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| TSC Category | Laboratory Management | | | | | |
| TSC | Technical Services Management | | | | | |
| TSC Description | Manage technical service support to deliver innovative technical solutions and industry applications of products to customers and markets | | | | | |
| TSC Proficiency Description | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 |
| | | ECM-LAB-2005-1.1 | ECM-LAB-3005-1.1 | ECM-LAB-4005-1.1 | ECM-LAB-5005-1.1 | ECM-LAB-6005-1.1 |
| | | Identify product technical specifications and applications and customers' requirements to assist in delivering technical services and solutions to customers | Interpret product technical information, production limitations and market information to deliver technical services and solutions to customers | Investigate product technical information, market information, applied research and customer requirements to design and formulate innovative technical services and solutions for customers | Evaluate product portfolio and global market trends and analysis to devise and specify new test and industry applications of products for customers and markets | Synergise strategies to design and develop innovate technical services and solutions to drive business performance and opportunities in markets |
| Knowledge | | <ul style="list-style-type: none"> • Knowledge of product technical datasheets and applications • Product non-conformance identification • Principles of standard test and analysis systems | <ul style="list-style-type: none"> • Organisational policies, Standard Operating Procedures (SOPs) and laboratory best practices • Product technical knowledge • Operation of laboratory equipment and sample preparation • Problem solving techniques • Presentation skills | <ul style="list-style-type: none"> • Product technical knowledge • Principles of test and analysis systems • Research methodologies and techniques • Product investigative techniques • Product innovation methods • Customer service techniques • Presentation skills and techniques | <ul style="list-style-type: none"> • Global market trends and analysis • Product portfolio methods • Problem-solving techniques • Customer relationship management • Laboratory and research equipment designs and specifications • Principles of project management • Business communication techniques • Technical presentation techniques • People management techniques | <ul style="list-style-type: none"> • Marketing strategies • Emerging global market trends and analysis • Technical problem-solving techniques • Budgeting methods and techniques • Business development techniques • Methods of building, coaching and motivating high performance teams |

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

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| <p>Abilities</p> | | <ul style="list-style-type: none"> • Identify product technical specifications and applications and customers' requirement • Prepare prototype samples for customers' use • Prepare datasheets for internal customers • Conduct material testing, application tests and laboratory analyses using a range of laboratory equipment • Present non-conformance results | <ul style="list-style-type: none"> • Interpret product technical information, production limitations and market information • Provide in-house technical support • Coordinate material testing, application tests and laboratory analyses to ascertain and benchmark performance of the organisation's products against that of competitors' • Conduct troubleshooting on standard product issues • Perform technical modifications to products or process parameters to meet customers' requirements • Present standard technical reports to internal and external customers | <ul style="list-style-type: none"> • Investigate product technical information, market information, applied research and customer requirements • Provide onsite technical services to customers • Conduct research and experiments to analyse properties and characteristics of the organisation's products and other materials on the market • Conduct investigations on product issues and develop integrative solutions • Design and conduct material testing, application tests and laboratory analysis • Design technical modifications to products or process parameters to meet customers' requirements • Liaise technical services projects with external laboratories • Prepare detailed technical reports for internal and external customers • Conduct customer training | <ul style="list-style-type: none"> • Evaluate product portfolio and global market trends and analysis • Manage technical services team on project activities which support internal and external customers with product issues • Conduct troubleshooting and investigations of multi-faceted technical problems • Guide laboratory testing activities • Oversee technical research into new industrial applications of products • Manage the development of new products and methods based on new technology applications • Support the development of strategies and plans for new products and new customers • Recommend, design and specify new tests and research equipment to meet the organisation's technical services objectives • Mentor, coach and develop technical service teams and customers | <ul style="list-style-type: none"> • Synergise strategies to design, formulate, develop, test and deliver innovative technical products and solutions for markets and customers • Drive technical solutions support to business partners and customers • Synergise the market segments, customer requirements and trends to enhance products and services • Synergise the development of internal marketing, research and development, operations and business development strategies • Drive business performance reviews of new and existing product opportunities in the market • Lead technical support to organisational and customer research and innovation activities • Lead customer technical solutions support services for product sales, development, performance and innovation • Lead the organisation's research into new business partners, recommend strategies for increased market penetration |
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