

<b>TSC Category</b>	Discipline Engineering Specialisation					
<b>TSC</b>	Process Analyser Maintenance Management					
<b>TSC Description</b>	Interpret and implement maintenance regimes, processes and procedures for maintenance and configuration and inspection of process analysers to ensure their optimal availability and reliability					
<b>TSC Proficiency Description</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>	<b>Level 6</b>
		ECM-DEG-2010-1.1	ECM-DEG-3010-1.1	ECM-DEG-4010-1.1		
		Identify and apply maintenance regimes, processes and procedures to perform maintenance and configuration for process analysers	Interpret maintenance regimes, processes and procedures to perform monitoring, inspection, configuration and maintenance for process analysers	Facilitate the implementation of maintenance regimes, processes and procedures to supervise monitoring, inspection, configuration and maintenance for process analysers		
<b>Knowledge</b>		<ul style="list-style-type: none"> <li>• Types of process analysers</li> <li>• Types of sampling and conditioning systems</li> <li>• Safety requirements for the storage and installation of test gases</li> <li>• Types of analytical measurement</li> <li>• Engineering mathematics</li> <li>• Safety requirements for the storage and installation of test gases</li> <li>• Types of analytical measurement</li> <li>• Principles of data integrity</li> </ul>	<ul style="list-style-type: none"> <li>• Types of process analysers</li> <li>• Types of sampling and conditioning systems</li> <li>• Principles of process control</li> <li>• Methods of calibrating process analysers</li> <li>• Types of field communication networks</li> <li>• Engineering mathematics</li> <li>• Fundamentals of statistical control</li> </ul>	<ul style="list-style-type: none"> <li>• Methods of using analysers in process control strategies</li> <li>• Signal conditioning and data processing</li> <li>• Industrial process analysers</li> <li>• Industrial communication networks and communication protocols</li> <li>• New technology developments in process analyser equipment and systems</li> </ul>		

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

<p><b>Abilities</b></p>		<ul style="list-style-type: none"> <li>• Perform basic monitoring, inspection and maintenance of process analysers</li> <li>• Perform disassembly and reassembly of process analysers, sampling and conditioning equipment and their components</li> <li>• Perform maintenance and inspection of process analyser auxiliary control systems</li> <li>• Perform calibration of in-line analysers</li> </ul>	<ul style="list-style-type: none"> <li>• Perform monitoring, inspection and maintenance of process analysers</li> <li>• Perform disassembly and reassembly of process analysers, sampling and conditioning equipment and their components</li> <li>• Perform maintenance and inspection of process analyser auxiliary control systems</li> <li>• Perform calibration of in-line and mobile analysers</li> <li>• Carry out programming and system interrogation of process analysers</li> <li>• Perform checks on software communications to, and from, the process analysers</li> <li>• Liaise with equipment vendors and external technical support specialists</li> </ul>	<ul style="list-style-type: none"> <li>• Perform calibration of single method and multi-functional process analysers</li> <li>• Supervise and perform the disassembly and reassembly of process analysers, sampling and conditioning equipment and their components</li> <li>• Supervise and perform the maintenance and inspection of process analysers auxiliary control systems</li> <li>• Supervise and perform the calibration of in-line and mobile analysers</li> <li>• Perform programming and system interrogation of process analysers</li> <li>• Supervise and perform checks on software communications to, and from, the process analysers</li> <li>• Liaise with equipment vendors and external technical support specialists</li> </ul>		
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