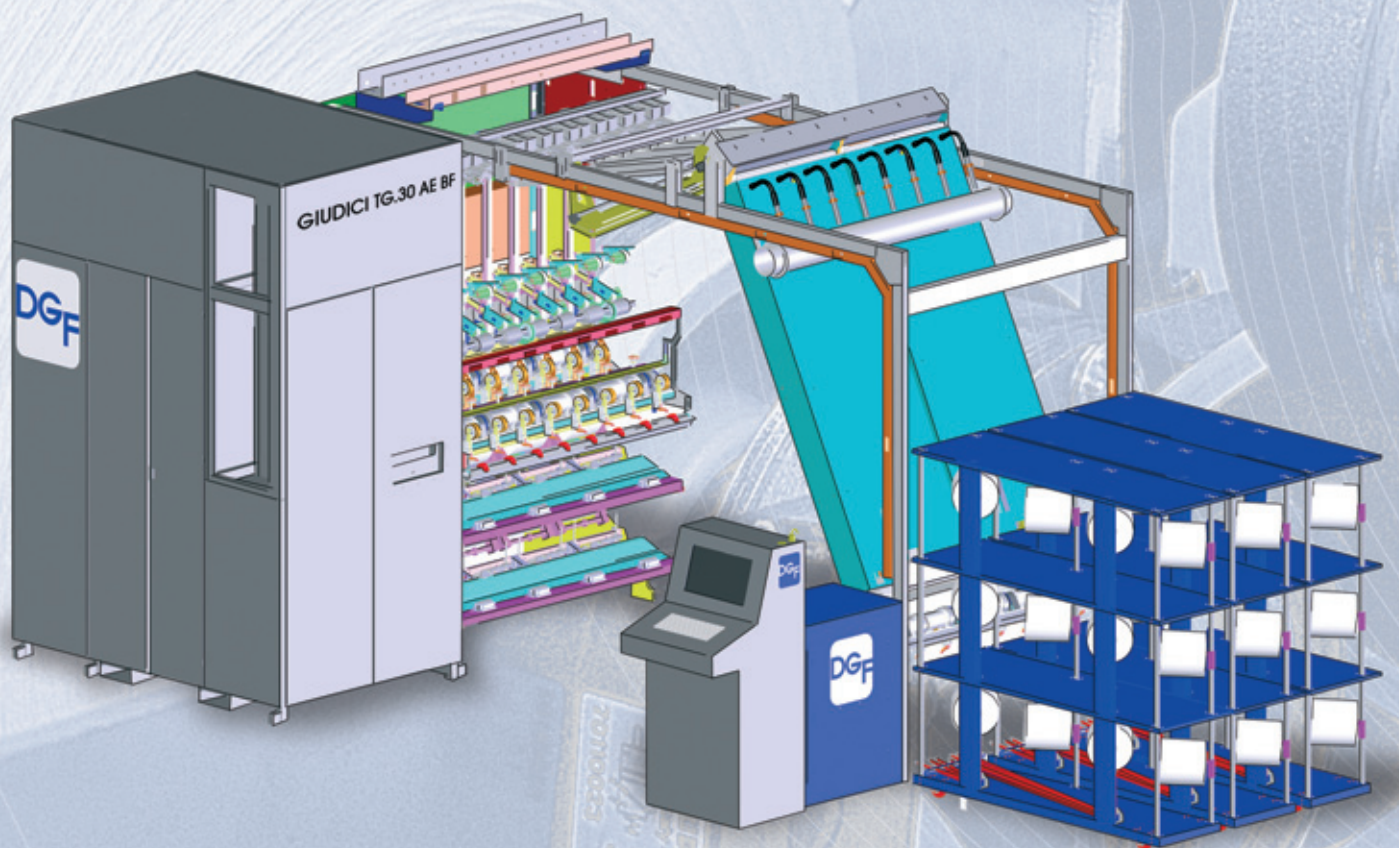


GIUDICI



DRAW TEXTURING MACHINE

Model TG.30 AE BF “COMBI”
with automatic device of elastomer application

DRAW TEXTURING MACHINE

GIUDICI model **TG.30 AE BF "COMBI"** is a double heater, friction draw texturing, double density machine with individual multiple automatic doffing and independent shafts. Equipped with automatic device of elastomer application, for texturing and aircovering on the same machine.

