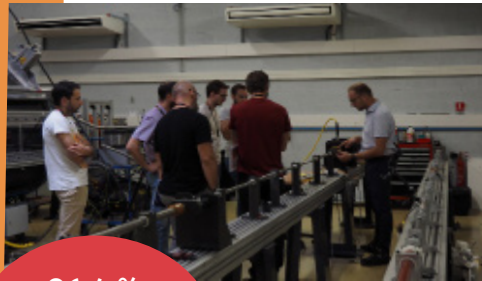


SHOCK PHYSICS ACADEMY

Created by the company Thiot Ingénierie, the Shock Physics Academy offers courses about material dynamics and shock physics.

With over 30 years of experience and its level of expertise, THIOT INGÉNIERIE is opening its doors to this complex field through exclusive courses covering both **theoretical and practical aspects**:

- Benefit from the knowledge and experience of renowned experts
- put into practice the theory in our laboratory thanks to our high tech testing equipment



96,4 %
customer
satisfaction



CONTACT

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Thiot Ingénierie's premises are classified as an establishment open to the public, and are therefore suitable for people with reduced mobility.

NOVEMBER 15,16 AND 17, 2022

start: November 15 at 11 am - end: November 17 at 12 pm



in english

BALISTIC IMPACTS ON PROTECTION STEELS: TESTS AND NUMERICAL MODELLING WITH IMPETUS AFEA /FOR02-EN

2,500 €

PREREQUISITE

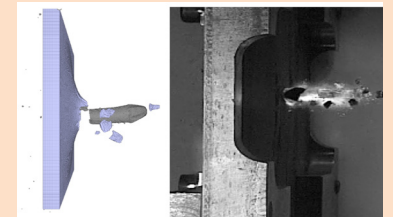
- Basic knowledge in the field of materials

OBJECTIVES

- Acquire knowledge in terms of perforation and penetration mechanisms of protection steels
- Acquire adapted rules to model these mechanisms for relevant numerical simulations

TRAINING CONTENT

- The challenges of terminal ballistics – focus on a Mars 600 protection steel with three case studies: perforation, adiabatic shear bands and spalling.
- Description of adapted tools: single stage gas gun, dedicated measurement techniques (3D digital image correlation, etc.), Impetus AFEA solver.
- Cas #1: perforation. Presentation of main mechanisms, adapted models, analysis of a test result, simulation, and correlation between test and simulation.
- Cas #2: Adiabatic Shear Bands (ASB). Presentation of main mechanisms, adapted models and calibration process, analysis of a test result, simulation, and correlation between test and simulation
- Cas #3: Spalling. Presentation of main mechanisms, adapted models and calibration process, spalling test and analysis of results, simulation, and correlation between test and simulation
- Examples of case studies related to other kind of materials.



KNOWLEDGE CONTROL PROCEDURE

Final OCM to validate the knowledge sanctioned by a certificate at the end of the training

TARGETED PUBLIC

You are an engineer, a technical manager, an R&D manager, a thesis student in the field of material behaviour

SPECIAL EVENING

A visit and dinner around our local heritage (Dordogne Valley Lotoise)