

Aerospace Tooling

Structural Analysis

Recent technology developments related to the manufacturing process of aircrafts, spacecraft and launch vehicles have increased the complexity of tooling used for manufacturing, assembling and testing: increasing needs for larger structures, position accuracy, integration of new materials - fiber reinforced composite -, etc. Moreover, most toolings have strict structural requirements in order to avoid vibrational coupling, or large sagging and deflection... Last but not least, the safety of personals stays a first priority.

In this demanding context, we can help you design and verify your toolings so that they meet your customer's needs.

Analysis objectives

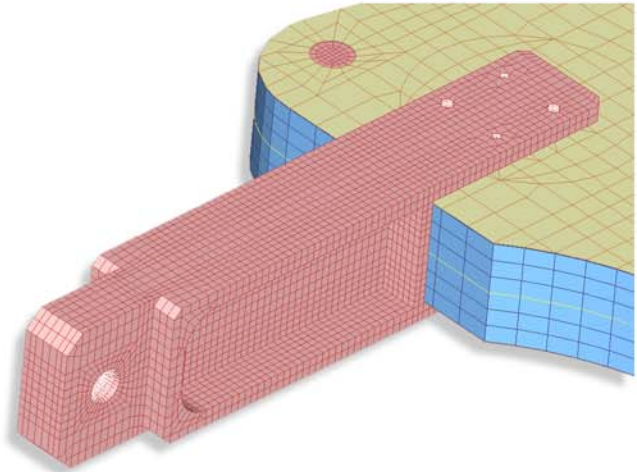
We can intervene at different stages of the design process, with the following objectives:

- ▶ Dimensioning,
- ▶ Validation,
- ▶ Substantiation.

Structural analysis

In order to meet the structural requirements, we will perform the required analyses to assess the following aspects:

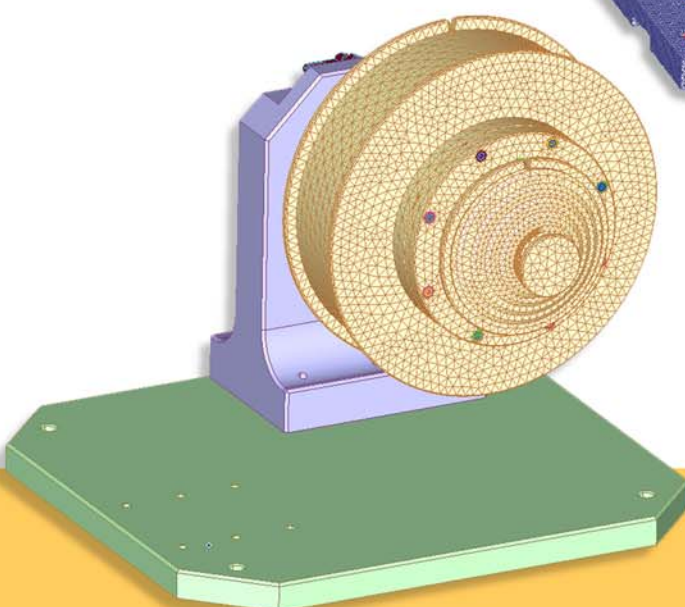
- ▶ Deflection
- ▶ Detailed stress
- ▶ Vibration (modal / frequency response)
- ▶ Fatigue
- ▶ Buckling



Types of structures

Due to the increasing use of new materials, we can assist you in developing different types of structures:

- ▶ Metallic
- ▶ Composite
 - Honeycomb panels
 - Fiber reinforced structure



sales@xadice.com

T. +33 (0) 2.40.58.21.12

F. +33 (0) 2.28.02.17.04

Immeuble Mallève 2B - 1, bd Jean Moulin
44100 NANTES - France
www.xadice.com