BTU TECH

PULTRUSION COILER / UNCOILER
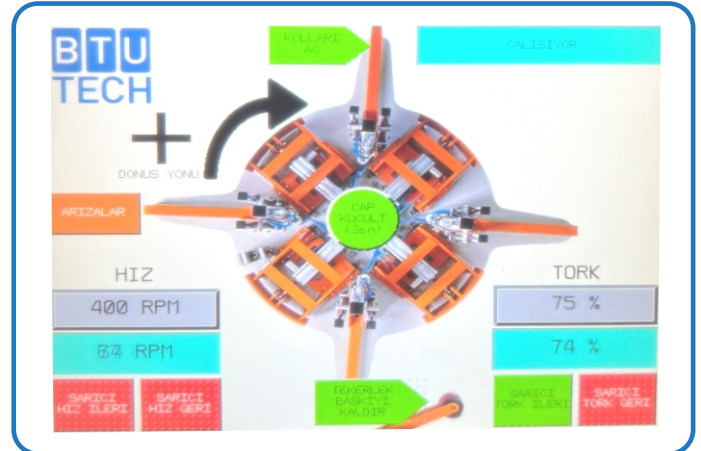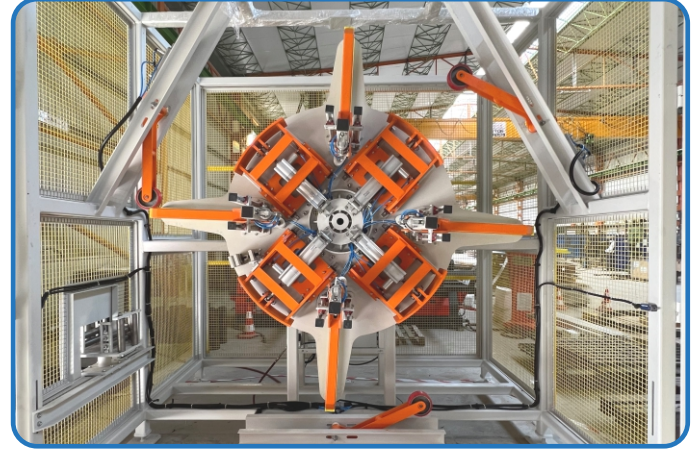
DESCRIPTION

The Pultrusion Coiler / Uncolier is used to wind pultrusion profiles in a coil from with a specified tension and inner diameter.

FEATURES

- The inner diameter (ID) is programmable in between 1450mm to 1700mm. (acc. to customer specifications)

- 4 support arms equaly spaced with 90 degrees for support.

- In case of power or air loss, a mechanical brake holds the coil in place by fixing the ID.

- After winding operation, the ID shrinks to release the coil easily.

- A programmable tensioner wheel with pneumatic cylinder drives the profile to the coiler.

- A metering wheel encoder is used to measure total coil length & speed.

- A servo motor and a reducer generates the necessary power for the coiler rotation operation.

- A PLC system controls the torque of the coiler, and the torque can be adjusted from the HMI touch panel.

- It can operate both in fixed torque or fixed speed mode.

- A slipring system transmits air and electric signals from the standstill electric panel to the continuously rotating coiler.

- 7,5" HMI touch panel enables the operator to control the coiler. (Remotely (wireless) from a tablet or smartphone, as well.)

- Both manual and full automatic operation is possible from the HMI.

PULTRUSION COILER / UNCOILER SPECIFICATIONS

Control: Programmable servo torque control

Speed: 20m/min max.

Motor: SCHNEIDER Servo

Reducer: i=555, 1500Nm, 5-8arcmin, 5000RPM

Inner Diameter (ID): 1450mm to 1700mm (acc. to customer specifications)

Outer Diameter (OD): 2000mm max.

ID Shrinking: Automatic with adjustable speed and mechanical brake

ID Measurement: Analog position sensor

Profile Width: 80mm to 145mm mechanically adjusted

Tensioner Wheel System: Programmable pneumatic cylinder tension

Tensioner Wheel: 150x45mm with greasing nipple

Metering Wheel: 1024 pls incremental encoder

Side Support Arms: Tension programmable, automatic operation, on-off sensors

Slipring: Air and data transmit

Material: CNC machined steel

Weight: 2000kg approx.

Certificates: CE

Protection Class: IP54 min.

