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EWP LOs Standard	Technical Review of Portfolio		
To be use as reference for RPL process	<b>Authorised Training Body (ATB) identification:</b> <b>DATE AND PLACE:</b>  In the portfolio assessment, the ATB should identify candidate knowledge and skills in each Competence Unit		
<b>Actions</b>			
<b>Competence Unit 2- Welding and Cutting Processes</b>	YES	NO	REMARKS
2.3 - Apply basic knowledge of TIG Welding with solid filler material (wire/rod) (141) Fundamentals, equipment, applications, main variables, safety and specific problems	<input type="checkbox"/>	<input type="checkbox"/>	
2.4.1 - Apply basic knowledge of the MIG welding with solid wire electrode (131)/MAG welding with solid wire electrode (135) fundamentals, including equipment, applications, main variables, safety and common problems.	<input type="checkbox"/>	<input type="checkbox"/>	
2.4.2 Apply basic knowledge of the MAG Welding with flux cored electrode (136) fundamentals, including equipment, applications, main variables, safety and common problems.	<input type="checkbox"/>	<input type="checkbox"/>	
2.5 Apply basic knowledge of the Manual Metal Arc Welding (111) fundamentals, including equipment, applications, safety and common problems.	<input type="checkbox"/>	<input type="checkbox"/>	
2.6 Apply basic knowledge of the Submerged -Arc Welding (12) fundamentals, including equipment, applications, main variables, safety and common problems.	<input type="checkbox"/>	<input type="checkbox"/>	
2.7.1 Apply basic knowledge of Plasma; Electron Beam; Laser, their application, main variables and most common problems.	<input type="checkbox"/>	<input type="checkbox"/>	
2.7.2 Apply basic knowledge of the fundamentals and the field of application of electro-slag welding (72), friction welding (42), explosion welding (441); diffusion welding (45); aluminothermic welding (71); high-frequency resistance welding; cold-pressure welding (48). Including equipment, main variables and most common problems.	<input type="checkbox"/>	<input type="checkbox"/>	
2.8 Apply basic knowledge of the basic principles and the fields of application of the most common cutting and edge preparation processes used in weld construction, including equipment, main variables, safety and common problems.	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Competence Unit 4- Materials, Their Weldability and Application of Structural and High Strength Steels</b>			
4.1 Apply basic knowledge about the metallurgical processes occurring in welding of iron carbon alloys.	<input type="checkbox"/>	<input type="checkbox"/>	

4.4 Apply basic knowledge of structural unalloyed steels and the effects of welding processes on the weld joint.	<input type="checkbox"/>	<input type="checkbox"/>	
4.5 Apply basic knowledge about the effects of micro-alloying elements on structure, mechanical properties and weldability with reference to fine-grained and high strength steels	<input type="checkbox"/>	<input type="checkbox"/>	
4.6 Apply basic knowledge about welding problems dealing with the fundamental aspects of the application of structural and high strength steels, with particular reference to physical, chemical and mechanical characteristics	<input type="checkbox"/>	<input type="checkbox"/>	
4.8 Apply basic knowledge on fundamentals of the various types of stainless and heat resistance steels and their weldability including the filler material choice.	<input type="checkbox"/>	<input type="checkbox"/>	
4.9 Apply basic knowledge of the metallurgy, the range of application and the weldability of aluminium and aluminium alloys.	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Competence Unit 5- Construction and design</b>			
5.1 Apply basic knowledge of the design of weld details related to a given material, wall thickness, accessibility, loading, welding process, welding position, welding symbols, available equipment, tolerances.	<input type="checkbox"/>	<input type="checkbox"/>	
5.2 Apply basic knowledge of identification of joints and relevant details of welded metallic structures.	<input type="checkbox"/>	<input type="checkbox"/>	
5.3 Apply basic knowledge of fatigue and the influence of notches and their avoidance.	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Competence Unit 6- General Features for Quality Management</b>			
6.1 Apply basic knowledge of the main factors affecting welding stress and distortion in welded fabrications and how these effects can be estimated and minimised.	<input type="checkbox"/>	<input type="checkbox"/>	
6.2 Apply basic knowledge of the need for, and function of, auxiliary equipment, jigs and fixtures from the viewpoint of quality, economics and the environment.	<input type="checkbox"/>	<input type="checkbox"/>	
6.3 Apply basic knowledge of the health and safety hazards associated with welding and fabrication processes, including techniques to minimise them.	<input type="checkbox"/>	<input type="checkbox"/>	
6.5 Apply basic knowledge of the economics of welding operations applied to welded fabrications.	<input type="checkbox"/>	<input type="checkbox"/>	
6.6 Apply basic knowledge of the problems of repair welding both for in manufacture and in-service situations.	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Competence Unit 7- Quality Assurance/Quality Control on Welded Joints</b>			
7.1 Apply basic knowledge of principles of quality assurance and quality Control, and recognise the related standards and their application to welded fabrication as a special process.	<input type="checkbox"/>	<input type="checkbox"/>	

7.2 Apply basic knowledge of the requirements and function of Quality Control during manufacture, the standards related to brazing and welding operators and brazing and welding procedure qualification including joint traceability methods, the need for calibration, and monitoring of process parameters.

<input type="checkbox"/>	<input type="checkbox"/>	
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**Competence Unit 8- Tests Used for The Quality Control of Welded Joints**

8.3 Apply basic knowledge of the use of Non Destructive Testing as applied to welding fabrications.

<input type="checkbox"/>	<input type="checkbox"/>	
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