**Training and Assessment Strategy (TAS)**

**Learning Center - KSB Indonesia**

|  |  |
| --- | --- |
| **Organisation** | KSB Indonesia – Training Center |
| **Code** | MEM10119 |
| **Qualification** | Certificate I in Engineering |
| **Target Group** | Operations and Maintenance Staff for Centrifugal Pumps |
| **Implementation Date** | June 11th 2024 |

Table of Contents

[1. Qualification Overview 3](#_Toc151982539)

[1.1 Information 3](#_Toc151982540)

[1.2 Qualification Packaging Rules 3](#_Toc151982541)

[1.3 Competency Units 4](#_Toc151982542)

[1.4 Participant & Client 4](#_Toc151982543)

[2. Course Information 5](#_Toc151982544)

[2.1 Environment & Location 5](#_Toc151982545)

[2.2 Duration and Amount of Training 5](#_Toc151982546)

[2.3 Training Model 6](#_Toc151982547)

[2.5 Entry Requirements 6](#_Toc151982548)

[2.6 Employability Skills Summary & Foundation Skills 7](#_Toc151982549)

[2.7 Recognition Processes 7](#_Toc151982550)

[2.8 Educational & Support Services 7](#_Toc151982551)

[2.9 Physical Resources 7](#_Toc151982552)

[3. Course Structure & Delivery Plan 9](#_Toc151982553)

[4. Assessment 11](#_Toc151982554)

[4.1 Evidence Gathering Techniques 12](#_Toc151982555)

[4.2 Authenticity of student work 14](#_Toc151982556)

[4.3 Cheating and plagiarism 14](#_Toc151982557)

[4.4 Reassessment 14](#_Toc151982558)

[4.5 Assessment appeals and grievances 14](#_Toc151982559)

[5. Staff Matrix - Human Resources 15](#_Toc151982560)

[6. Assessment Moderation 18](#_Toc151982561)

[6.1 Moderation Meetings 18](#_Toc151982562)

[6.2 Validation 18](#_Toc151982563)

[6.3 Assessment Feedback 18](#_Toc151982564)

[6.4 Transition Arrangements 18](#_Toc151982565)

[7. Review of Training & Assessment Strategy (TAS) 20](#_Toc151982566)

[Approved by: 20](#_Toc151982567)

# Qualification Overview

## Information

This section states information that identifies KSB Indonesia – Learning Center and its training, as well as the person authorizing use of the strategy document.

|  |  |
| --- | --- |
| **Name of Training Organisation** | KSB Indonesia – Learning Center |
| **Code** | - |
| **Training Package Code** | - |
| **Training Package Title** | MEM- Manufacturing and Engineering |
| **Version (Release) Training Package** | - |
| **Qualification Code** | MEM10119 |
| **Qualification Name** | MEM10119 - Certificate I in Engineering |
| **Training Duration** | 6 months |
| **Contact person** | Imron Chamid Aziz |
| **Contact Details** | Imron.Aziz@ksb.com |
| **Authorization** | Technical Trainer |

## Qualification Packaging Rules

Based on information available from www.training.gov.au the following packing rules apply to completion of this qualification:

|  |  |
| --- | --- |
| **Number of units** | 10 |
| **Number of CORE Units** | 1 |
| **Number of ELECTIVE Units** | 9 |
| **Other notes (imported units, unit levels, etc)** | Only candidates who have been assessed as meeting the requirements outlined in the packaging rules for this qualification will be awarded a full certificate II in Engineering |

## Competency Units

Consistent with qualification packaging rules, the training provided corresponds to the units listed below for this qualification.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Code** | **Unit Competency Name** | **Core** | **Elect** |
|  | MEM13015 | Work safely and effectively in manufacturing and engineering |[x] [ ]
|  | MEM16006 | Organise and communicate information |[ ] [x]
|  | MEM11011  | Undertake manual handling |[ ] [x]
|  | MEM12024 | Perform computations |[ ] [x]
|  | MEM12023 | Perform engineering measurements |[ ] [x]
|  | MEM09002 | Interpret technical drawing |[ ] [x]
|  | MEM18001 | Use hand tools |[ ] [x]
|  | MEM18002 | Use power tools/hand held operations |[ ] [x]
|  | MEM07001 | Perform operational maintenance of machines/equipment |[ ] [x]
|[ ]  MEM18013 | Perform gland packing |[ ] [x]

## Participant & Client

1. The target participants for this example of course delivery are KSB Indonesia Participants – Learning Center.
2. The training undertaken may be accredited or non-accredited.
3. Their role may involve some coaching/mentoring with individuals or small groups.

