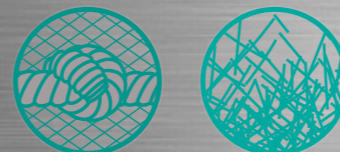




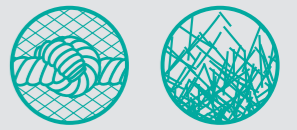
T4TR-E FOUR-FOR-ONE . TWISTERS TECHNOLOGY



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 **SIMA** s.r.l.
a company of the group
dietze + schell



The four-for-one twisting process has reached technological maturity during the last decade. This maturity is proved by the high number of SIMA T4TR-E four-for-one machines purchased by SIMA customers worldwide for twisting natural and synthetic fibers in the range from 5.000 to 100.000 deniers.

The T4TR-E, is ruggedly built to deal with the work requirements when twisting industrial yarns. The T4TR-E machine represents the latest state of the art development which is the result of SIMA's research based on more than seventy years of experience in twisting and rope making machinery. All moving parts are studied for optimal ease of operation resulting in a superb production capacity, allowing the T4TR-E to operate at 2500 rpm, with a standard production capacity of 10000 twists per minute and with a special version T4TRS-E running up to 3500 rpm and 14000 twists per minute.

Thanks to new specially treated materials, the friction coefficient has been reduced to a minimum, allowing a constant specific tenacity of the yarn during the twisting process.

Starting from yarn spools or bobbins, this machine is suitable for making spool from min. 6"x6" to max. 12"x12", equipped with main A.C. driving motors, with mandrel – multiple type for the production of spools with tube - expansion type with link rods for spools without tube.

Screw boxes are available from 6" to 12" traverse.

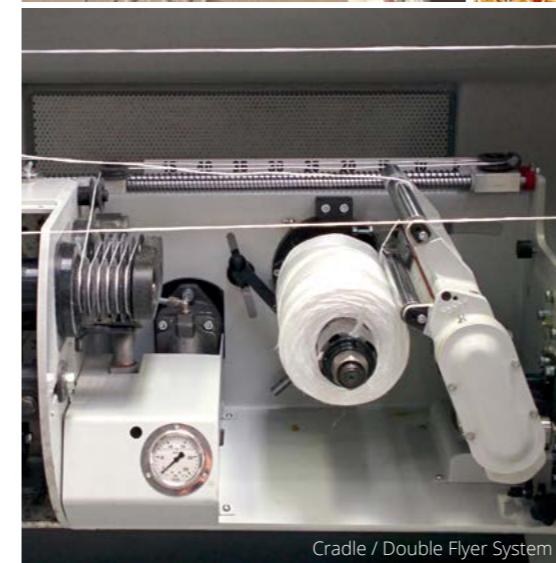
The machine can be combined with AC2000 accumulator and thanks to its high speed it is particularly suitable to work in line directly with extrusion line for producing monofilaments, cable filler and twine production.

The main features of the machine are:

- Main A.C. motor with speed change by means of digital control panel
- Motor with increased performances according to IEC 34-2 regulation, which enables to save energy, increasing the life of motor and bearings, with a lower noise;
- Digital control panel with meter-counter for automatic stopping of the twister at achievement of preselected length of the spool.
- Pneumatic opening of cover.
- Inside lightening.
- Electrical yarn braking device complete with additional braking with 5 pulleys.
- Draw compensator
- 2 cooling fans
- Electric-electronic control board, incorporated inside the base
- Sensor for the speed feedback, which allow to carry out a proportional/integrative control in order to increase the precision, compared to the set set-point. Moreover, it allows to further increase the machine safety by means of an interblock of the protection;
- Modular PLC with Eprom extractable memory;
- Alarm signal on the digital display, so to carry out a diagnosis of the status of the machine, as for example the intervention of the protections;
- Possibility to connect to the PLC, using the serial communication, a supervision unity of higher level, for example a computer with proper communication card, to acquire the production/diagnosis data.



Electrical yarn braking device



Cradle / Double Flyer System

TECHNICAL DATA		T4TR-E	T4TRS-E
Description	Unit	Data	Data
Denier range (Basic Version)	Denier	10.000-120.000	5.000-50.000
Rotation speed (Basic Version)	Rpm	2.500	3.500
Twists (Basic Version)	Twist/ min	10.000	14.000
Twist range with electrical system	Twist / m (Depending on deniers)	20-96 (123)	20-96 (123)
Twist direction		S-Z	S-Z
Spool dimension standard	inches min	6"x6"	6"x6"
	inches max	12"x12"	12"x12"
Spool weight (PP yarns)	kg	10.5	10.5
Energy consumption MAX	kW/h	19	27

