

BALLISTIC IMPACT ON METALLIC MATERIALS: TESTS AND NUMERICAL SIMULATION FOR02

97%
client
satisfaction
rate

In partnership with:



Industeel

Total length of training: 16 hours
Start: Day 1 at 11:00 | End: Day 3 at 12:00

PREREQUISITES



Basic knowledge in the field of materials

TARGET POPULATION



Engineers, technical managers, R&D managers, PhD students in the field of the behavior of materials.

KNOWLEDGE TESTING METHOD



Final MCQ to validate the acquired knowledge, attested to by a training completion certificate

TRAINING OBJECTIVES



- Learn about phenomena relating to perforation and penetration of armor/protection steels
- Learn special methods for modeling these phenomena in order to conduct appropriate numerical simulations.

COURSE CONTENT



- The challenges of terminal ballistics. Focus on the protection steel Mars® 600 with 3 case studies: perforation, adiabatic shearing and spalling
- Description of the specific tools: test equipment, metrology, software
- Case 1: Perforation. Presentation of main mechanisms, suitable models, analysis of a test result, simulation, test/simulation correlation
- Case 2: Adiabatic Shear Bands (ASB). Presentation of main mechanisms, suitable models and calibration process, analysis of a test result, simulation, test/simulation correlation
- Case 3: Spalling. Presentation of main mechanisms, suitable models and calibration process, spalling tests and analysis of results, simulation, test/simulation correlation
- Examples of case studies relative to other types of material