

## **REDEX Group Mechatronics solutions for composite machines**

REDEX Group is offering dedicated solutions for composite processing machines including :

- MEROBEL web tension control
- REDEX zero backlash Linear and Rotary axis drives
- REDEX Planetary, Multispeed, Bevel and Differential gearboxes

These solutions are optimized for composite processes and are used as “building blocks” by machine designers worldwide to develop innovative and high-performance machines, from fiber placement to braiding, fiber winding or tape laying.

REDEX Group will introduce at JEC 2025 its latest innovation in tension control for yarn or web, this complete solution integrates a precision actuator, a digital regulation and a sensor. This package can be used on a single spool, a special controller is dedicated to creels and multi-spools applications.

The new generation of sensors WAT+ introduced at JEC has an integrated amplifier directly at the core of the load cell making signal available for the tension measurement or control much more robust to EMI (Electro-Magnetic Interferences) than traditional sensors. It guarantees for embedded solution a high reliability of the data transmission even through slip ring or rotary union. Amplified signal can be directly transmitted to PLC or Drive for the scaling operation. No need for extra wiring or additional electronics, with the same dimensions as the standard load cell WAT+ making a compact and extremely light solution for ATL & AFP robotics applications.

This new solution covers 3 ranges of tension measurement: 50N – 250N – 500N. Extension to the high-tension range, covering up to 5000N can be realized on demand. The original design allows many pulley or shaft configurations including cantilever mounting

With a global footprint in Europe, USA and Asia, REDEX Group is a referent supplier for composite market, our application engineers are at your disposal for product sizing and machine integration.

To know more about REDEX Group solutions for the composite industry : <https://www.redex-group.com/machine-drives/>

Visit us at Booth 6R52!