SABCA Limburg nv

- Full subsidiary of SABCA
- Established in 1992
- Composites Design & Manufacture
- Equipment Integration for Ariane 5
- 12,000+ sqm built
- 175,000 sqm total

- 75 km from SABCA Brussels
- Crossroad of major motorways
- 500 m from the canal Liège - Antwerp

~135 Employees
SABCA offers a Complete Service

DESIGN
- CATIA v4, v5 & v6
- CADDS 5
- CADDS 5 / CATIA Interfaces
- ENOVIA VPM

STRESS ANALYSIS
- SAMCEF
- NASTRAN/PATRAN
- Specialized software

FULLY INTEGRATED MANAGEMENT
- SAP

Built to Print

Built from own design

SABCA LIMBURG N.V.

Oct. 2013
SABCA proprietary
A350-900 Flap Support Fairings
Manual Lay Up

- Risk sharing Partner
- Design, Manufacturing & Support
Integrated skins

Bonded Stringers (A320 & A340 Ribs)

Foam stringers

Integral stringers (A400M Flap Skins)
Dassault Falcon Jets

Automatic Tape layer:
Horizontal Tail Skin

Manual Layup:
Top Air Inlet Fairing
Gulfstream G650

Partner of Fokker

Spars

Horizontal Tail integrated skin
Composite Facility

3 Autoclaves
- Up to 5.5 m diameter & 15 m length

2 Automatic Tape Layers

Gerber Cutter

5-axes trimming

Phased Array Scanner

5 Axes trimming

Hot Drape Forming

SABCA Limburg N.V.

Oct. 2013

SABCA proprietary
Automatic fibres placement
AFP defects

- Gap/Overlap at ends of tows
- Gap/Overlap between tows
SABCA showed an interest to participate in the MacroModelMat (M3) program

Objective: reduction of coupon testing during design phase

→ Simulation of the defects to predict knock down factors.
  Static and fatigue behaviours have to be investigated.
  Correlation with tests has to be performed.

Actual design analysis tools are Nastran/Patran/Samcef and Isami (Airbus) for stress analysis.