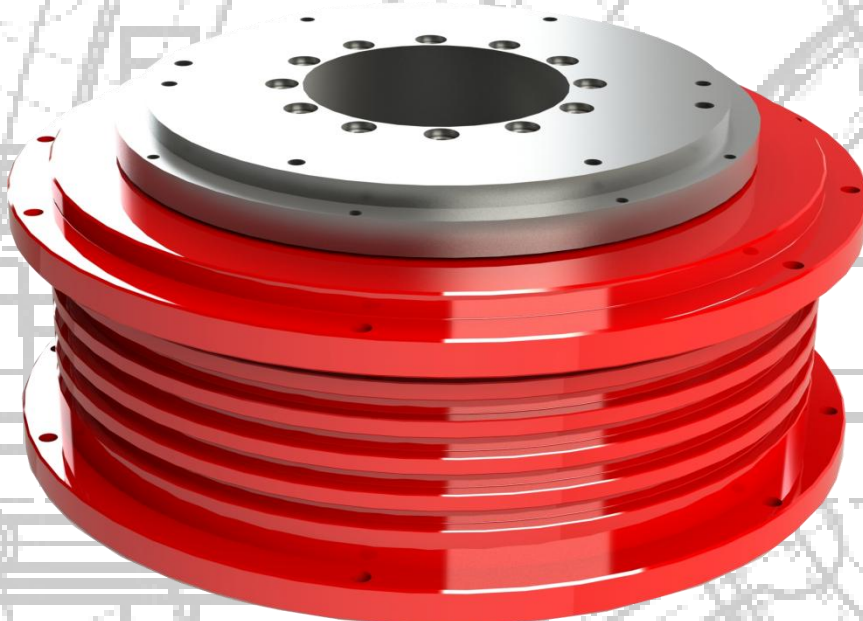
The positioning table **TMT-P 300** is with natural cooling, the only connections are power supply and signal cable. The table can be mounted on the work plane with fixing screws and alignment pins. (See Layout at page. 5). Table can be mounted both in vertical and horizontal position.

TMT-P 300 TABLE CHARACTERISTICS		
MAX. TABLE DIAMETER	Ø400	mm
BEARING LUBRICATION	GREASE	
MAX. SPEED	500	RPM
KNEE SPEED	175	RPM
MAX. PIECE WEIGHT	2.000	kg
MAX. RADIAL FORCE	20.000	N
TOTAL WEIGHT OF TABLE	80	kg
NOMINAL TORQUE (S1)	75	Nm
MAX TORQUE	265	Nm
NOMINAL POWER (S1)	1,3	kW
POSITIONING ACCURACY	±0.033°	°
POWER (SINGLE PHASE)	240	V

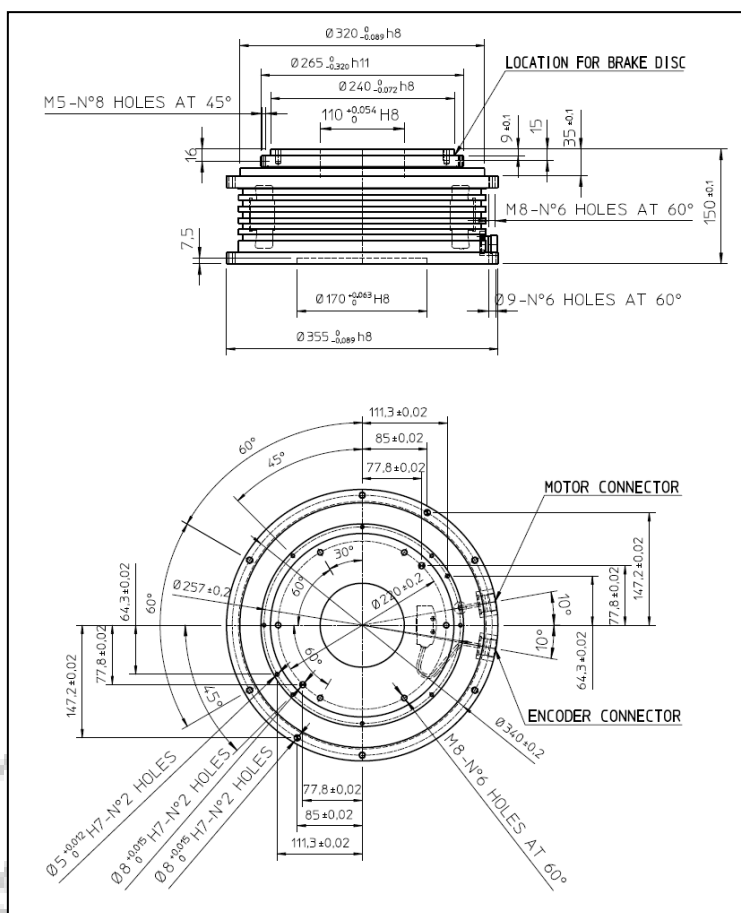
The table have the predisposition for a hydraulic holding brake, available on request.

Table is delivered without platform, it is usually made by customer based on his needs, recommended diameters for table are as follow:

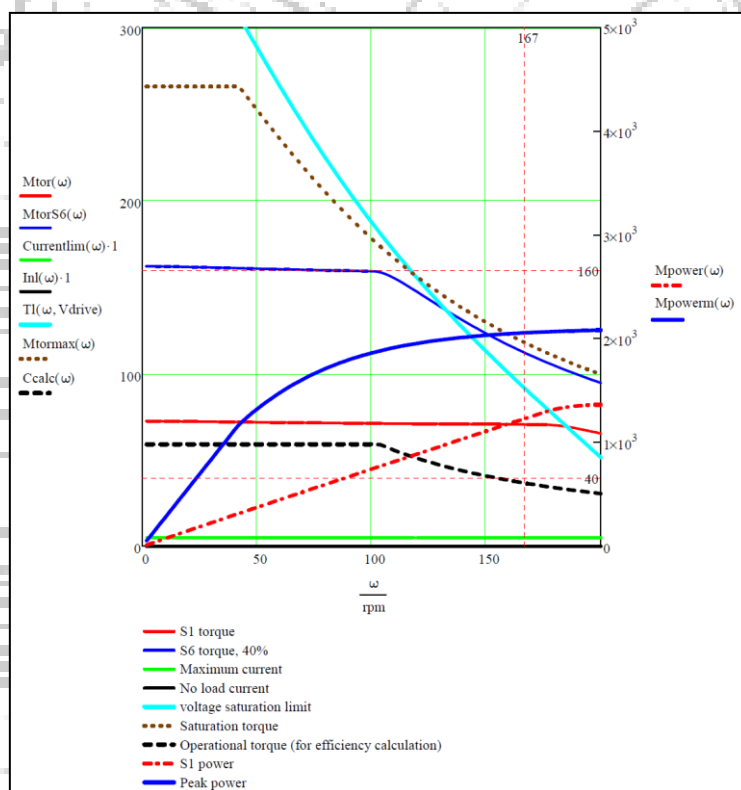
STANDARD TABLE DIAMETERS (mm)			
Ø250	Ø300	Ø350	Ø400



LAYOUT TMT-P 300



TORQUE MOTOR CHARACTERISTICS



TMTI-T 700 and TMTI-F 700 Tables

TMTI 700 table is available in turning version (suffix T) and milling only version (suffix F) it is designed to be embedded in customer machine. The Direct Drive is thermally stabilized with coolant. Angular accuracy depends on the encoder that is to be mounted, we have designed different versions based on accuracy required by customer. The table is equipped with a hydraulic holding brake.

