



DANOBAT

DFS-WB

AUTOMATED WIND BLADE MANUFACTURING SYSTEM

DANOBAT presents a disruptive **TURN KEY** solution for the automation of wind blade manufacturing.

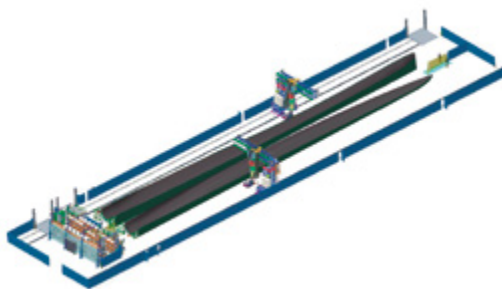
With a collaborative and Client focused approach in order to define the draft project that most adapts to your particular case.

We can automate one or several processes used in manufacturing bringing the best available technology, solutions and machine tool expertise to solve your manufacturing needs having as result a **fully scalable** and **flexible system**.



▲ Layup Head (ADMP®)
* more information on the backside

DISRUPTIVE **AUTOMATION** SYSTEM



▲ Layout sample



▲ Gluing (40 Kg/min)



▲ Surface activation



▲ Painting (90 m/min)



▲ Roll magazine

Automation of a WIND BLADE manufacturing process, including:

- Dry fabric preforming & layup (ADMP®)
- Surface activation/grinding
- Gluing
- Painting
- Vision and quality inspection
- Magazine re-supply
- Storage and global system management

... for a more efficient high-quality production process.

ADMP[®]

AUTOMATED DRY MATERIAL PLACEMENT

FULL AUTOMATIC HEAD

- Roll loading/unloading
- Material identification
- Process parameter adjustment
- Self threading & feeding
- Cutting on the fly
- Selective application of binder/tackifier
- Ply positioning on mold
- In-process lap/gap control and adjustment



▲ Cutting on the fly & Selective application of binder/tackifier



▲ Self threading & feeding



▲ Roll loading/unloading

FABRICS

NCF (non crimp fabrics) and/or Woven

- **Fibre types:** Glass and/or Carbon
- **Fiber directions:** Uniaxial, Biaxial, Triaxial, Combi...
- **Areal weight:** up to 1800 g/m²

CONTROL SYSTEM

- Remote diagnostic
- Integrated safety
- Process data monitoring
- Part traceability
- Data and error log
- Easy part reference (model) changeover
- Compatibility with plant MES
- Ready for Industry 4.0

CAPABILITIES

Part examples	Blade	Spar Cap	T E	Root
Max. Roll Diameter (mm)	700			
Max. Roll Width (mm)	800			
Max. Roll Weight (kg)	600			
Fabric Areal weight (gr/m ²)	800	1600	800	1200
Fabric Width (mm)	800	400	200	800
Machine Speed (m/min)	110	110	110	110
"C" Rate (floor to floor) (kg/h)	450	1250	215	200