

	<b>Design</b>	<b>Manufacturing</b>	<b>Testing</b>	<b>Operation</b>
<b>Work Package 1</b> Code reviews	<b>Task 1.1:</b> typical design examples	<b>Task 1.2:</b> manufacturing and material degradation	<b>Task 1.3:</b> Structural integrity and End of Life design	<b>Task 1.4:</b> Safety factors and Failure modes
<b>Work Package 2</b> Design requirements	<b>Task 2.1:</b> Functional requirements and geometrical properties	<b>Task 2.2:</b> Fabrication effects (welding, forming, heat treatment)	<b>Task 2.3:</b> Appropriate test methods applicable for new steels	<b>Task 2.3:</b> Assumed loads, temperatures, environment and life time under static, dynamic, cyclic loading
<b>Work Package 3</b> Welding	<b>Task 3.1:</b> Selection of material welding procedure, consumables	<b>Task 3.2:</b> Plate/Forgings- manufacturing and delivery and welding of test material	<b>Task 3.3:</b> NDT and secondary stresses	<b>Task 3.4:</b> Conformity with EN Welding Codes
<b>Work Package 4</b> Material characterisation <ul style="list-style-type: none"> <li>• Strength, toughness, corrosion resistance, Fatigue</li> <li>• Effect of cold forming and heat treatment</li> <li>• Material modelling</li> </ul>	<b>Task 4.1:</b> QT-HSS plates and weldments <b>Task 4.2:</b> TMCP plates and weldments <b>Task 4.3:</b> Duplex stainless steel plates and weldments <b>Task 4.4:</b> Forgings of QT, Duplex <b>Task 4.5:</b> High strain rate <b>Task 4.6:</b> Statistical evaluation and correlations			
<b>Work Package 5</b> Modelling	<b>Task 5.1:</b> new design aspects for new steels and design of test vessels	<b>Task 5.2:</b> Quantification of typical welding and forming effects and FEM Simulation of residual stresses	<b>Task 5.3:</b> Adoption of structural integrity concept, statistics, correlation	<b>Task 5.4:</b> FEM Simulation for representative structural parts, vessels under typical load scenarios
<b>Work Package 6</b> Validation		<b>Task 6.1:</b> Fabrication of test vessels and component like large scale specimen	<b>Task 6.2:</b> Testing of component like large scale specimen	
<b>Work Package 7</b> Development of safety concept	<b>Task 7.1:</b> Quantification of extreme loading parameters and other basic variables	<b>Task 7.2:</b> Quantification of effects of material degradation	<b>Task 7.3:</b> Statistical verification of structural integrity concept	<b>Task 7.4:</b> Assessment of Life time and inspection intervals
<b>Work Package 8</b> Design recommendations	<b>Task 8.1:</b> Development of design tools for future code and practice implementation <b>Task 8.2 :</b> Preparation of main project output for publishing			