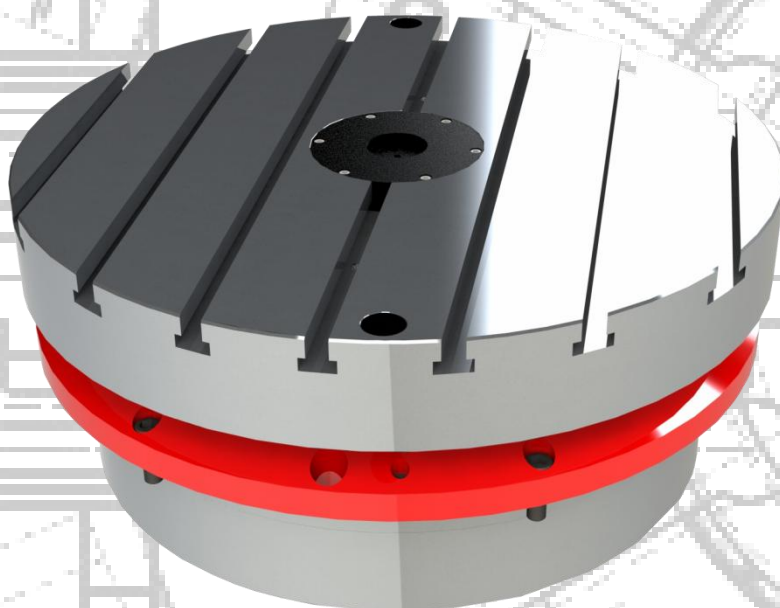
For dimensions see Layout at page 7.

This table can be mounted both in vertical and horizontal position.

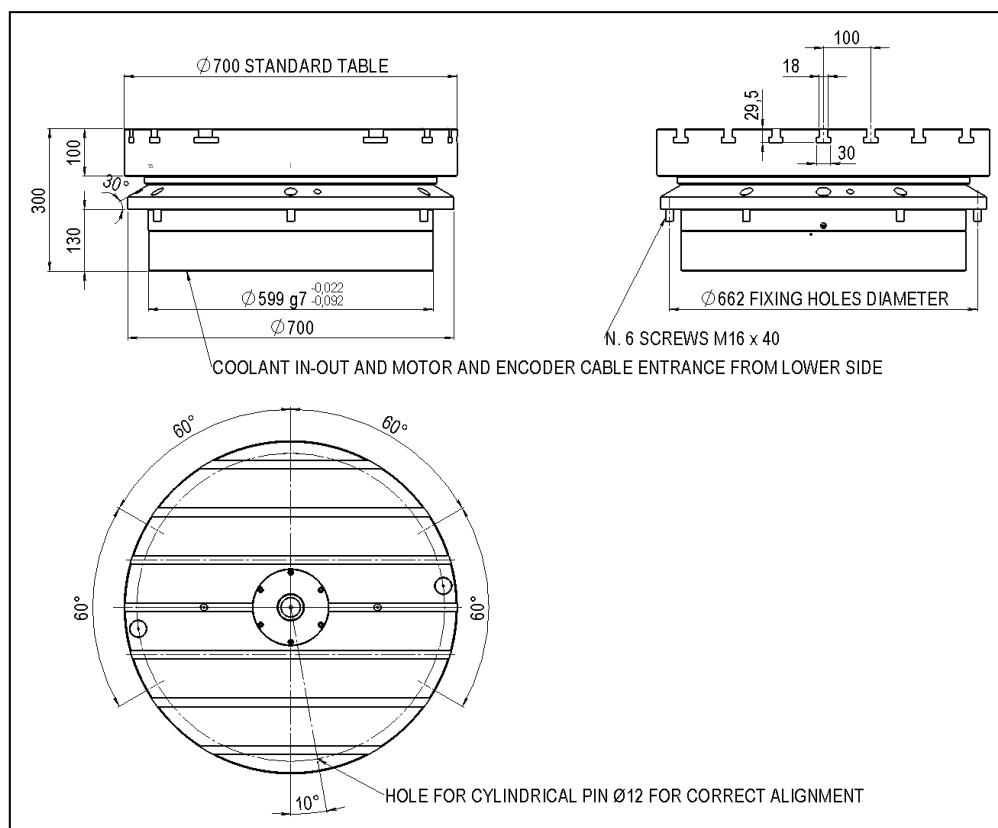
TABLE CHARACTERISTICS	TMTI-T 700	TMTI-F 700	
STANDARD TABLE DIAMETER	Ø700	Ø700	mm
BEARING LUBRICATION	GREASE	GREASE	
MAX. SPEED	300	130	RPM
KNEE SPEED	87	87	RPM
MAX. PIECE WEIGHT	2.500	4.000	kg
TABLE WEIGHT	300	300	kg
NOMINAL TORQUE (S1)	1.677	1.677	Nm
MAX. TORQUE	3499	3499	Nm
NOMINAL POWER (S1)	16	16	kW
MAX BRAKING TORQUE	6.000	6.000	Nm

The table can be customized according to customer needs (radial or longitudinal slots) round or square shape, available diameters for table are as follow:

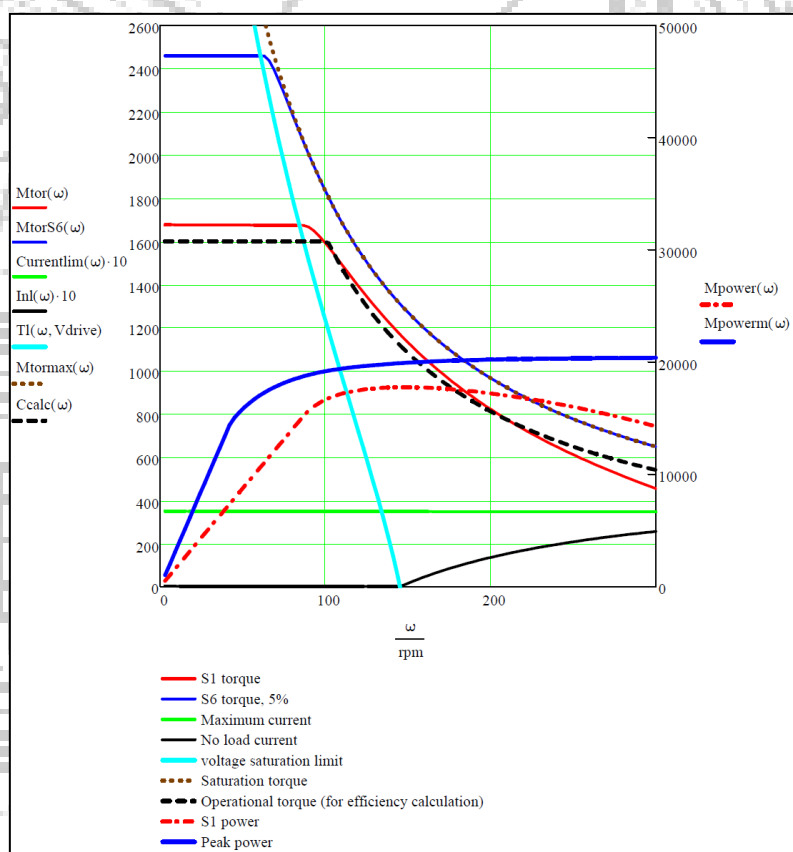
TABLE DIAMETERS (mm)		
Ø630	Ø700	Ø800
□500		□630



LAYOUT TMTI-T 700 and TMTI-F 700



TORQUE MOTOR CHARACTERISTICS



TMT-T 700 and TMT-F 700 Tables

TMT 700 table is available in turning version (suffix T) and milling only version (suffix F) it is designed to be mounted on the work plane of customer machine. The Direct Drive is thermally stabilized with coolant. Angular accuracy depends on the encoder that is to be mounted, we have designed different versions based on accuracy required by customer. The table is equipped with a hydraulic holding brake.

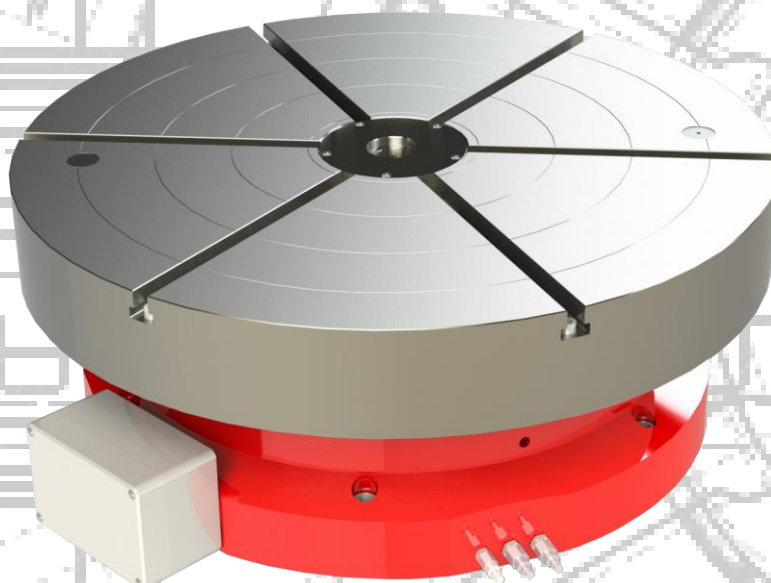
For dimensions see Layout at page 9.

