

Structuring and preparation of a lesson: **EAB module 5 (Quality Control of Bonded Structures)**

time	Theme, core information, statements or questions	Learning objectives ¹	Methods (e.g. presentation/ discussion/group work)	Media/ training material
3 h	<p>Wetting tests (water droplet, test ink)</p> <p>Destructive testing on parallel test pieces (witness specimens): Lap shear and bead peel tests</p> <p>Non-destructive tests (visual, layer thickness)</p> <p>Special Process</p> <p>Silicone, Clean tools</p> <p>Workplace and storage conditions (dust, pollution, temperature, relative humidity)</p> <p>Measures to ensure quality process (e.g. traceability and use of working instructions)</p> <p>Adhesive (reception and during storage).</p> <p>Destructive testing on parallel test pieces (witness specimens): eg. peel tests, lap shear tests.</p>	<p>Interpret the modes of operating of the principal methods involved in quality control of bonded structures.</p> <p>List the most common advantages and disadvantages of non-destructive and destructive testing when applied to bonded structures.</p> <p>Interpret common acceptance standards for bonded structures imperfections (1);</p> <p>Identify quality control techniques applied to bonded structures (1);</p> <p>Use traceability and work instructions as key measures for guarantying the quality of the process</p>	<p>Ppt content presentation</p> <p>Video presentation (e.g. examples of DT and NDT methods for bonded structures).</p> <p>Group discussion/brainstorming about limits and advantages related to NDT and DT applied to bonded structures or Practical exercise (individual /group) about the identification and proper use of quality control techniques</p>	<p>Beamer / printed ppt presentation</p> <p>White board</p> <p>Practical exercise</p>

¹ (1) Know and understand, (2) transfer and practically apply, (3) analyze and assess; (0) no learning objective; additional information

Structuring and preparation of a lesson: **EAB module 5 (Quality Control of Bonded Structures)**

	Adhesive (cured) in the bonded structure. Non-destructive inspection of the joint. Tolerance requirements (related to gap-filling ability of different types of adhesives)	(2); Check with limited autonomy the workplace and storage conditions		
--	--	--	--	--

¹ (1) Know and understand, (2) transfer and practically apply, (3) analyze and assess; (0) no learning objective; additional information