

WORKSHOP

Material nonlinearity with NX Nastran

Level Advanced
Duration 1 day
Language English or Dutch
Location Delft, or on-site

Topics

- Commonly used types (Isotropic, Plastic, Nonlinear elastic)
- Stress and strain evaluation (large strain, true stress)
- Rupture
- Hyperelasticity, Creep, Laminates
- Solver support

Description

Material nonlinear effects should be modeled when the material properties cannot be considered linear for the loading conditions considered. This workshop will cover the various causes for material nonlinearities, how you select an analysis model to predict the behavior and how forces and displacements translate into stress and strain distributions within the material. Examples are drawn for analyzing hyperelastic (rubber) materials or analyzing metals that exhibit plastic behavior because they are stressed beyond yield limits.



Aim of workshop

Knowing early in the design cycle when materials show nonlinear behavior leads to better design and reduced product failure later on. After the training, the trainee is able to act on nonlinear material behavior in NX Nastran (with Femap).

Who should attend?

This workshop is intended for designers, engineers and finite element analysts who need to understand the NX Nastran solver settings with regards to materials with nonlinear behavior.

Interested? Sign up on www.femto.eu or send your training request to info@femto.nl.

About us

At Femto Engineering we help companies achieve their product innovation goals with FEA & CFD consulting, software, training, support, deployment and R&D. We are the CAE partner of Siemens PLM Software in the Benelux and an authorized distributor for Femap, NX Nastran, Simcenter 3D and SDC verifier.

Directions

Our address is: Oude Delft 137, Delft.
 By car: follow the parking signs to the Phoenixgarage (Phoenixstraat 29). Leave the “centrum” exit from the parking and turn left. Directly after the gate, we’re in the first building on your right.
 When you arrive by train, it’s a 5 minute walk via the Westvest and the Binnenwatersloot to the Oude Delft.