This table can be mounted both in vertical and horizontal position.

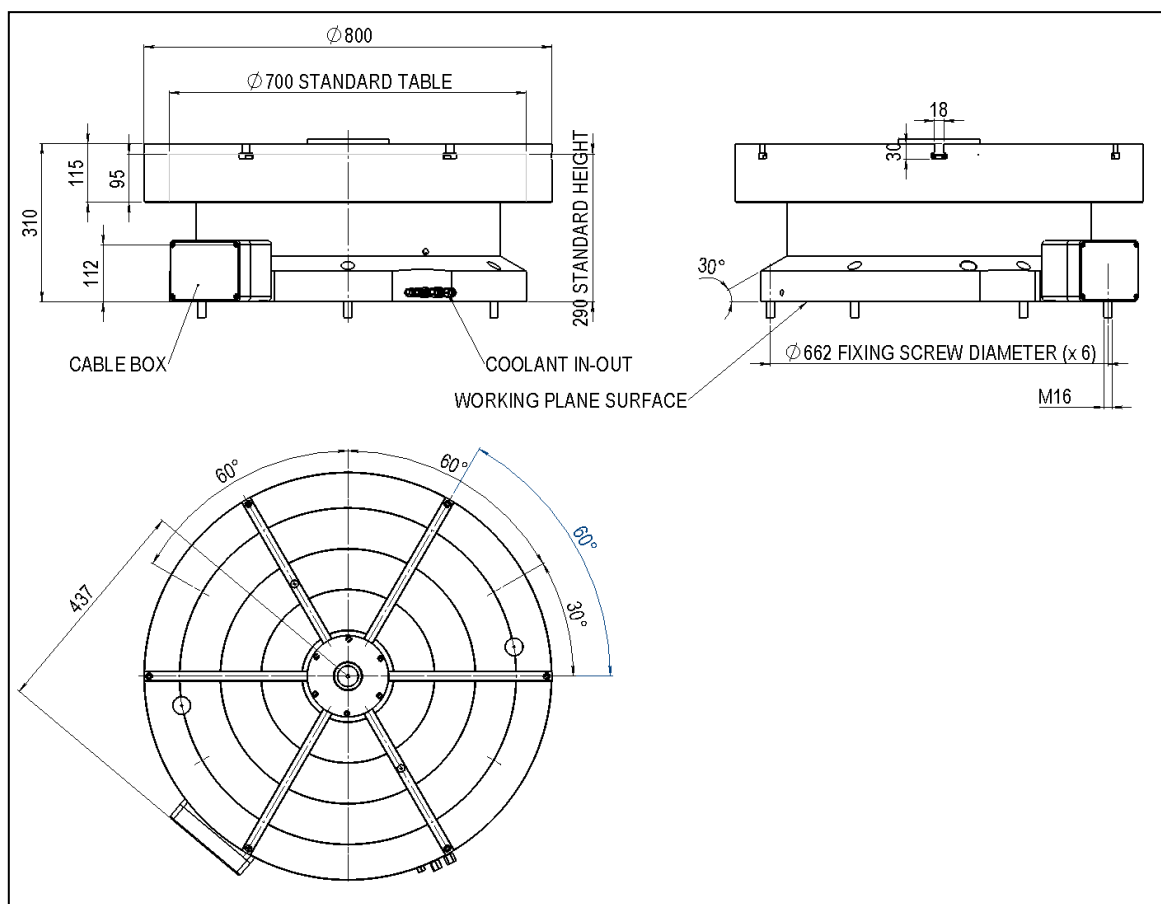
TABLE CHARACTERISTICS	TMT-T 700	TMT-F 700	
STANDARD TABLE DIAMETER	Ø700	Ø700	mm
BEARING LUBRICATION	GREASE	GREASE	
MAX. SPEED	300	130	RPM
KNEE SPEED	87	87	RPM
MAX. PIECE WEIGHT	2.500	4.000	kg
TABLE WEIGHT	300	300	kg
NOMINAL TORQUE (S1)	1.677	1.677	Nm
MAX. TORQUE	3499	3499	Nm
NOMINAL POWER (S1)	16	16	kW
MAX BRAKING TORQUE	6.000	6.000	Nm

The table can be customized according to customer needs (radial or longitudinal slots) round or square shape, available diameters for table are as follow:

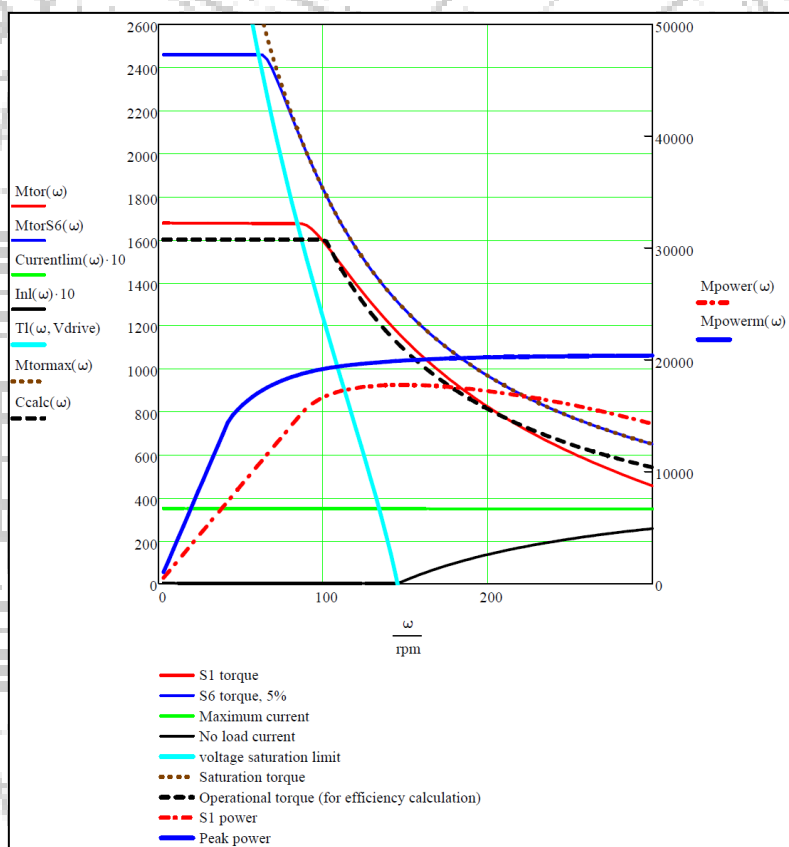
TABLE DIAMETERS (mm)		
Ø630	Ø700	Ø800
□500		□630



LAYOUT TMT-T 700 and TMT-F 700



TORQUE MOTOR CHARACTERISTICS



TMTI-T 1000 and TMTI-F 1000 Tables

TMTI 1000 table is available in turning version (suffix T) and milling only version (suffix F) it is designed to be embedded in customer machine. The Direct Drive is thermally stabilized with coolant. Angular accuracy depends on the encoder that is to be mounted, we have designed different versions based on accuracy required by customer. The table is equipped with a hydraulic holding brake.

