

**SKILLS FRAMEWORK FOR AEROSPACE
TECHNICAL SKILLS AND COMPETENCIES (TSC) REFERENCE DOCUMENT**

TSC Category	Quality Management					
TSC	Visual Testing					
TSC Description	Perform visual testing on engineering materials, components and fabricated items including casting, welding and wrought products. This involves the use of appropriate equipment and tools, evaluation and reporting of test results in accordance with the applicable standards and organisational procedures.					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	AER-ACE-1031-1.1	AER-ACE-2031-1.1				
	Perform visual testing to verify quality standards of engineering materials, components and fabricated items	Evaluate and report test results in accordance with applicable standards and organisational procedures				
Knowledge	<ul style="list-style-type: none"> • Physical principles of visual testing • Visual testing equipment and their checks and calibration methods • Techniques for visual testing of engineering products • Product technologies • Personal protective equipment and material safety data sheets (MSDS) • Relevant standards, codes, specifications and procedures for visual testing • Workplace safety and health (WSH) practices • Organisational standard operating procedures (SOPs) 	<ul style="list-style-type: none"> • Visual testing principles, capabilities and limitations • Concepts of vision, lighting techniques and visual perception • Selection criteria and applications of visual testing equipment • Material attributes and types of parts and components • Visual testing processes for engineering products • Advanced product technologies • In-service flaws and test acceptance/rejection criteria • Recording and reporting procedures for visual test results • Relevant standards, codes, specifications and procedures for visual testing • Workplace safety, health (WSH) and standard operating procedures (SOPs) 				

Abilities	<ul style="list-style-type: none"> • Prepare parts and components for visual testing • Perform pre-operational checks of visual testing equipment for safe and useable conditions to minimise safety risks • Set up and perform specific calibrations on equipment • Perform visual testing as specified in work instructions • Interpret results for component acceptance or rejection • Report visual test results in accordance with prescribed procedures • Perform post-inspection procedures and cleaning activities • Adhere to written instructions and SOPs • Observe and apply safety practices in the workplace 	<ul style="list-style-type: none"> • Interpret task requirements from work plans and job specifications • Examine conditions of incoming parts and components for abnormality • Select appropriate tools and equipment for visual testing • Verify and calibrate visual testing equipment settings • Interpret and evaluate results according to applicable codes, standards and specifications • Inspect tested parts and verify conformance to quality requirements • Take corrective actions to address non-conformances • Obtain verification for work done from quality assurance or relevant personnel • Ensure documentation in accordance regulatory requirements • Ensure safety practices in the workplace 				
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