

MTorres to play a relevant role supplying composite manufacturing equipment for the A-350 XWB



43 units



- **MTorres selected by Airbus as its only source to supply Automatic Tape Layer Machines (ATL), TORRESLAYUP, to different Airbus plants, to support the A-350 XWB production needs**

ROBUSTNESS
Delivered at the early 90's
it is still working like
the first day.
/MTorres

The multiyear contract covers for all the Tape Laying needs of Airbus for A-350XWB and eventually other programs, through 2012 and possibly extension to 2014. It makes M. Torres company the only source of Tape Laying Technology for Airbus for the duration of the contract.

The agreement covers for different size and configuration machines to manufacture the wing and stabilizers skins, stringers, spars, and other carbon fibre components.

Automatic Tape Laying Technology has been identified by Airbus as the most efficient and productive way to lay up the large amount of carbon fibre needed to build such large components, as the ones used for the A-350 XWB.

This agreement strengthens even further the already well established position of the MTorres Company, as a world's leading supplier of highly advanced Composite Manufacturing Equipment for the Aerospace Industry.

Since the very first TORRESLAYUP was installed at a customer back in the mid 90's, a total of **43 units** are currently in operation or in the backlog with installations in Europe, Asia, America, etc.

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PRODUCTIVITY
TORRESFIBERLAYUP, Automatic Fiber Placement Machines.
/MTorres

- **MTorres has reached an agreement with GKN Aerospace to supply Automatic Fibre Placement machines (AFP), TORRESFIBERLAYUP, to manufacture the composite A-350 XWB wing rear spar**

The AFP machines will be installed at GKN Aerospace's recently acquired facility in Filton (UK).

Mr. Juan Solano, Sales Director at MTorres said "We believe the high productivity level that TORRESFIBERLAYUP offers has led GKN Aerospace to select our Automatic Fibre Placement Technology. This is the first time that AFP technology is going to be used in the manufacture of primary wing spar components, saving process time and reducing overall cost

- **MTorres selected by Spirit Aero systems, Inc. to supply Automatic Fibre Placement Machines (AFP), TORRESFIBERLAYUP model, to build the A-350 XWB Wing Front Spar, Composite Routing and Drilling equipment, TORRESMILL and TORRESTOOL model, as well as Ultrasonic Inspection Machines, TORRESONIC type, for both Wing Front Spar and Fuselage Section 15**

The AFP, Routing and Inspection machines will be delivered to the Spirit newly created facility in Kinston, North Carolina (USA). The TORRESFIBERLAYUP Automatic Fibre Placement Machine, has been chosen by Spirit to lay up on final shape such large and critical Carbon Fiber Components, as the wing front spars.

This program is the first time ever that this technology is going to be used to manufacture these size of spars, saving process time and reducing overall cost.

In addition, the TORRESMILL and TORRESTOOL Systems for Routing and Drilling operations, which M. Torres has supplied in the past for other Spirit Programs, and the TORRESONIC Machines for Ultrasonic



ACCURACY
TORRESDRILL, Automatic Drilling Machines
/MTorres

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Inspection process, complete the range of solutions that M. Torres is supplying to Spirit to fulfill the demanding Airbus requirements for the A-350 XWB program.

A total of two units of each type, AFP, Trimming and NDI, have been contracted for the initial stages of the program production.

Every M. Torres product involved in this Spirit contract, are well proven and known as highly productive lamination, routing and inspection equipment and have been used in all major programs in the past years.

• **MTorres delivers first of two TorresDrill, to BAE Aerospace, for drilling and countersinking aircraft structural components, including titanium, aluminium and carbon fiber stack-ups for the Eurofighter Typhoon**

The commissioning of this machine is critical for BAE to meet challenging production requirements for the Eurofighter program future. A second unit is scheduled to be delivered at the end of 2009.

The TorresDrill system not only provides flexible and accurate operation but also has incorporated a customer experience based elements that gives the client a full customized solution.

• **MTorres ships a TorresMill, milling machines to GKN (Saint Louis)**

MTorres has successfully reached the preliminary acceptance milestone for a trim and drill machine that will be used by GKN in the Sikorsky CH53-K after transition fuselage

At this moment the machine is being shipped to GKN Saint Louis site for final installation.

Applications include net trimming, drilling and countersinking of large sizes components for the helicopter.



Gamesa and MTorres

will develop a technology project for the design and automated manufacturing of wind turbine blades

About MTorres

MTorres is involved in aeronautics, paper converting and wind energy sectors. It develops capital goods for automated manufacturing processes in the paper and aeronautical industries, particularly those used in the manufacture of composite materials. Additionally manufactures multipolar synchronous wind turbine generators with its own technology.

About Gamesa

Gamesa is a company specialized in sustainable energy technologies, mainly wind power. It is the leading company in Spain and situated among the world's three most important wind turbine generator manufacturers. It has installed more than 16,000 MW in 20 countries spread out over four continents.

- The new blade concept will enable wind farm profitability and adaptation to the environment to be improved

- Mass production will commence at the end of 2011

Gamesa Corporacion Tecnológica and MTorres Diseños Industriales will share a research and development project focusing on a new concept for wind turbine blade design, as well as on an automated blade manufacturing process. The new production process will provide significant improvements to blade manufacturing cycle times, along with consequent manufacturing unit cost reductions. The project foresees investments totalling €100 million.

MTorres Diseños Industriales will take part in the project as the process' capital goods manufacturer and will apply its own technology –used in the aeronautics sector where it is a world leader in lamination technology for composite materials– to the production of wind turbine blades.

With this alliance, as well as obtaining a direct profit as a manufacturer of wind generators, MTorres also enters the business of supplying equipment for the wing energy industry. Specifically M. Torres considers that this development will benefit its future competitiveness in the offshore business".

All in all, MTorres is helping customer achieve top line growth and lowest cost strategies.



MTORRES

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