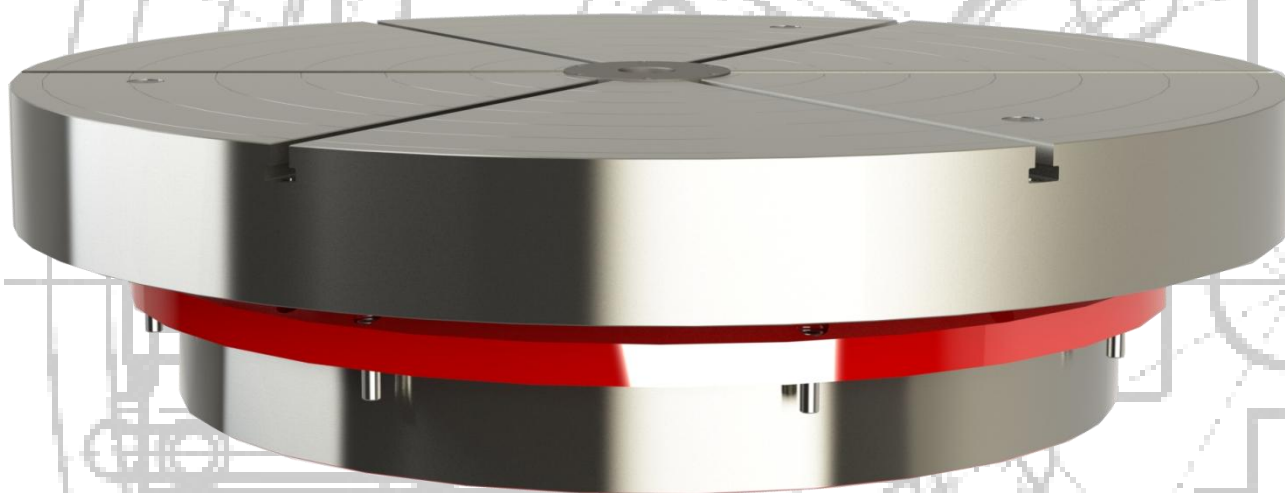
For dimensions see Layout at page 11.

This table can be mounted both in vertical and horizontal position.

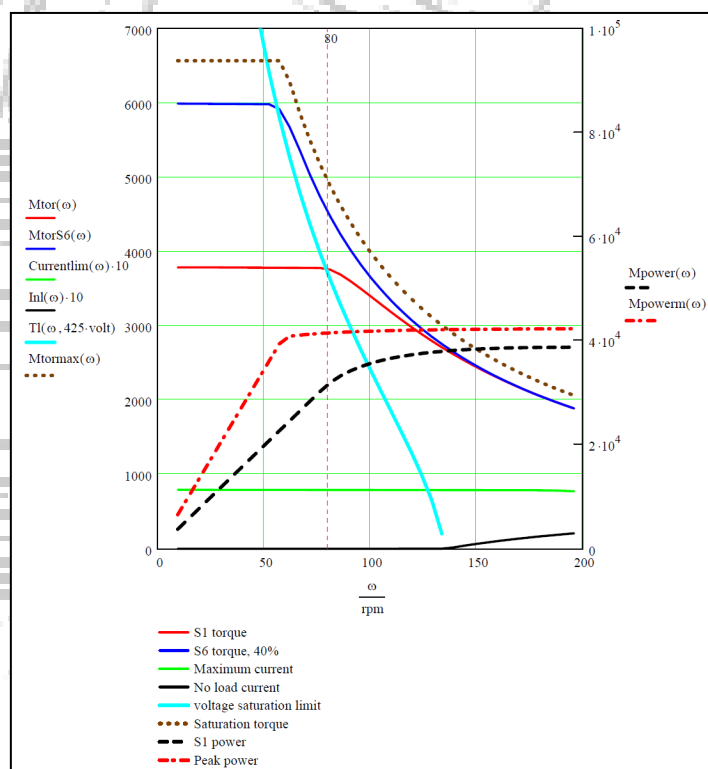
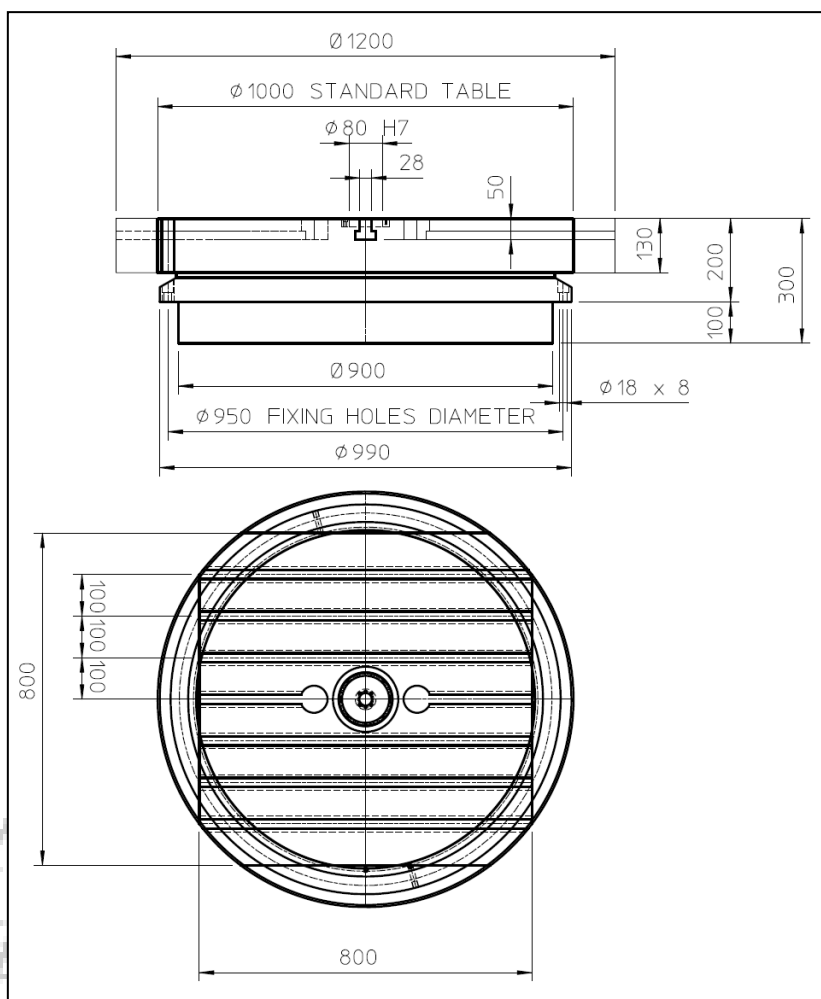
TABLE CHARACTERISTICS	TMTI-T 1000	TMTI-F 1000	
STANDARD TABLE DIAMETER	Ø1000	Ø1000	mm
BEARING LUBRICATION	GREASE	GREASE	
MAX. SPEED	600	80	RPM
KNEE SPEED	120	120	RPM
MAX. PIECE WEIGHT	3.000	5.000	kg
TABLE WEIGHT	2.000	2.000	kg
NOMINAL TORQUE (S1)	3.800	3.800	Nm
MAX. TORQUE	6.000	6.000	Nm
NOMINAL POWER (S1)	38	38	kW
MAX BRAKING TORQUE	16.000	16.000	Nm

The table can be customized according to customer needs (radial or longitudinal slots) round or square shape, available diameters for table are as follow:

TABLE DIAMETERS (mm)	
Ø1000	Ø1200



TORQUE MOTOR CHARACTERISTICS



TMT-T 1000 and TMT-F 1000 Tables

TMT 1000 table is available in turning version (suffix T) and milling only version (suffix F) it is designed to be mounted on the work plane of customer machine. The Direct Drive is thermally stabilized with coolant. Angular accuracy depends on the encoder that is to be mounted, we have designed different versions based on accuracy required by customer. The table is equipped with a hydraulic holding brake.

For dimensions see Layout at page 13.

This table can be mounted both in vertical and horizontal position.

