

## Liebherr on Board the SuperJet 100



© Sukhoi Civil Aircraft

Liebherr-Aerospace is a major supplier of the SuperJet100, designing, supplying and supporting the flight control and the air management system for this aircraft.

Liebherr-Aerospace is the first aircraft supplier worldwide who has been awarded a complete flight control system including the different cockpit controls as well as all movable surfaces of the airframe.

The Liebherr flight control system for the Superjet100 includes primary flight control, secondary flight control (which is required to provide high lift during take-off and landing), the trimable horizontal stabilizer actuation, the spoiler actuation as well as the respective flight control computers.

As a first step toward the all electric aircraft, the stabilizing setting mechanism, as well as the flap and slat actuation systems, are electrically driven. They use fly-by-wire technology with electrical power drive units. The primary flight control system uses as well fly-by wire technology with 3,000 psi hydraulic power.

A totally new custom design electronic control suit has been developed especially for the SuperJet100 featuring particularly dedicated hosting cabinets and power electronic for the electric power drives. Liebherr-Aerospace is responsible for the flight control systems software development embedded in the various controllers.

Liebherr-Aerospace also supplies the integrated air management system including the following components and systems:

- Engine bleed air
- Pneumatic air distribution
- Air conditioning
- Zone temperature control
- Ventilation / Extraction System (avionic bay, luggage compartment)
- Cabin pressure control
- Wing anti ice system control
- Overheat detection

Due to Sukhoi Civil Aircraft Company's procurement policy to award only Liebherr-Aerospace for these two considerable work packages of flight control and air management systems, the SuperJet100 program benefits of the best optimization process.

*Subject to technical modifications*