V2 CONFIGURATION machine with straight yarn path in the entire draw texturing zone from the first to the second roller, for high speed drawtexturizing of set or stretch yarns of PES (every textile count).

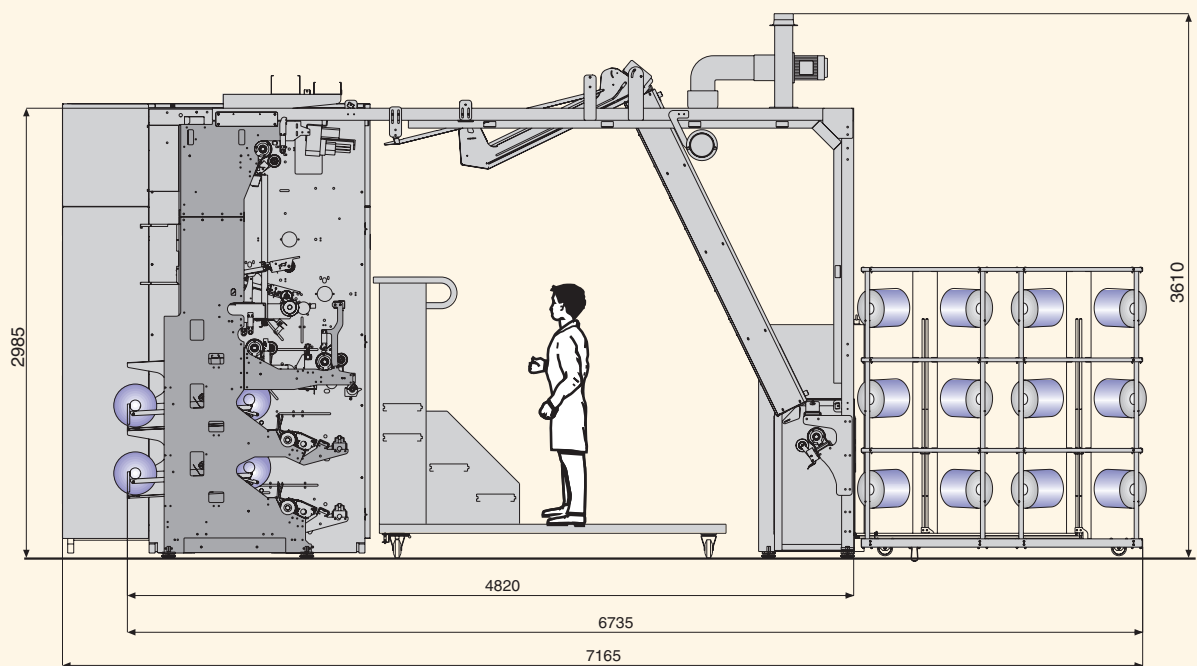
Machine equipped with:

- Primary dowtherm heater 2.30 m length;
- Secondary electric heater 1.00 m length;

TG.30 AE BF "COMBI"

- Giudici motorized spindles, complete with 52 mm diameter, 9 mm thick ceramic discs; discs combination up to 1-8-1;
- Rollers shaft for entangling tension control;
- GQS (Giudici Quality System) for yarn quality control, integrated with the machine;
- Air entangling device consisting of an air-pressure regulator, piping, taps and nipples for jets, complete with intermingling jets.

Layout



Technical description

TECHNICAL DATA

TAKE-UP LEVEL	2
SECTION PITCH	1.700 mm
NUMBER OF POSITIONS PER SECTION	8
DENIER RANGE	Normally from 10 denier up to 300 denier

Computerized control system

Central computer that drives the automatic doffing system and allows to preset and display the following parameters and data:

- basical machine and shafts speed (controlled by inverters)
 - draw-ratio
 - spindles speed (D/Y)
 - take-up speed
 - traverse speed, radial and axial disturbance
 - yarn oiling quantity
 - crossing angle
 - weight of take-up packages for each section of 8 positions
 - production and efficiency statistics
 - temperature of each heater
 - sensors and yarn cutters operation and situation
- An interface is included for connection to an external Customer computer. Possibility of storing all the settings of the machine.