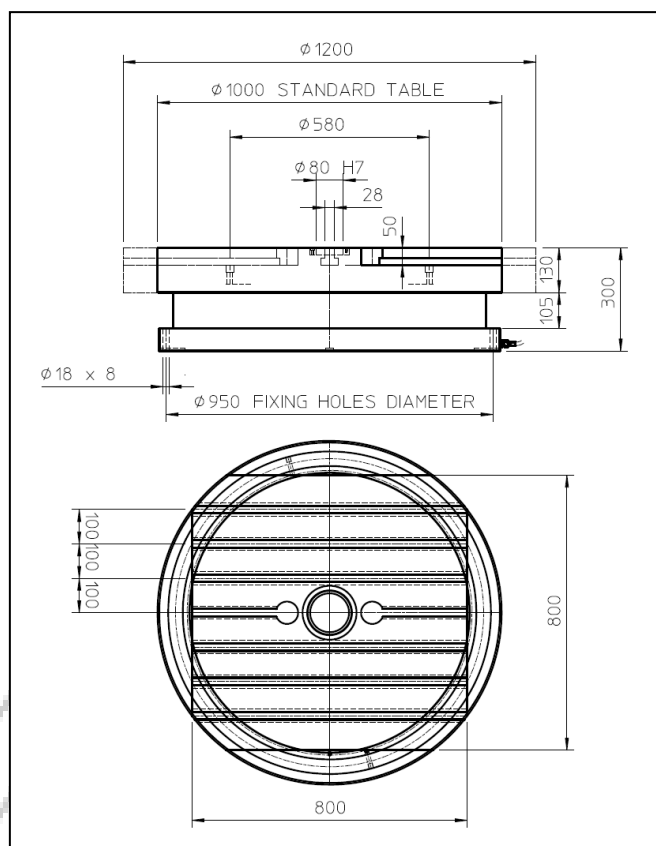
TABLE CHARACTERISTICS	TMT-T 1000	TMT-F 1000	
STANDARD TABLE DIAMETER	Ø1000	Ø1000	mm
BEARING LUBRICATION	GREASE	GREASE	
MAX. SPEED	600	80	RPM
KNEE SPEED	120	120	RPM
MAX. PIECE WEIGHT	3.000	5.000	kg
TABLE WEIGHT	2.000	2.000	kg
NOMINAL TORQUE (S1)	3.800	3.800	Nm
MAX. TORQUE	6.000	6.000	Nm
NOMINAL POWER (S1)	38	38	kW
MAX BRAKING TORQUE	16.000	16.000	Nm

The table can be customized according to customer needs (radial or longitudinal slots) round or square shape, available diameters for table are as follow:

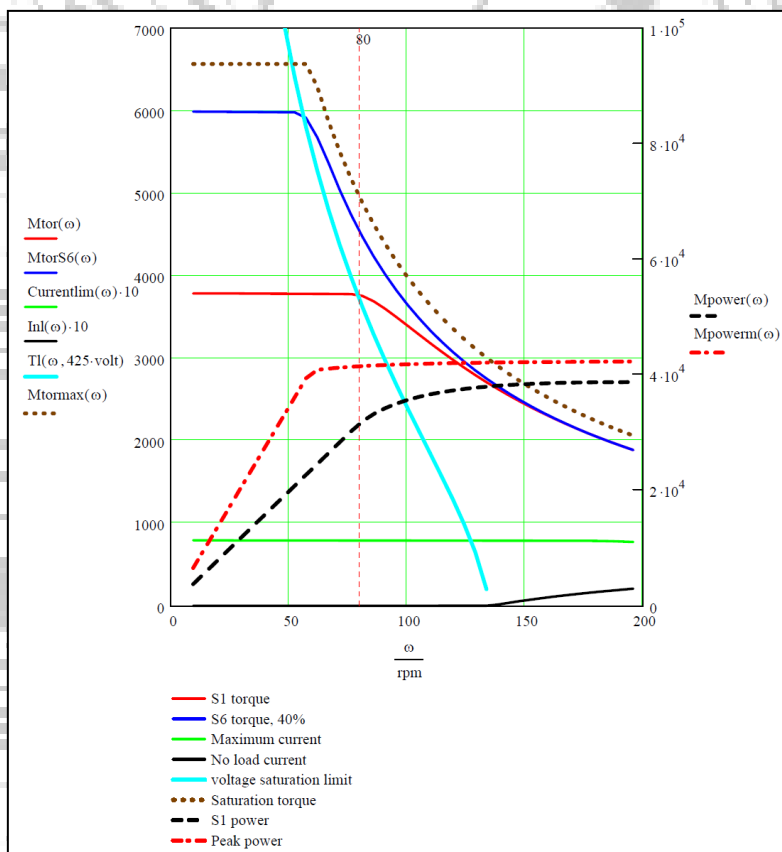
TABLE DIAMETERS (mm)	
Ø1000	Ø1200



LAYOUT TMT-T 1000 and TMT-F 1000



TORQUE MOTOR CHARACTERISTICS



TMT 1400 Table

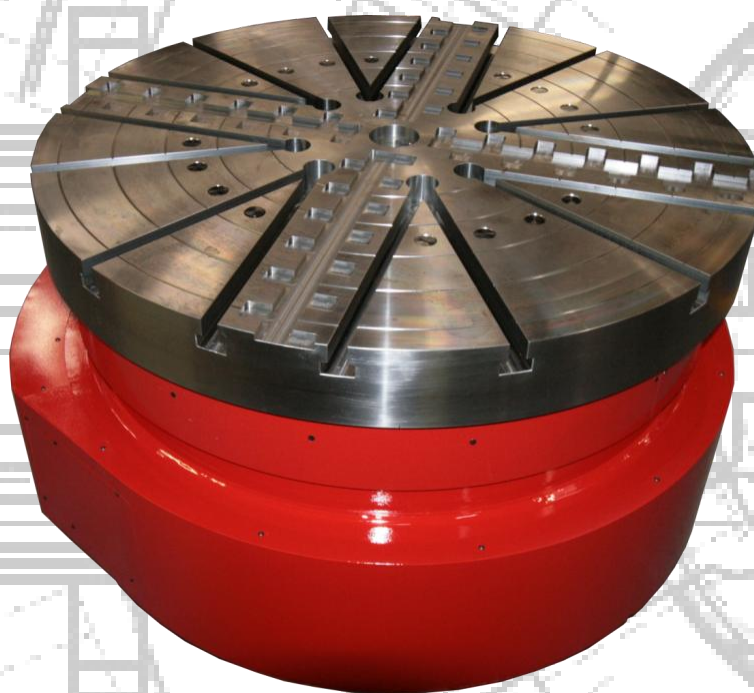
TMT 1400 turning and milling table is designed for harsh operating conditions (heavy turning and milling) it is equipped with high load and high precision bearings. It is designed to be mounted on the work plane of customer machine or directly on the ground with leveling systems. The Direct Drive is thermally stabilized with coolant. Angular accuracy depends on the encoder that is to be mounted, we have designed different versions based on accuracy required by customer. (For dimensions see Layout at page 15). The table is equipped with a hydraulic holding brake. This table can be mounted only in vertical position.

TMT 1400 TABLE CHARACTERISTICS		
MAX. TABLE DIAMETER	Ø1.800	mm
BEARING LUBRICATION	OIL	
MAX. SPEED	250	RPM
KNEE SPEED	50	RPM
MAX. PIECE WEIGHT	12.000	kg
TABLE WEIGHT	5.800	kg
NOMINAL TORQUE (S1)	12.194	Nm
MAX. TORQUE	23.219	Nm
NOMINAL POWER (S1)	62	kW

