

# Twister t60dt (driven tools)

- basic machine EMCOTURN E65 T (R6)
- control: SIEMENS or FANUC
- max. turning OD 600 mm
- turret hydraulic with 12 tooling positions VDI 30 / 6 position with driven tools
- extraction unit and cutter
- SealCAM software / hardware
- flexible clamping system up to 400 mm OD/for bigger ODs clamping discs incl. 1 set clamping plate
- tools basic equipment, VDI-holders inclusive and Tool holder
- keys and necessary additionals

### all round price: on request

- installation in Europe inclusive
- installation outside Europe EUR 3.000,00

optional equipment	
set VDI, tool holder and tool inserts for Aluminium parts	2.890,00 EUR
set extra tool mini	1.885,00 EUR
set extra tool maxi	3.210,00 EUR
PC-desk Alu	1.769,00 EUR
work table with Tool rack	966,00 EUR
band saw	810,00 EUR
airplast	490,00 EUR
cooling water control equipment	285,00 EUR
chip con	998,00 EUR
milling cutter for grooves	2.700,00 EUR
tool grinding system	1.922,00 EUR
tool lapping system	2.470,00 EUR
transformer – 60	3.270,00 EUR
interface barfeeder	2.350,00 EUR
sea freight 40 ft container CFR port and sea freight packing	on request

#### delivery

ex works, not covered by insurance delivery time usually 8 – 12 weeks or rather against agreement

#### training

1 week for 1 person free on the ordered machine in Klagenfurt excl. board/lodging and travel each further person EUR 200,00 / day excl. board/lodging and travel alternatively: after installation at your place - EUR 400,00 / day excl. board and lodging

#### payment

30 % against order / prompt
60 % against delivery - before dispatch / prompt
10 % after successful training and installation 30 days net

#### warranty

1 year effective from date of installation

All above stated data results from random tests which were taken from the ongoing production. All data was established based on standard test-products according to ISO, DIN and ASTM standards and can basically not be carried over to the completed seal.

Our applied technical advice, either oral, written or through tests is given according to our best knowledge. However, this information is to be considered as non-obligatory instruction, also in terms of any protective rights of a third party, and does not exempt you from testing our product in reference to its suitability for the intended process and purpose. Utilisation, application and processing of the products occur entirely outside of our control and are therefore exclusively your responsibility. However, should a case of liability come into question, it will be limited to all damages in the value of the product which we delivered and you used. By all means, we do warrant the impeccable quality of our products in accordance with our general sales and delivery conditions.



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Capacity		
Swing over bed	[mm]	ø 640
Max. machining diameter	[mm]	ø 600
Max. machining length	[mm]	520
Max. bar work diameter	[mm]	ø 65
Travel		
Travel in X-axis	[mm]	320
Travel in Z-axis	[mm]	610
Main spindle	[]	
Speed range	[rpm]	60-4200
Max. torque	[Nm]	192
Spindle nose acc. to DIN 55026	[]	A2-6
Spindle bearing inner diameter	[mm]	Ø100
Spindle bore diameter	[mm]	ø 73
C-Axis		010
Resolution	[°]	0,001°
Rapid speed	[rpm]	100
Spindle indexing w/ disc brake	[°]	0,01°
Main drive		0,01
Main drive power @ 100/40% duty cycle	kW	15/18
Turret		10/10
Number of tool station		12
Quick change tool shank according to DIN 69880		VDI 30
Turret indexing time	[sec]	0,2
Rotary tools (Coupling DIN5480)		0,2
Speed range	[rpm]	0-5000
Max. torque @ 20% duty cycle	[Nm]	20
	• •	5
Max. power @ 20% duty cycle	[kW]	5 12
Number of rotary tools	[0/]	25
Max. duty cycle for max. speed or max. power	[%]	20
Coolant system	m	000
Tank capacity	[]]	230
Coolant pump	[kW]	0,57/2,2
Coolant delivery @ 3,5bar/1bar	[l/min]	15/65
Coolant delivery @ 10bar/5bar (optional)	[l/min]	5/50
Hydraulic system		
Oil tank capacity	[1]	10
	[j] [bar]	50
Max. pressure for work holding Pneumatic unit		
	[bar]	6
Air pressure required	[l/min]	5
Air volume required		5
Lubrication system	Autom control oil	
Guide ways and ball screws (featuring oil-save logic)	Autom. central oil	
Main animalla anumban animalla (franca franciska anama)	lubrication	
Main spindle, counter spindle (free of maintenance)	Grease lubrication	

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Trygonal Group



Painting		
Light - Grey	RAL No.	7035
Signal - Blue	RAL No.	5005
Signal - Orange	RAL No.	2010
Power supply		
Voltage	[V]	3x400 / PE
Max. voltage fluctuations	[%]	+/-10
Frequency	[Hz]	50/60
Connected load value	[kVA]	20
Main fuse for machine	[A gG,gL]	50
Required short circuit power (in case there is a weak power at the customer	[kVA]	1100
source, a SURPRESSION FILTER F5Z 360 can be offered as a solution)		
Operable temperature range	[°C]	+10 to +35
Use of additional transformers		
A) For connecting the machine to a line supply network without a protective		
conductor (IT-supply, TT-supply) only use an isolating transformer.		
B) For connecting the machine to a line supply network with a protective		
conductor (TN-supply, TN-C supply) you also can use an auto-transformer.		
Dimensions / weight		
Spindle height above floor	[mm]	1100
Machine total height	[mm]	1880
Floor space W×D (without chip conveyor)	[mm]	2852×1722
Total weight of the machine	[kg]	4300
Sound intensity level		
Average sound emission level	[db(A)]	75
According to the following conditions:		
Measuring method: enveloping surface according to DIN 45 635		
Measured point: 1m distance and 1.6m above ground		
Operating mode: max. spindle speed w/ no load		

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