# Course Information

1. Industry representatives are consulted in relation to:
* Develop & review training and assessment strategies
* Development and validation of assessment tasks and assessment benchmarks
* Appropriate professional development of staff
1. Position of Industry Representativei:
* Head of KSB Indonesia – Learning Center
* Technical Trainer

## Environment & Location

1. The environment in which the qualification will be delivered includes:
* Institutional delivery
* Simulation of work/industrial environments
* Work in industry/work placement
* Simulated work environment
1. Locations of training facilities for this target group are:
* KSB Indonesia – Learning Center
* Location of PT KSB Indonesia – Learning Center and its subsidiaries
1. Training facilities for this group of students are:
* In the KSB Indonesia room – Learning Center
1. Emergency plan:
* If a training date coincides with another training, an alternative place will be taken at another possible location.

## Duration and Amount of Training

1. Learning Volume for Certificate I is 6 months – 1 year. As part of this, the amount of training provided in this example course delivery is 6 months or 1040 hours, consisting of:
* 304 hours of theory and practice
* 736 hours of on-the-job training activities
1. The course structure and delivery plan has been developed to enhance student work life to help maximize the volume of learning for each student.
2. The duration and number of training will be set to 2 stages with the following arrangements:
* Stage 1, core and elective training, consisting of off job (in class) and on job training (practice in the workplace)
* Stage 2, elective training, consisting of off job (in class) and on job training (practice in the workplace
* After these times, KSB Indonesia – Learning Center participants are allowed to take 2 weeks off

## Training Model

Delivery will be:

[x] Face to face

[x]  Online

[ ]  Correspondence

[x]  On-the-job

[x]  Combination

[ ]  Others

* 1. **Pathways**
1. Further study pathways available for students who take this qualification include undertaking RPL at other official institutions.
2. This qualification can also lead you to job roles which can include machining, fitter, fabrication and other mechanical engineering tool experts.

## Entry Requirements

Specific course entry requirements are (for example, LLN, technology skills, or prerequisite qualifications):

1. Minimum education standards:
* Vocational School majoring in engineering, or
* High school majoring in science, or
* Diploma in engineering
1. Minimum knowledge and skills
* General command of spoken and written Indonesian and English
* Able to write simple reports
* This course requires satisfactory completion of oral and written assignments
* For further details see the assessment section of this document
1. The person must be working in a full-time or part-time capacity and have been or wish to be involved in the delivery of training and competency assessment in a workplace context within their own industry.
2. Language, Literacy and Numeracy
* Recruitment staff and assessors will review candidates' language, literacy and numeracy skills during the application process with writing assignments and one-on-one interviews.
* If the review determines that the candidate would benefit from a thorough assessment of language, literacy and numeracy skills, a trained assessor will discuss further options with the candidate.
1. Industry skills/knowledge/experience
* No previous industry experience required
1. Age limit
* Candidates must be 18 years of age or older at the time of induction

## Employability Skills Summary & Foundation Skills

The Employability Skills Summary for this qualification can be accessed from the training.gov.au website at the following link: <https://training.gov.au/Training/Details/MEM10119>

## Recognition Processes

* Entry level for participants of KSB Indonesia – Learning Center is aimed at candidates who do not have experience.
* RPL and CC (Credit Transfer) cannot be applied.

## Educational & Support Services

In accordance with the 2015 RTO Standards, support must include at a minimum:

* Identify specific requirements (such as literacy, numeracy, English or physical ability) that students need to complete each course, and
* Develop strategies to provide support where gaps are identified.

