

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

TSC Category	Quality Management					
TSC	Failure Analysis					
TSC Description	Examine the electrical and physical defects evidence to verify the causes of failure as well as identify the failure modes					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
			PRE-QUA-3002-1.1	PRE-QUA-4002-1.1	PRE-QUA-5002-1.1	
			Implement failure analysis to determine if defect is caused by electrical or physical failure	Review failure analysis results and implement changes that limit and/or eliminate the causes of failure	Initiate failure analysis projects to improve organisation's objectives	
Knowledge			<ul style="list-style-type: none"> Types of failure analysis techniques Failure analysis tools 	<ul style="list-style-type: none"> Types of failure analysis techniques Procedures for failure analysis techniques 	<ul style="list-style-type: none"> Failure analysis techniques Problem solving techniques 	
Abilities			<ul style="list-style-type: none"> Identify types of failure analysis techniques Select appropriate failure analysis techniques to perform analysis Review failure analysis results Determine follow-up action required 	<ul style="list-style-type: none"> Identify appropriate failure analysis techniques Perform failure analysis techniques Interpret failure analysis results Recommend follow-up actions required 	<ul style="list-style-type: none"> Select appropriate project that can help improve company's objective in the context of failure analysis Define project scope of work and the number of hours based on business requirements Execute project in accordance with project plan Evaluate project effectiveness in accordance with project objectives Recommend follow up actions in accordance with organisational requirements 	