

MADYMO Advanced Airbag training

The MADYMO Airbag training is designed for experienced users with MADYMO. It is suited for engineers that have been using MADYMO for some years in an occupant safety environment and that are interested in more detail on airbag modelling in MADYMO.

The 1-day training content is a mixture of theory and hands-on exercises. The knowledge gained in the theory parts will be applied in practical assignments, ranging from fundamental up to more application focused exercises. The training is given by TASS' own experts in MADYMO software application.

At the end of the training the user will be familiar with airbag modelling, ranging from generating inflator input up to detailed deployment of a folded airbag using a Gasflow Eulerian description. The knowledge gained will enable the user to model airbags in more detail and will give him more theoretical background for accurate and correct airbag modelling.

Course Contents

- Introduction
 - In-Position vs. Out-of-Position
 - Uniform Pressure vs. Gasflow
 - Different type of airbags
- Scaling/Folding & relaxation
 - Meshing
 - Folding
 - Initial Metric Methods, Reference mesh
- Global airbag modelling guidelines
 - Contacts
 - Element and material formulation/definition
 - Inflator modelling
 - Permeability and hole definitions
- Gasflow modelling guidelines
- Airbag model validation
 - Tank test analysis
 - Model sensitivity
- Tips and tricks