Can be:

* Language, Literacy & Numeracy (LLN) support.
* Assistive technology
* Additional tutorials, and/or
* Other mechanisms, such as assistance in using technology for online delivery components

Additional training and tutorials:

* Every effort, within reason, will be made to ensure successful outcomes for its students. Additional training and/or tutorials may be negotiated.

Reasonable adjustment:

* If the student is unable, due to physical or mental disability, ill health or family emergency, to undergo the assessment as outlined in each training block, alternative forms and timing of the assessment may be negotiated with the trainer prior to the assessment date. In the event that illness is the reason why the assessment cannot be completed, a doctor's certificate must be provided.

## Physical Resources

All staff involved in the delivery and assessment of these qualifications have:

* Direct access to the latest versions of competency units, assessment requirements,
* Training Packages
* Access to appropriate supporting materials relevant to their areas of delivery and assessment
* Trainer Handbook
* Vocational training & assessment books
* Assessment tasks with recommended answers
* Access to a copy of the most recent assessment tools used for this program
* Access to equipment and facilities to meet the requirements of each competency unit and successfully implement the program (more information available below).

Specifically, the following physical resources are available for the delivery and assessment of the competency units selected for this qualification.

* Access to [www.training.gov.au](http://www.training.gov.au)
* Timetable
* Manuals and/or materials
* Computer / laptop
* Projector
* Projector screen
* Portable memory
* Printers
* Whiteboard, blackboard equipment
* Absenteeism
* Session plan
* Powerpoint Slides
* Computer and internet lab
* Documentation of Student Assignments
* Workshops
	1. **Learning Resources**

The following learning resources will be available to ensure learners can acquire and absorb the skills and knowledge required prior to assessment:

* Student Books
* Powerpoint Slides
* Leaflets – templates can be hard copy or on a USB stick
* Printer
* Tea & coffee facilities

# Course Structure & Delivery Plan

Competency units will be delivered as:

* Stand-alone units
* Clusters of units
* Combination of stand-alone and clustered

The table below provides a description of the themes or topics and sequencing of units throughout the program. It also outlines the delivery schedule, required learning materials, methods and hours required. An indication is given if an assessment will be carried out.

**Course Structure & Delivery Plan**

| **Week** | **Unit Code** | **Name of Competency Unit** | **Points** | **Method** | **Duration (hrs)** | **Resources****(Learning, Physical etc)** | **Assessment** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 - 8 | MEM13015 | Work safely and effectively in manufacturing and engineering | 2 | face to face | 16 | * Access to [www.training.gov.au](http://www.training.gov.au)
* Timetable
* Manuals and/or materials
* Computer / laptop
* Projector
* Projector screen
* Portable memory
* Printers
* Whiteboard, blackboard equipment
* Absenteeism
* Session plan
* Powerpoint Slides
* Computer and internet lab
* Documentation of Student Assignments
* Workshops
 |[x]
| 1 - 8 | MEM16006 | Organise and communicate information | 2 | face to face | 16 |  |[x]
| 1 - 8 | MEM11011  | Undertake manual handling | 2 | face to face | 16 |  |[x]
| 1 - 8 | MEM12024 | Perform computations | 3 | face to face | 24 |  |[x]
| 1 - 8 | MEM12023 | Perform engineering measurements | 5 | face to face | 40 |  |[x]
| 1 - 8 | MEM09002 | Interpret technical drawing | 4 | face to face | 32 |  |[x]
| 1 - 8 | MEM18001 | Use hand tools | 2 | face to face | 16 |  |[x]
| 1 - 8 | MEM18002 | Use power tools/hand held operations | 2 | face to face | 16 |  |[x]
| 1 - 8 | MEM07001 | Perform operational maintenance of machines/equipment | 2 | face to face | 16 |  |[x]
| 1 - 8 | MEM18013 | Perform gland packing | 2 | face to face | 16 |  |[x]

# Assessment

KSB Indonesia – Learning Center is committed to an assessment system that ensures that assessments comply with the training package assessment requirements; and carried out in accordance with the Principles of Assessment and Rules of Evidence.

