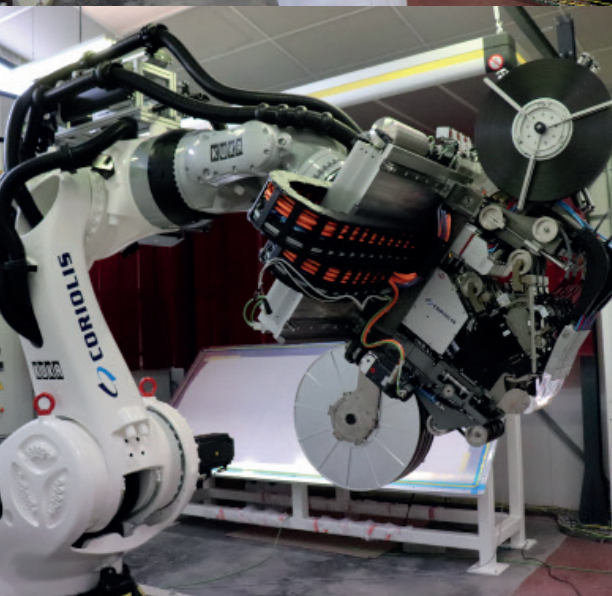


Coriolis C5

Fiber placement dockable head for large parts

- High speed layup with robot and gantry for large slightly curved parts
- 1.5" thermoset, thermoplastic and dry fiber manufacturing ability
- Unique modular head design for maximum productivity and reliability





CORIOLIS C5

TECHNICAL INFORMATION

AFP process specifications

Fiber configuration	Up to 8 x 1.5"
Cut and feed repeatability*	± 2.5 mm at 1 m/s
Compaction force control	10 N/mm
Maximum lay-up speed*	1.2 m/s
Tolerance between course laid up on separate tapes	+2.5/-0 mm
Minimum distance between cutting and feeding an individual fiber**	10 mm
Minimum fiber length*	124 mm
Dynamic head compliance	±5 mm
Roller crush	≤5 mm
Material packaging	Tape wheel on the head
HMI for advanced production management	
Offline programming software	Coriolis CADFiber® and CATFiber®
Heating device	Flash lamp, laser or Infrared
Controller	Siemens
Bar-code reader for material traceability	
Exchangeable head device and docking station	

Robotic cell configuration

Robot	Kuka KR 800 or Titan
Horizontal axis positioner	From 6T to 2x40T

Gantry cell configuration

AXIS	Stroke	Speed	Acceleration	Positional Accuracy	Repetability
X	20 m	70 m/min	2 m/s ²	±0.10 mm	± 0.05 mm
Y	7 m	90 m/min	3 m/s ²	±0.10 mm	± 0.05 mm
Z	2.1 m	120 m/min	4 m/s ²	±0.10 mm	± 0.05 mm
A	±100°	2.62 rad/s	8 rad/s ²	±25 arcsec	±15 arcsec
B	±25°	0.80 rad/s	5 rad/s ²	±25 arcsec	±15 arcsec
C	±200°	8.4 rad/s	17 rad/s ²	±25 arcsec	±15 arcsec

*Depends on the material, heat source and part shape and controller

** lay-up speed can be limited

APPLICATIONS

Wings & fuselage panels
2D tailored stacks

MATERIALS

Thermoset prepreg	135 to 252 gsm dry
Thermoplastic prepreg	135 to 252 gsm dry
Dry fiber	135 to 252 gsm dry

PACKAGING

Tape wheel

Maximum gross weight	10 kg
Maximum net weight	8 kg
Spool maximum diameter	600 mm
Carboard Inner diameter	203.7 mm
Cardboard Core width and tolerance	46 + / 0.1 mm
Tape width	38.1 mm (1.5in)