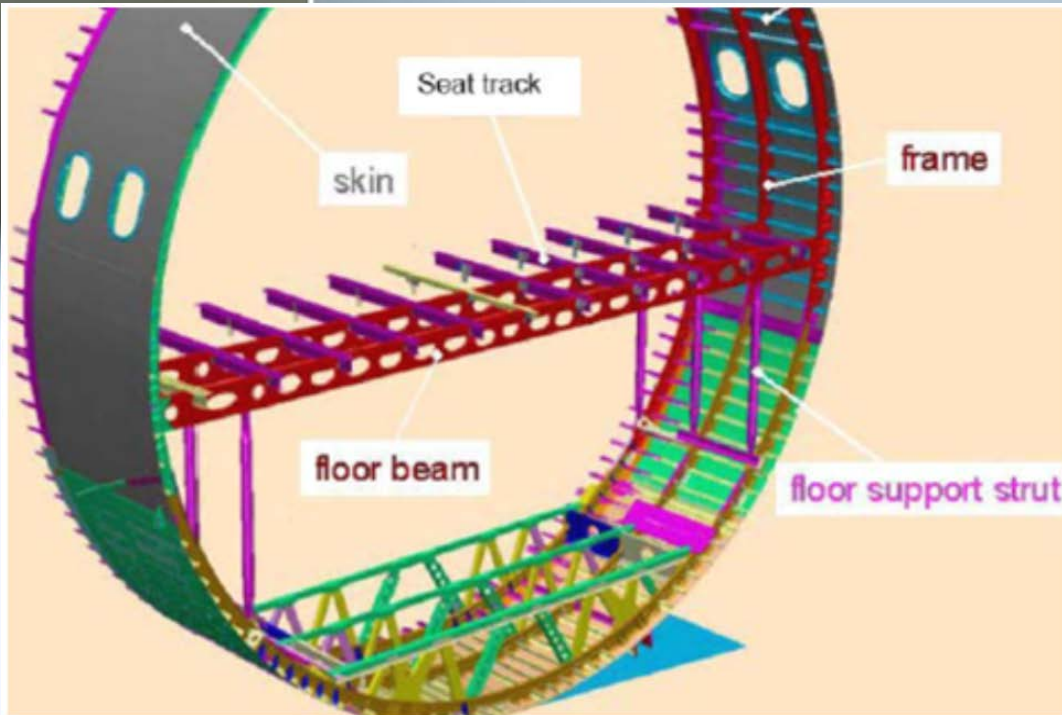




Case Study – Mechanical Design

Aerospace – Floor Beam Analysis



Floor beam Analysis of a commercial Aircraft for a leading Aircraft OEM

Geometry Extraction

Floor beam has been divided in to **number of bays** and geometry corresponding to all the components are extracted

Load extraction

Loads are extracted from **Global FE** model using **FEDAMS** at the Floor Beam middle nodes and **critical loads** are identified.

Beam Identification

Shear Resistant (SR) or Intermediate Diagonal Tension (IDT). Calculation of Critical Shear, bending and compression buckling stress and Identification of **IDT factor "K"**



Engineer the future