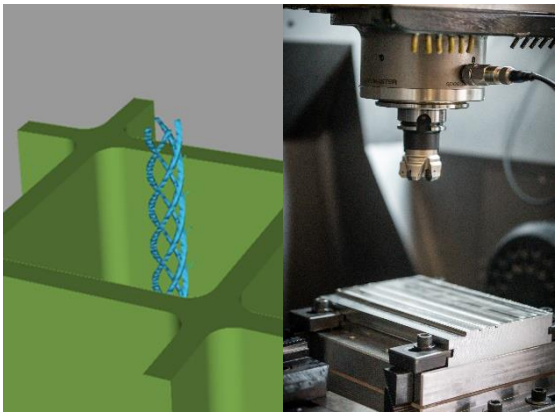
framatome

Numerical simulation of machining

Digital Twin Machining : expertise and simulation during machining operations.

Optimize your machining operations and increase productivity by reducing vibration-related issues



Challenge

- Are you facing vibration issues during the machining of your parts?
- Do vibrations cause marks on your parts, tool breakage, machine wear, and noise in the workshop?
- Do you have to downgrade cutting conditions to carry out your machining operations?
- Do you spend a lot of time finding the right cutting parameters?

Solution

Framatome offers a numerical machining simulation solution that enables users to:

- Predict machining vibrations
- Predict cutting forces and power
- Predict surface quality

This solution offers:

› A service for optimizing cutting conditions

› Machining test facilities

› Tools for characterizing the dynamics of the workpiece and cutting tools

› Support for workpiece clamping methods

Technical information

Development of stress models using an instrumented machining center

Development of experimental dynamic models of parts and tools using test equipment

Development of numerical dynamic models using the VPS software from the ESI suite.

Expertise in using Nessy2m, software developed through a consortium between Framatome, ENSAM Paris, Safran, and CETIM.

Customer benefits

- Increased productivity and quality through optimized operations
- Shorter production times
- Longer tool life
- Reduced noise in the workshop
- Less machine wear

Key figure

200h/year machine time saved thanks to one of our studies

Your performance
is **our** everyday **commitment**

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