Voltage : 380-480VAC

Power: 2,5kW

Frequency : 50-60Hz
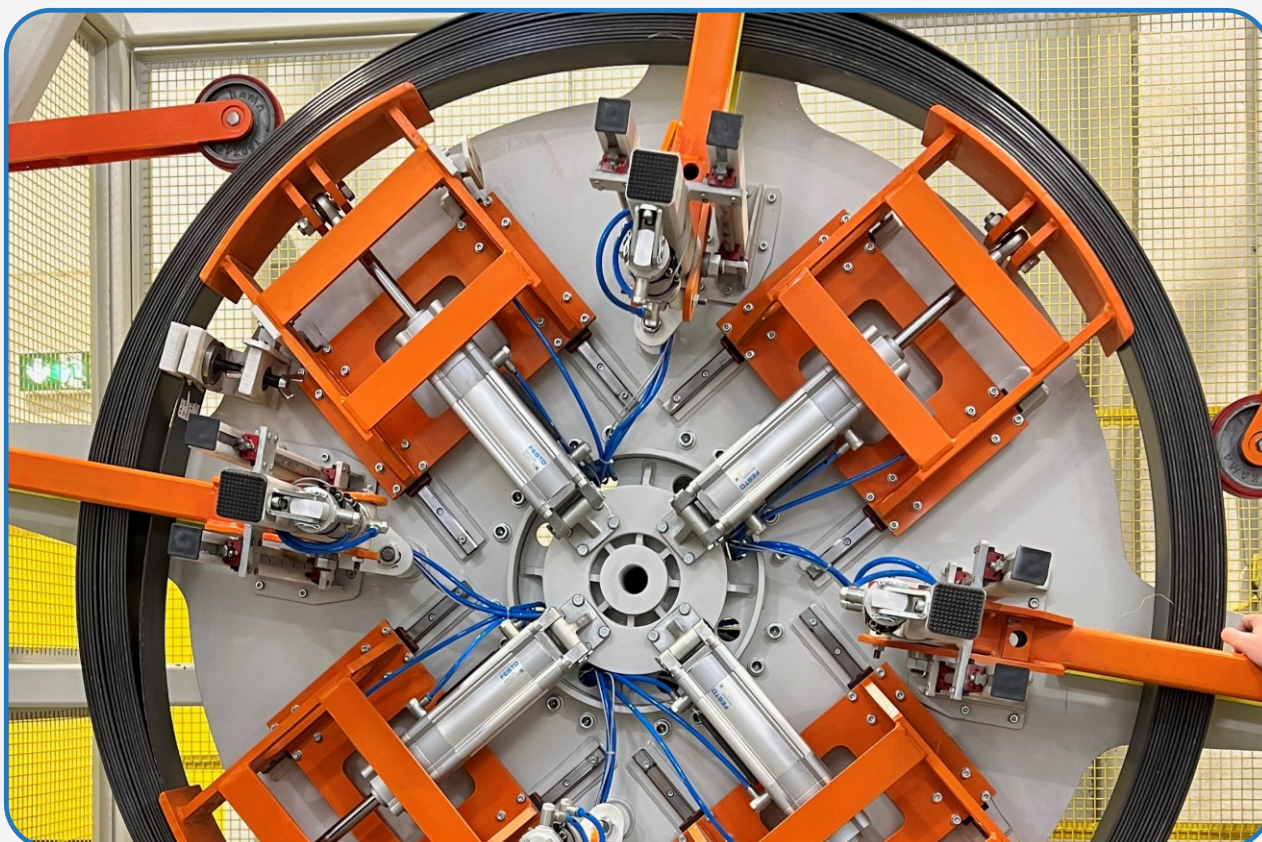
Pneumatics: FESTO

HMI: SCHNEIDER 7,5" HMIGTO Series, Colored Touch Panel

PLC : SCHNEIDER TM241 Series

Servo Drive: SCHNEIDER LXM32 Series, Ethernet Comm.

Power Supply : 24VDC

Light Tower: 3 color with alarm

ABOUT BTU

BTU-TECH was founded in 2020 as a start-up company for engineering, design and manufacturing of machines and technologies for variety of industries, such as textile and composites.

As the main shareholder and CEO of the company, Burçin Pak received investment for the company. In addition to his 20+ years in microelectronics, communication and machinery which includes many patents and awards for the developed technologies, together with its investors, the company has a total of 60 years of experience, covering industries such as heavy duty machinery & transport equipments, robotics, microelectronics, IOT, industrial textiles.

The company has a talented core team for analysis, engineering, design, quick prototyping and serial production. The inhouse capabilities and skills are 3D modelling, FEA, programming and industrial automation.

Based in Istanbul, Turkey, BTU-TECH is aiming to serve customers globally both by direct contact and via technical partners.

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