

TSC Category	Special Processes					
TSC	Non-destructive Testing (Infrared Inspection)					
TSC Description	Perform infrared inspections on components using appropriate tools, equipment and methods meeting requirements and in accordance with organisational procedures					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	AER-ACO-1037-1.1	AER-ACO-2037-1.1				
	Carry out infrared inspections on components and record inspection results in accordance with written instructions	Conduct advanced infrared inspections and evaluate inspection results with respect to applicable codes, standards and specifications				
Knowledge	<ul style="list-style-type: none"> Basic principles of infrared inspection and thermography Laws of thermodynamics Thermal radiation principles and heat transfer theory Qualitative imagery and thermography Basic principles of atmospheric transmission and emissivity measurement Infrared inspection tools, equipment, techniques and procedures Defect detection and evaluation Pre and post-inspection procedures Relevant non-destructive testing (NDT) standards and requirements Organisational standard operating procedures (SOPs) and safety practices 	<ul style="list-style-type: none"> Principles of infrared inspection and applications Advantages, disadvantages and limitations of infrared inspection Infrared inspection methods and procedures Fundamentals of effects on atmospheric transmission Factors influencing emissivity Thermal image interpretation and analysis Types and nature of discontinuities Cause and effect of various types of discontinuities Relevant non-destructive testing (NDT) codes, standards and specifications Safety data sheet (SDS) 				
Abilities	<ul style="list-style-type: none"> Prepare components for infrared inspection Perform pre-operational checks of NDT equipment for safe and 	<ul style="list-style-type: none"> Verify and calibrate NDT equipment settings Perform infrared inspections Interpret and evaluate results according to 				

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

	<p>useable conditions to minimise safety risks</p> <ul style="list-style-type: none"> • Set up and perform specific calibrations on equipment • Perform infrared inspections as specified in work instructions • Evaluate for component acceptance or rejection • Record inspection results • Perform post-inspection and cleaning activities • Adhere to written instructions and SOPs • Observe and apply safety practices in the workplace 	<p>applicable codes, standards and specifications</p> <ul style="list-style-type: none"> • Organise and report inspection results • Translate NDT codes, standards and specifications into practical testing instructions • Prepare NDT instructions • Define limitations of inspection methods • Ensure all inspections carried out in accordance with NDT requirements • Ensure safety practices in the workplace 				
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