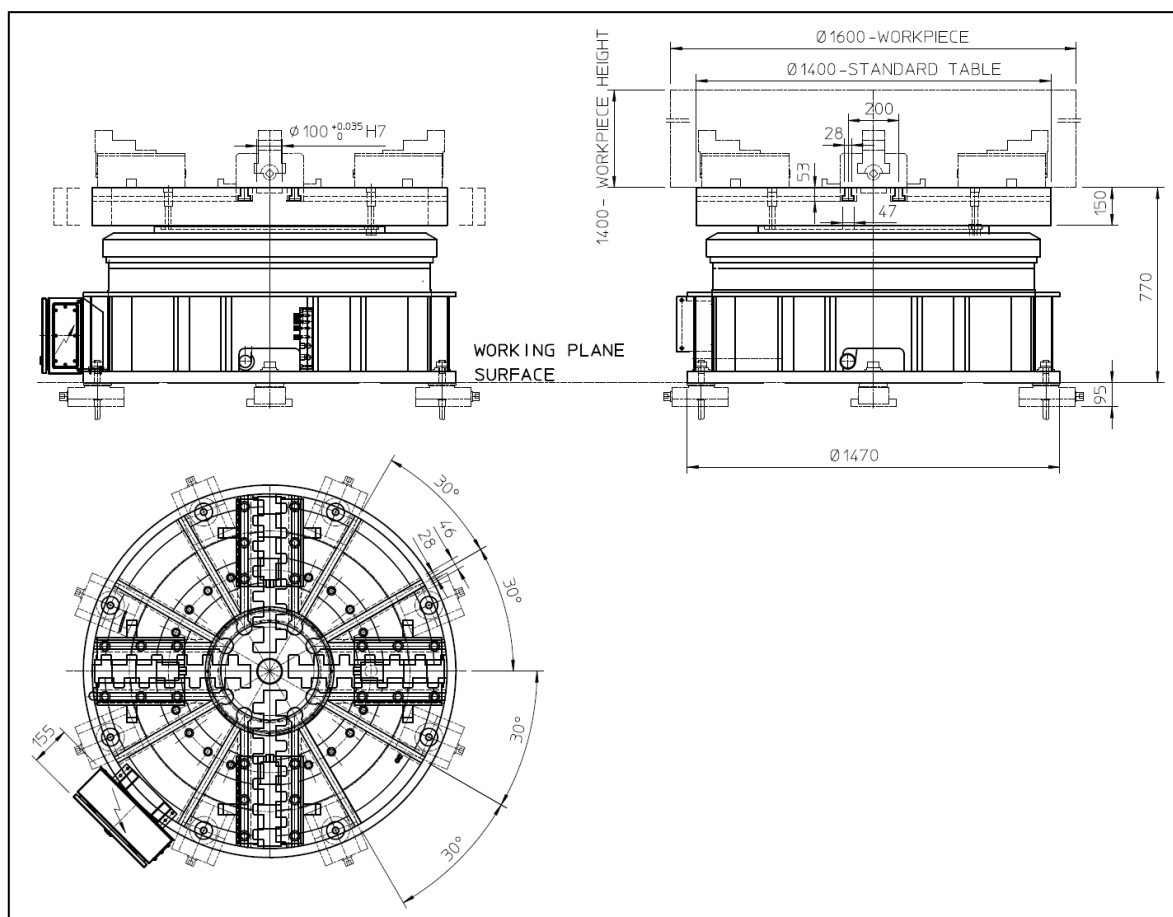
This table is usually built with manual table, it is also possible to build a table with automatic locking system, it have same diameter but is 210 mm higher.

Available diameters for table are as follow:

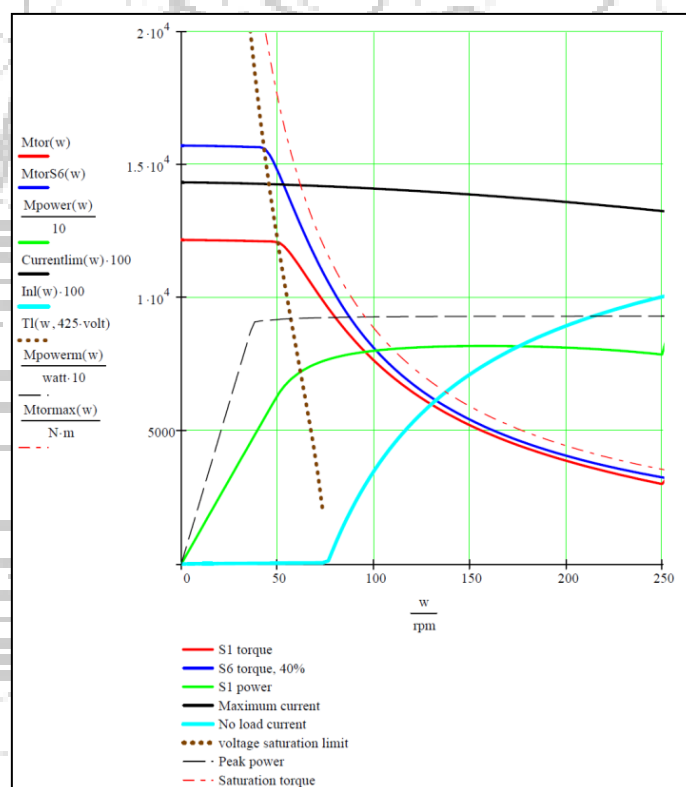
TABLE DIAMETERS (mm)			
Ø1250	Ø1400	Ø1600	Ø1800



LAYOUT TMT 1400



TORQUE MOTOR CHARACTERISTICS



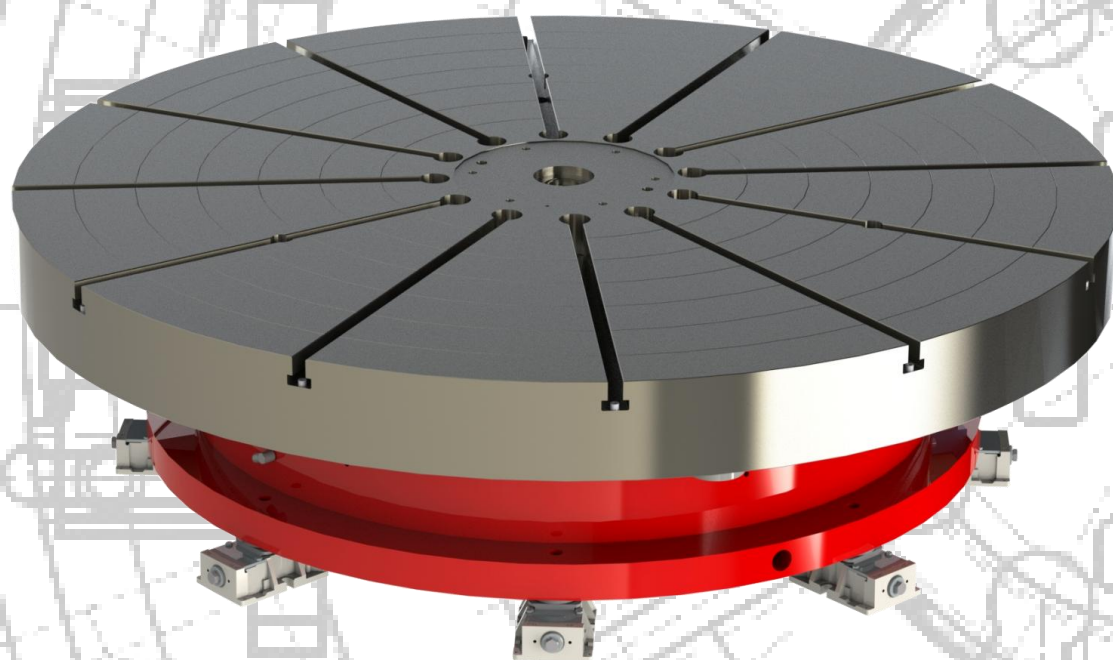
TMTL-T 1400 and TMTL-F 1400 Tables

TMTL-T 1400 turning table and **TMTL-F 1400** milling table are designed for lighter working conditions. It is designed to be mounted on the work plane of customer machine or directly on the ground with leveling systems. The Direct Drive is thermally stabilized with coolant. Angular accuracy depends on the encoder that is to be mounted, we have designed different versions based on accuracy required by customer. (For dimensions see Layout at page 17). This table can be mounted only in vertical position. The table is equipped with a hydraulic holding brake.