Principles of Assessment

1. Fairness
* Learners' individual needs are considered in the assessment process.
* Where necessary, reasonable adjustments are implemented by the RTO to consider the needs of individual students. The RTO informs students about the assessment process, and provides students with the opportunity to challenge the assessment results and be reassessed if necessary.
1. Flexibility
* Reflects learner needs
* Assess the competencies possessed by students no matter how or where they have been acquired;
* Describe a variety of assessment methods and use those appropriate to the context, competency unit and related assessment requirements, and the individual.
1. Validity
* Assessment of competency unit(s) and associated assessment requirements cover a range of skills and knowledge essential for competent performance
* Integrated assessment of knowledge and skills with their practical application
* Assessments that are based on evidence that shows that a student can demonstrate these skills and knowledge in other similar situations;
* Competency assessments are based on evidence of learner performance aligned to competency units and associated assessment requirements.
1. Reliability
* Evidence presented for the assessment is interpreted consistently and assessment results can be compared regardless of the assessor conducting the assessment.

Rules of Evidence

1. Validity
* Assessors are confident that students have the skills, knowledge and attributes as described in the module or competency unit and related assessment requirements.
1. Sufficiency
* Assessors are confident that the quality, quantity and relevance of assessment evidence enables judgments to be made on the learner's competency.
1. Authenticity
* Assessors are assured that the evidence presented for assessment is the student's own work.
1. Currency
* The assessor is confident that the assessment evidence demonstrates current competency. This requires assessment evidence from the present or very recent past.

## Evidence Gathering Techniques

The following table provides an overview of the evidence gathering techniques that will be used to assess each competency unit. Assessors have flexibility in choosing which techniques or tools they will use to gather sufficient evidence, in a variety of contexts, to meet training package requirements and make competency decisions.

If evidence is collected for a number of assessments, successful completion of a competency unit will only be assessed following successful completion of each individual assessment.

The techniques used for this qualification and the target groups are as follows:

|  |  |
| --- | --- |
| **A** | Review questions |
| **B** | Written Examination |
| **C** | Project |
| **D** | Observation of performance |
| **E** | Assignment |
| **F** | Third party report |

**Assessment Matrix**

| **Unit Code** | **Unit Title** | **Evidence Gathering Techniques** |
| --- | --- | --- |
|  |  | **A** | **B** | **C** | **D** | **E** | **F** | **Catatan** |
| MEM13015 | Work safely and effectively in manufacturing and engineering |  |[x]   |[x]   |[x]  Text, Assignments, Cover sheets |
| MEM16006 | Organise and communicate information |  |[x]   |[x]   |[x]  Text, Assignments, Cover sheets |
| MEM11011  | Undertake manual handling |  |[x]   |[x]   |[x]  Text, Assignments, Cover sheets |
| MEM12024 | Perform computations |  |[x]   |[x]   |[x]  Text, Assignments, Cover sheets |
| MEM12023 | Perform engineering measurements |  |[x]   |[x]   |[x]  Text, Assignments, Cover sheets |
| MEM09002 | Interpret technical drawing |  |[x]   |[x]   |[x]  Text, Assignments, Cover sheets |
| MEM18001 | Use hand tools |  |[x]   |[x]   |[x]  Text, Assignments, Cover sheets |
| MEM18002 | Use power tools/hand held operations |  |[x]   |[x]   |[x]  Text, Assignments, Cover sheets |
| MEM07001 | Perform operational maintenance of machines/equipment |  |[x]   |[x]   |[x]  Text, Assignments, Cover sheets |
| [x] EM18013 | Perform gland packing |  |[x]   |[x]   |[x]  Text, Assignments, Cover sheets |

## Authenticity of student work

A student must be able to ensure the authenticity of his or her own work at all times.

## Cheating and plagiarism

Plagiarism is presenting someone else's work as your own. This includes copying someone else's work without giving credit to the author or passing off someone else's work as your own.

Cheating and plagiarism are unacceptable.

## Reassessment

If the assessment results are 'unsatisfactory', students will have the opportunity to retake the assessment for that unit free of charge. If the result of the re-sit is a result of 'not yet satisfactory', further re-sit is permitted.

