



SHAPE-MEMORY ALLOYS

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COURSE AIMS

Let the student learn the basic concepts on shape memory effect and use them in case-studies aiming applications in different engineering fields (orthodontic, welding, mechanical solicitations, ...)

LEARNING OUTCOMES

On completion of this module, the learner will be able to:

- ▶ Demonstrate an understanding of the principles and concepts of shape memory and superelasticity effects.
- ▶ Apply these concepts in a personal work.
- ▶ Assess the effect of different processing conditions.
- ▶ Propose the best solution for a specific application.
- ▶ Compare this solution with alternative materials.
- ▶ Analyze and criticize the proposed solution for a given application.

TEACHING METHODS

- ▶ Lectures and laboratory work