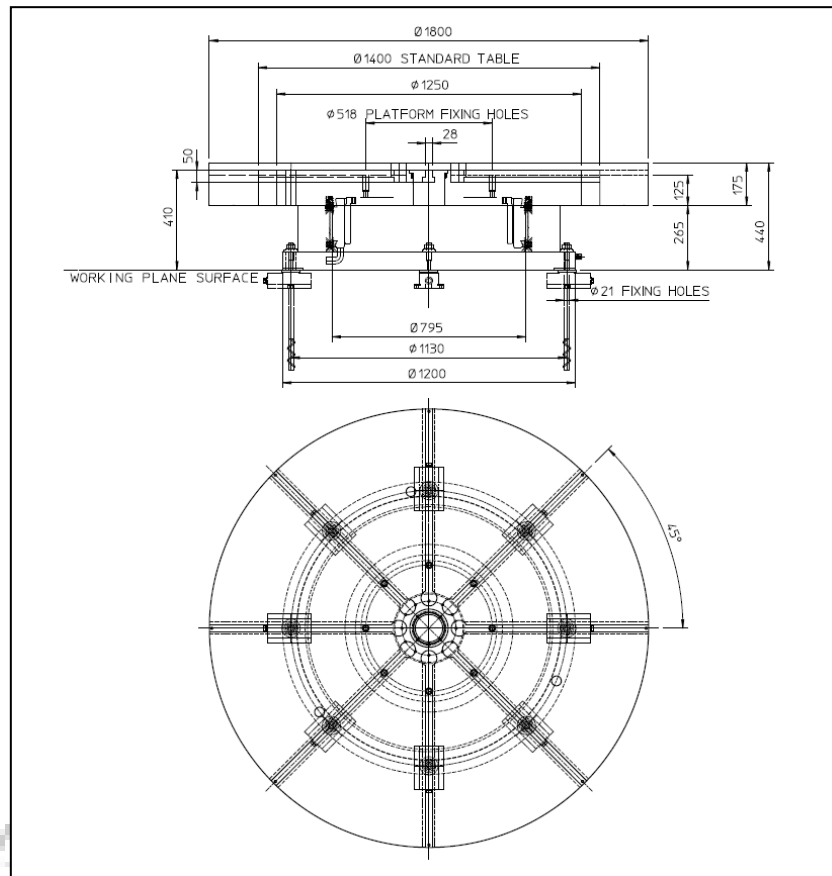
TABLE CHARACTERISTICS	TMTL-T 1400	TMTL-F 1400	
STANDARD TABLE DIAMETER	Ø1.400	Ø1.400	mm
BEARING LUBRICATION	OIL/GREASE	GREASE	
MAX. SPEED	300	60	RPM
KNEE SPEED	75	75	RPM
MAX. PIECE WEIGHT	16.000	16.000	kg
TABLE WEIGHT	5.000	5.000	kg
NOMINAL TORQUE (S1)	6.400	6400	Nm
MAX. TORQUE	11.400	11.400	Nm
NOMINAL POWER (S1)	50,2	50,2	kW
MAX. BRAKING TORQUE	10.000	10.000	Nm

The table is designed with manual piece locking system, but it can be equipped in different ways. Available diameters for table are as follow:

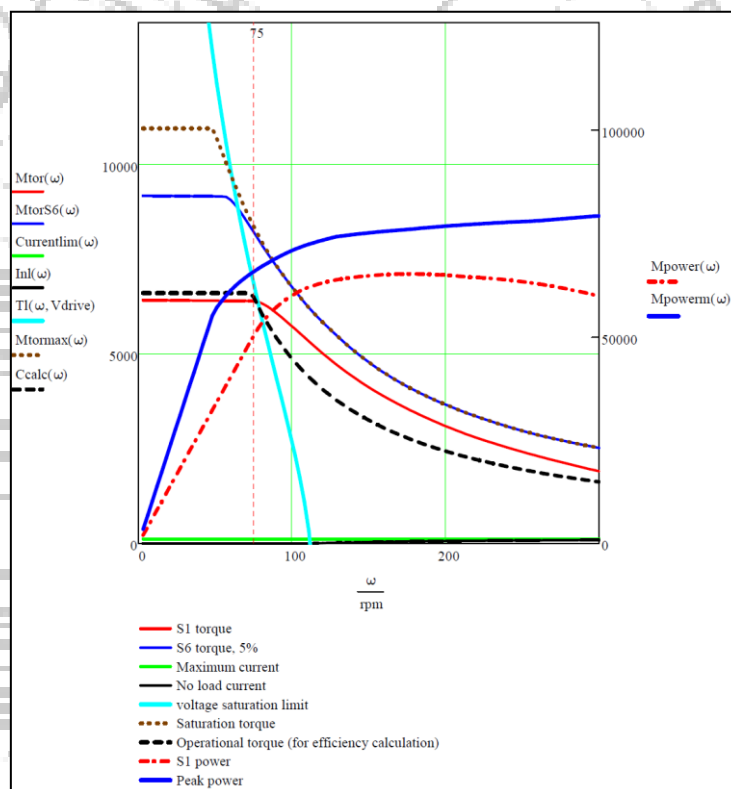
TABLE DIMENSIONS (mm)				
Ø1250	Ø1400	Ø1600	Ø1800	Ø2000



LAYOUT TMTL-F 1400 AND TMTL-T 1400



TORQUE MOTOR CHARACTERISTICS



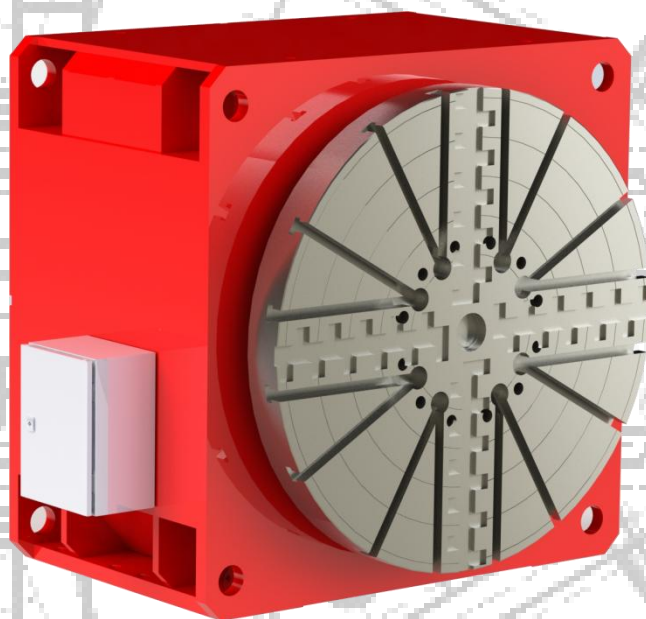
TMTU 1000 Table

TMTU 1000 Universal table was designed for turning and milling both in vertical and horizontal position, it can also be used as Indexing system. (For dimensions see Layout at page 19). The table is available with two Torque motors size, 10.000 Nm and 12.000 Nm. The Direct Drive is thermally stabilized with coolant. The table is equipped with a hydraulic holding brake.

