

A350XWB - Twin Wing Transport Jig

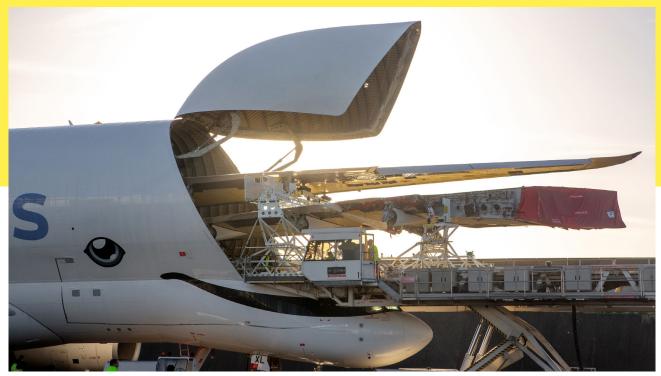
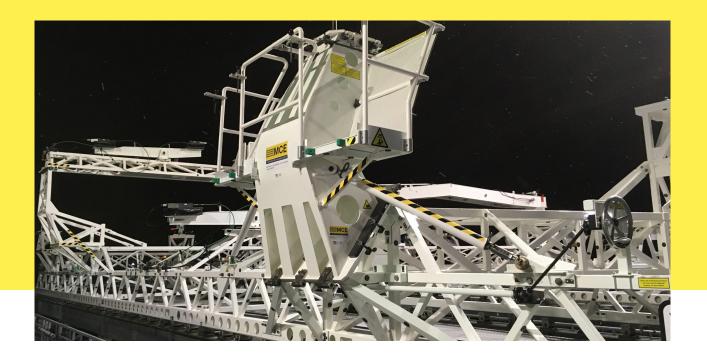


Photo credits: Airbus HP



Toulouse - Blagnac, France - 2017 Airbus S.A.S. placed an order to MCE GmbH to deliver 6 Transport Jigs for the air transport of one pair full equipped A350XWB wings with the new Beluga XL transport freighter.

MCE GmbH delivered the flying transport devices including concepts, engineering, stress analysis, manufacturing, set up, and commissioning on three different Airbus sites in Europe to the complete satisfaction of our customer Airbus S.A.S.



Due to the uninterrupted increase in global demand for new fuel-efficient aircraft, the European manufacturer Airbus is increasing its production capacities in all areas. However, the production of the individual components that make up an aircraft is distributed throughout Europe. This also necessitates an adjustment of logistics capacities.

A new and larger cargo aircraft, called "Beluga XL" has been developed for the increased transport of internal structural parts. Unlike the previous version, it is now possible to transport two wings of the A350 at once between locations, thus doubling capacity and halving costs.

Today, as MCE, we can reflect on a successful planning phase of more than two years and one year's production and commissioning period. In parallel, Airbus also carried out the maiden flight and certification of the Beluga XL. Since the MCE device was required for successful certification and thus also entry into service of the aircraft, precise tracking of the completion rate of all manufactured parts was necessary. The challenge of the project included, in addition to a customer central project team from three countries, above all to produce a device that does not exceed the dead weight of 13 tons, but at the same time has the necessary stiffness to withstand even a possible crash of the aircraft. For this purpose, simulations and analyses of the plane with the wings and the new construction were carried out, with forces of up to 144 t acting on it.

With this project, MCE was able to consolidate further its position as a competent full-service provider in the field of "unusual" steel construction for Europe's largest aircraft manufacturer.

Facts & Figures:

Customer:	Airbus S.A.S.
Project Period:	2016-2019
Empty weight:	13 t
Payload:	2×16 t
Number of Jigs:	6
Outer dimension:	25 m×5 m×4 m

Used for Beluga XL certification

