

BALLISTIC IMPACT ON METALLIC MATERIALS: TESTS AND NUMERICAL SIMULATION

FOR02

In partnership with:



ABSTRAO

94.72%
client
satisfaction
rate

Total length of training: 16 hours

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

Date to be defined
according to your
needs

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