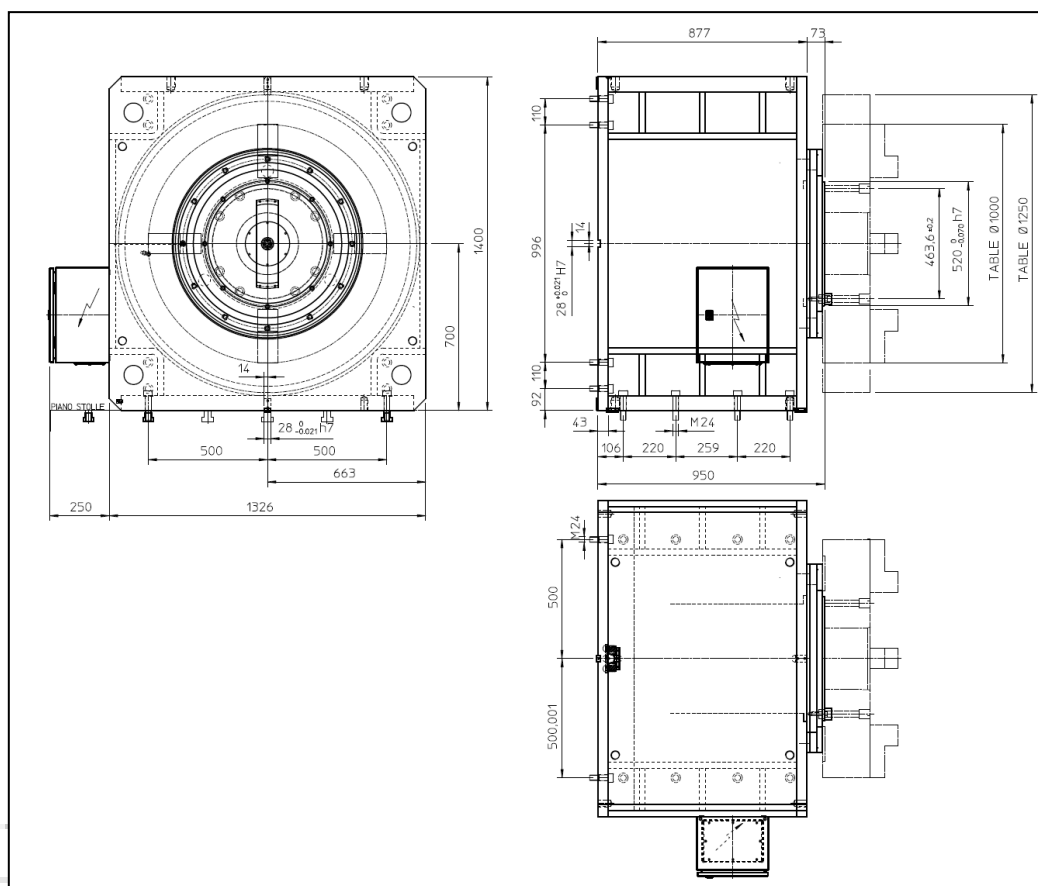
TABLE CHARACTERISTICS	TMTU 1000	
STANDARD TABLE DIAMETER	Ø1.000	mm
BEARING LUBRICATION	GRASSO	
MAX. SPEED	200	RPM
KNEE SPEED	50	RPM
MAX. PIECE WEIGHT	10.000	kg
TABLE WEIGHT	5.000	kg
NOMINAL TORQUE (S1)	10.000	Nm
MAX. TORQUE	14.000	Nm
NOMINAL POWER (S1)	50	kW
MAX. BRAKING TORQUE	20.000	Nm

The table is designed with manual piece locking system, but it can be equipped in different ways. Available diameters for table are as follow:

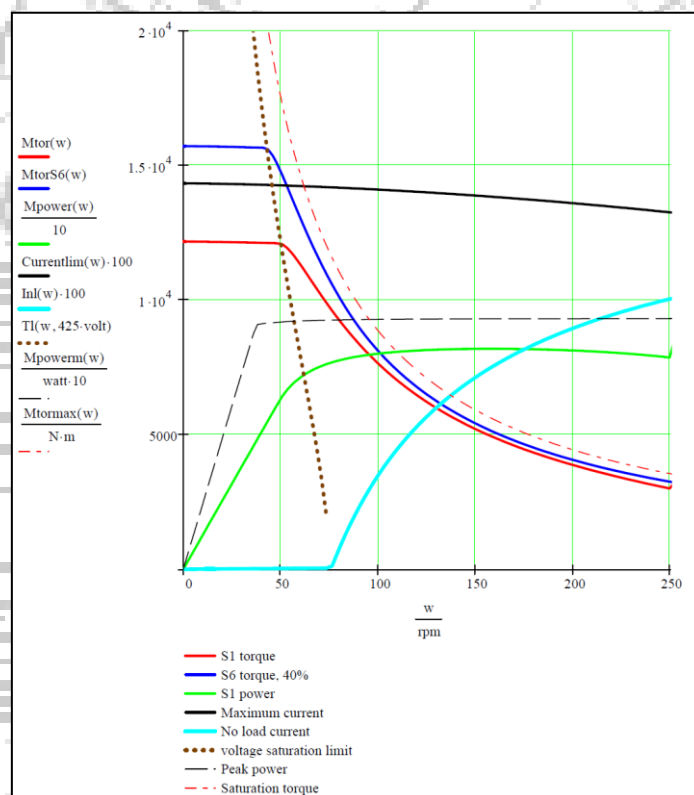
TABLE DIMENSIONS (mm)	
Ø1000	Ø1250

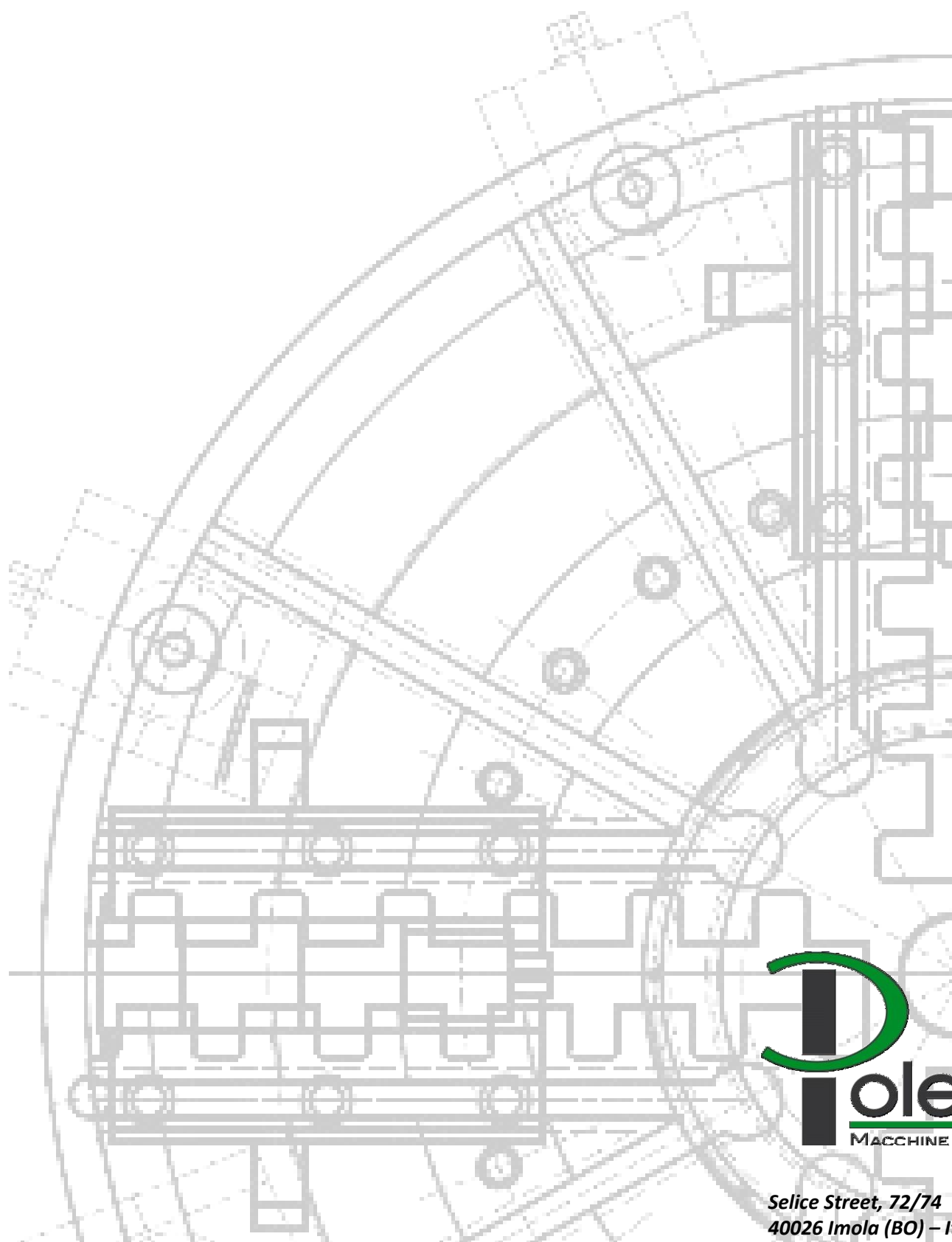


LAYOUT TMTU 1000



TORQUE MOTOR CHARACTERISTICS (VERSION 12.000 Nm S1)





*Selice Street, 72/74
40026 Imola (BO) – Italy
Phone. +39 0542 32203
Fax +39 0542 32270
www.studio-poletti.it
info@studio-poletti.it*