Machine drive

All the shafts are independent, driven by individual motors controlled by vectorial inverters allowing a perfect synchronization.

Individual multiple automatic doffing

A pneumatic system for each position doffs the bobbin that has reached the preset metering, replaces it with an empty tube and restarts the position without the intervention of an operator. Full bobbins magazine capacity: 3, whilst a fourth one is being built. Empty tubes magazine capacity: 6.

Traverse cam box

Individual for each take-up position, with programmable radial and axial disturbance devices.

Traverse unit lubrication

Oil bath lubrication, with oil level check.

Radial disturbance

Allows to preset the basical number of strokes per minute and to control with multi-cycle sequence the amplitude of the disturbance, the ramp up time and ramp down time.

Axial disturbance

Allows the programming of amplitude, active time, dwell time, in synchronization with the radial disturbance. The composition and the sequence of the various cycles are programmed by the central computer, with synoptic display.

TAKE-UP PACKAGE

TUBE DIMENSIONS	length 229 mm or 289mm (tolerance +0mm -0,5mm)
	inside diameter 69mm
	rolled nose end inside diameter 57 mm
TRAVERSE	195mm or 245mm
MAXIMUM PACKAGE DIAMETER	250mm
POSITION OF THE TAIL	right end

Package shape can be biconical or cylindrical. Mechanical adjustment of the tapering angle.

Spindles

GIUDICI motorized spindles 52 mm diameter, 9 mm thick solid ceramic discs, 14 mm diameter shafts.

Discs combination up to 1-8-1.
Mobile threading device.

Twists

Wide range to obtain the desired textured yarn.

Direction of twists

All S, all Z, or alternate S and Z.

Feed rollers

Large diameter steel rollers, with 120 mm ϕ , with hard chromed surface which contacts polyurethane covered spring loaded nip rollers, with 85 mm ϕ .

Primary texturizing heater

High heat insulation dowtherm heaters. Each heater consists of one track with 2 grooves. The grooves are deep with nitrided surface. The heater can be moved to the upright position for easy cleaning. Heater length: 2.30 m. Temperature range: 130°C - 240°C.

Technical description

Secondary stabilizing heater

High heat insulation electric heater, with electronic adjustment through microprocessor.
Heater length: 1.00 m.
Temperature range: up to 240°C.

Yarn cooling zone

With cooling/stabilizing contact tracks
Total length: 1.80 m.
Cooling track length: 1.50 m.

Cradle

Made of steel and pressed die-casting light alloy, equipped with stabilizer/weight compensator, fast package braking system and retractable center for doffing. Allows the formation of big diameter packages.

Yarn traverse device

Provided for all feed rollers.

Supply creels

Separate supply sliding creels, two per section, easy to be loaded at the height of a person, are located at the machine side.

Continuous yarn supply.

The creel is suitable for the following supply packages:

- 400mm \varnothing , 290mm tube length, 250mm traverse, simultaneous creeling.
- 480mm \varnothing , 150mm tube length, 110mm traverse, simultaneous creeling.

Fume exhaust system

Exhausters with suitable collectors located at the heaters ends. The dowtherm heaters are provided with pipes for condensated finish oil removal.

Yarn oiler

Lubricating rolls on each take-up level. The rolls speed is adjustable via the central computer.

Yarn sensors

Electronic sensors located before the take-up. When a yarn breakage occurs the bobbin is automatically changed.

Yarn cutting device

Electrically operated, controlled by the electronic sensors, suitable for single and 2-ply take-up.

Pneumatic threading and doffing system

By compressed air gun with bag.

Service trolley

Suitable service trolley for the operator is provided.



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