



Australian Government

Assessment Requirements for MSL953002 Operate a robotic sample preparation system

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MSL953002A Operate a robotic sample preparation system

Performance Evidence

Evidence of competence in this unit must satisfy all of the requirements of the elements and performance criteria, and include demonstration of:

- safely operating a robotic sample preparation system reliably and efficiently for at least three (3) different types of samples with different preparation requirements and subsequent analysis
- interpreting and applying workplace procedures for operating a robotic system
- accurately recording sample details in system
- recognising potential problems caused by prior sample handling and preparation
- recognising and reporting common system error codes
- maintaining sequential control of samples through all preparation stages
- recognising hazards and using safety equipment and safe work practices
- communicating problems clearly and promptly to supervisor
- minimising rework, waste and environmental impacts.

Knowledge Evidence

Must provide evidence that demonstrates knowledge of:

- importance of good customer relations, optimising throughput and minimising costs and rework
- procedures for sorting and receiving samples used in job role
- sample preparation methods/processes for common mineral ore samples used in job role
- characteristics of materials to be sampled
- purpose of routine downstream analytical tests conducted on samples used in job role
- procedures for preventing contamination
- procedures for ensuring traceability of samples
- function of key components and operating procedures for robotic sample preparation system
- safe work procedures and operation of safety equipment relevant to job role
- relevant hazards, work health and safety (WHS) and environment requirements.

Assessment Conditions

- Judgement of competence must be based on holistic assessment of the evidence. Assessment methods must confirm consistency of performance over time, rather than a single assessment event.
- This unit of competency is to be assessed in the workplace or a simulated workplace environment. A simulated workplace environment must reflect realistic operational workplace conditions that cover all aspects of workplace performance, including the environment, task skills, task management skills, contingency management skills and job role environment skills.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept in each case).
- This unit of competency may be assessed with:
 - MSL953001 Receive and prepare samples for testing
 - MSL943002 Participate in laboratory or field workplace safety
- Holistic assessment methods include:
 - review of entries made by the candidate in operator and robotic system logs
 - review of quality control performance and analytical results traceable to samples prepared by the candidate
 - feedback from peers, clients and/or supervisors about the candidate's ability to operate a robotic sample preparation system safely and efficiently
 - observation of the candidate using a robotic sample preparation system
 - oral or written questions to assess candidate's knowledge of robotic sample preparation procedures, common problems and their specified corrective actions.
- Access is required to instruments, equipment, materials, workplace documentation, procedures and specifications associated with this unit, including, but not limited to:
 - a robotic sample preparation system, sample preparation methods and service charges, reagents, sample containers and labels
 - sample preparation equipment, such as splitters (e.g. riffles and rotary dividers), mills (e.g. ball, ring and rod), bowls (e.g. chrome-steel, tungsten-carbide and zirconia) and tumblers, crushers (e.g. cone, jaw and roll), grinders and disc pulverisers, sieves and ovens
 - a variety of mineral ore samples
 - client requests/documentation, such as client profile, sample identification and sample receipts, required preparation methods, storage and analyses, and service charges
 - safety equipment.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competence and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience.

- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with a laboratory about performing the competency being assessed within the last twelve months.

Links

MSA Training Package Implementation Guides - <http://mskills.org.au/training-packages/info/>