



15th LS-DYNA International Conference & Users Meeting

Post-Conference Training (2 day) Wed & Thurs, June 12th & 13th, 2018, 9am-5pm *Edward Hotel & Convention Center, Dearborn, MI*

Nonlinear Implicit Analysis in LS-DYNA®

Instructor: Thomas Borvall, DYNAmore GmbH

Objective

The goal with this 2-day class is to learn about tools and techniques that will maximize the chances of obtaining successful results when employing Nonlinear Implicit Analysis in LS-DYNA. This knowledge can then be used as a spring board to deal with more complicated applications in the everyday engineering work...

COURSE CONTENT

- Implicit vs Explicit
 - fundamental differences
 - modeling aspects
 - accuracy concerns
 - switching options
- Nonlinear Implicit Settings
 - time step approaches
 - tolerances
 - statics vs dynamics
 - BFGS vs full Newton
 - line search
- Implicit features
 - mortar contact
 - initial penetrations
 - interference
 - connections
 - tied contacts
 - interpolation constraints
 - joints
 - spotwelds
 - elements and materials
 - prestress techniques
- Debugging
 - activating and interpreting outputs