

# ZF

ZF consolidates its machining simulation around  
NCSIMUL Machine

**SPRING**  
TECHNOLOGIES  
Machining as Designed

Success Story



**NCSIMUL**  
MACHINE





Information	
Industry :	Automotive
Solution :	NCSIMUL Machine



## Company Overview

The German specialist in transmissions has chosen SPRING Technologies software, through its successful integration with CAD / CAM tools, the NC and the information systems already in place in the company.

The ZF Group, one of the first fifteen global automotive suppliers, known for its components for power transmissions, has decided to unify its tools of machining simulation by choosing NCSIMUL Machine from SPRING Technologies.

This great name of the mechanical production particularly selected the NCSIMUL Machine software for its ease of integration with existing information systems, and different possibilities for simulating 3D objects or even the simulation of actual operating process of a CNC Machine-Tool machining (NC machines).

To date, the contract signed by the German subsidiary of SPRING Technologies focuses on nine NCSIMUL Machine licenses to be installed on the production site in Friedrichshafen, Germany.

Eventually, the group has 125 plants worldwide and would be ready to deploy this solution on all its sites.

The R&D Department located in Germany, is preparing all the NC systems (CNC) and identifies the best practices and production methods. Equipped with Pro / Engineer for 3D CAD and Pro / NC for the CAM, two PTC software and also Edgecam solution for the CAM, he needed a machining simulation tool to enhance productivity, securing its machining processes and reducing programming time.

## The selection process

« We launched in 2008 a tender to find the machining simulation solution that would allow us to be still and ever more competitive in our markets. We have created a specification with 248 points that reflected our needs, both in terms of organizational features and services to develop » says Peter Robl, Director of the Passau production site and in charge of the methods for all ZF Group production sites.

Thus, the specifications developed by ZF in the draft revision of machining simulation requirements accurately defined business needs, whether functional or organizational, and included in particular:

- The homogenization of machining simulation solutions ;
- The integration of this new solution in the existing Information Systems (various different according to the country: SAP, Oracle, etc.);
- The ease of use and learning of the software by all operators in different production sites, all equipped with NC machines from 5 to 7 axes;
- The interconnection with the various CAM solutions used by the production plants;
- The ability to use 3D objects and integrate them into the simulation, as well as geometry, tools, attachments, workpieces, etc.. ;
- The opportunity to work with different NC machines and controllers;
- The importance of simulating the process of actual operation of the NC machine tool in ISO code;
- The interconnection between the solution and the CNC programming simulation systems already in place.

The ZF group was also seeking for a partner that can accompany the different management changes by providing a range of relevant services, and especially a specialist in post-processors.

« We, as a first step, implemented this solution in Germany on a pilot site. Subsequently, we generalize this choice to standardize our production tools to optimize and secure our CAD/CAM data exchange. Our goal is simple: continue to be in the first fifteen largest industrial suppliers in the world. »

### Peter Robl

Director of the Passau production site and in charge of the methods for all ZF Group production sites