





Learning Module Outline

Short Description

Description of the module

Aerospace applications of cork, demanded properties from the aerospace sector

This module deals with cork composites in aerospace applications and demanded properties from cork by aerospace sector. Current cork technology in aerospace industry is described in this module. Examples from aerospace applications are given by discussing technical benefits of cork composites. The content of this module is given below.

- 1. Introduction
- 2. Materials properties of cork composites
 - 2.1. Mechanical properties
 - 2.2. Thermal properties
- 3. Material selection for aerospace applications
 - 3.1. Ashby's method for materials selection
 - 3.2. Decision making methods
 - 3.3. Knowledge based systems
- 4. Current cork applications in aerospace structures
- 5. Potential applications of cork composites in aerospace structures

Target Groups

Targets

- Engineering students (Aerospace, Aeronautical, Materials and Mechanical Engineering)
- Engineers, technical staff and leaders in Aerospace and Aeronautical Industries

Learning Objectives

Learning Objectives for this module

Upon completion of this module, attendants will be able to:

- Understand the technical properties of cork composites.
- Understand the current and prospective application areas of cork composites in aerospace structures.
- Understand the advantages of cork composites over the other materials in aerospace applications.













Learning Resources	
Resources	Scientific articles
	Audiovisual materials
	Research papers
	• Books
	• Thesis
	Industrial reports

Self-assessment and Learning Activities	
Self-assessment	Practice questions
and	• Quiz
Learning Activities to be created	Module summaryVideo lecturesBook
be created	• Book





