



SUD OUEST SYSTEME

machines outils

Braiding of composite materials

2D & 2D- ½

- **Braiding machines for composite fibers:** carbon fibers, glass, aramid...
- Possibility of braids integrating **0 deg fibers** (unidirectional 2D-½).
- **Fiber angle adjustment** at any point along the path.
- **Time zones with adjustable tension.**
- **Water mist spraying to improve friction** between fibers.
- Parts / core carrier on **6-axis robot base**, addition of an **additional linear axis** for long parts.
- **Additional robot** for braid opening or additional support.
- **Slaving the pulling speed** depending on the braiding speed.
- [YOUTUBE LINK](#)





SUD OUEST SYSTEME

machines outils

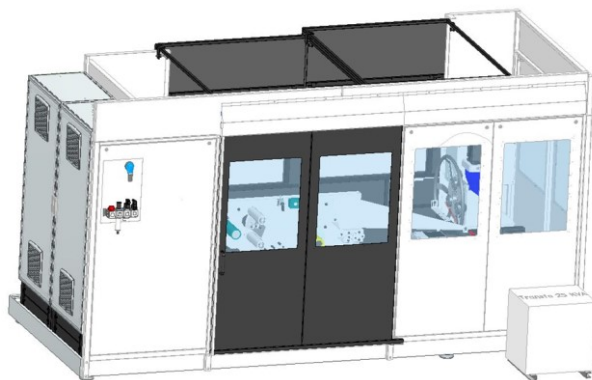
Filament Winding machine

Composite

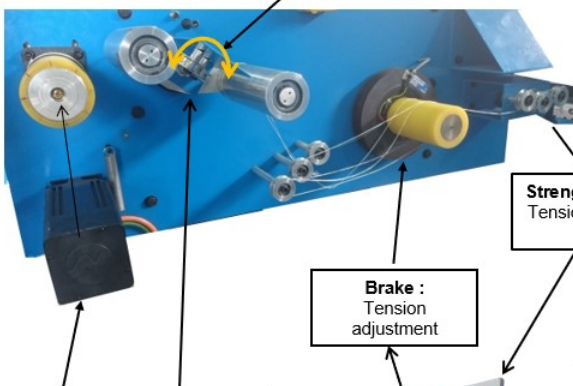


Features :

- Ranges and axis feedrate :
 - Z : 1500 mm, 20 m/min
 - C : Modulo 360°, 15 up to 40 tr/min
- Adjustable and controlled filament tension
- Filament sweep (parallel to Z axis) : tailor-made race
- Material : Glass fiber, carbon,...
- NC : Num Flexium, Fanuc 18i, Siemens 840D
- Options : Cross table (X,Z), Multi filament



Limit switch :
Wire break detection



Strength transducer :
Tension measurement

Brake :
Tension adjustment

NC :
Adjustment and display of the tension in daN

Spool:
The motor unwinds the spool of wire and maintains a puppet angle of approximately 15°.
An analog encoder constantly returns the angular position of the skate.

Numerical Control :
Brake servo-control according to the setpoint and the voltage measurement

