



Thursday 26 March 2009

## **The AEROLIA Saint-Nazaire Panel Line A GLOBAL INNOVATION**

Aerolia continues to invest in its sites to offer its customers all the advanced technologies available at the service of aeronautical performance, in both composite and metal materials.

Today at Saint-Nazaire, AEROLIA presents its metal 3D Panel Line, equipped with leading edge technologies.

Aerolia proposes to its Airbus customer a global innovation for 3D metal panels, to be used for parts of the A350 nose section to complement the composites technology.

Aerolia aims to present and propose this expertise to everyone involved in the world of aeronautics.

---

### **Some notions ...**

The standard section of an aircraft fuselage is cylindrical. The skin panels have therefore a rollable surface, called 2D, that can be formed by rolling and then machined flat.

The nose fuselage, AEROLIA's core business, has a much more complex shape, dictated by aircraft aerodynamic performance requirements.

This shape, called double curvature or 3D, requires skin panels formed by stretching over a die and then machined to cut out and lighten them.

### **Innovating technologies**

The AEROLIA Saint-Nazaire plant has all the skills and all the competencies required in this domain, as each year more than 3 million detail parts and panels are produced on this site.

AEROLIA, within the framework of its development is innovating and has equipped its Saint-Nazaire Panel Line with technological firsts:

- The largest longitudinal stretch forming bench in the world. With a power of 800 tonnes, this longitudinal bench can form large-scale panels with very complex shapes.

- The mechanical milling of 3D aeronautical panels to replace chemical milling – a world first. This technology (\*) gives AEROLIA five years advance over its competitors in terms of eco-efficiency, quality and production cycle times. It contributes to an improvement of the production processes and ensures quality and responsiveness for Customer orders.

With this ultra modern Panel Line, AEROLIA can propose to its Customers very large size 3D panels (up to 10.5m long, 3.3m wide and with a curve of 1.2m) and offer design possibilities which were previously impossible. Furthermore, the whole line is totally compatible with new aviation alloys such as aluminium-lithium.

**With over 90 years experience, AEROLIA is writing its future at the service of its Customers.**

Find all AEROLIA news on the internet site [www.aerolia.com](http://www.aerolia.com)

Contact: [philippe.le-gregam@aerolia.com](mailto:philippe.le-gregam@aerolia.com)

(\*) technology developed in partnership with Dufieux Industrie and with the support of the European Union and its Financial Instrument for the Environment (LIFE) GAP project (Green Advanced Panels) LIFE05 ENV/F/000062.