If, after reassessment, a student still does not meet the required competency criteria, he or she has the opportunity and seeks additional training on a case-by-case basis.

## Assessment appeals and grievances

KSB Indonesia – Learning Center strives to prevent assessment appeals by ensuring students are satisfied with the training and assessment process. All training personnel are expected to be fair, courteous, and helpful in all dealings with students. Before making a formal appeal, students are required to discuss the matter with the relevant assessors in an effort to reach an agreement.

The appraiser will reassess the decision that has been made. If students are still unhappy, they can submit a formal appeal in writing to the Head of KSB Indonesia – Learning Center. Upon receipt of a formal appeal, KSB Indonesia – Learning Center will appoint a further member of KSB Indonesia – Learning Center personnel as a third party to attempt to resolve the matter. Any decision recommended by a third party is not binding on either party.

If a student is still unhappy, KSB Indonesia – Learning Center will appoint another Registered Training Organization (RTO) to review the appeal. This Registered Training Organization will:

* Uphold the appeal
* Dismiss the appeal; or
* Recommend the collection of further evidence by either party.

# Staff Matrix - Human Resources

KSB Indonesia – Learning Center ensures all trainers and assessors comply with these requirements and a copy of the qualification is stored along with proof of PD with the trainer/assessor profile in the following location: Stored online in the Management System. Documentation is maintained for each trainer/assessor to demonstrate their competency in line with the relevant directives outlined above.

**Staff Matrix Human Resources**

| **Unit Code** | **Unit Title** | **Staff** |
| --- | --- | --- |
|  |  | **Imron Aziz** |  |  |
|  |  | **Deliver** | **Assess** | **Deliver** | **Assess** | **Deliver** | **Assess** |
| MEM13015 | Work safely and effectively in manufacturing and engineering |[x] [x]   |  |  |  |
| MEM16006 | Organise and communicate information |[x] [x]   |  |  |  |
| MEM11011  | Undertake manual handling |[x] [x]   |  |  |  |
| MEM12024 | Perform computations |[x] [x]   |  |  |  |
| MEM12023 | Perform engineering measurements |[x] [x]   |  |  |  |
| MEM09002 | Interpret technical drawing |[x] [x]   |  |  |  |
| MEM18001 | Use hand tools |[x] [x]   |  |  |  |
| MEM18002 | Use power tools/hand held operations |[x] [x]   |  |  |  |
| MEM07001 | Perform operational maintenance of machines/equipment |[x] [x]   |  |  |  |
| [x] EM18013 | Perform gland packing |[x] [x]   |  |  |  |

# Assessment Moderation

## Moderation Meetings

* Moderation meetings will be held according to a set schedule to ensure a systematic approach.
* This is separate from the validation process and is intended to ensure a reliable assessment has been made before releasing results to learners.
* Moderation of assessments will occur regularly, before releasing results to students, at least every 12 months.
* The moderation process involves reviewing a sample of evidence folios to ensure the reliability and consistency of the assessment meets the requirements of the training package as well as meeting industry standards.
* Materials such as learning and reference materials, training package assessment guides, feedback forms and other resources will be used.
* Discussions and recommendations during the moderation meeting will be recorded in the Moderation Form

## Validation

Validation will be carried out in line with the 5 year plan of KSB Indonesia – Learning Center.

## Assessment Feedback

Feedback and input from students and other stakeholders will be sought, analyzed and acted upon, as necessary, on a regular basis. The information obtained will become part of any material review and in the validation and moderation process. Feedback will be sought through the following process:

1. Feedback from students:
* Coach feedback form every semester (twice a year)
* End of semester course review feedback form (twice a year)
1. Coach feedback:
* Year-end review feedback form
1. Industry feedback:
* Industry questionnaire (once a year)

## Transition Arrangements

The Head of KSB Indonesia – Learning Center subscribes to email updates and the training community to ensure KSB Indonesia – Learning Center is informed about any changes to the Training Package.

When there are changes to the Training Package that impact this TAS, KSB Indonesia – Learning Center will notify all affected staff as soon as possible. When there are major changes to the Training Package, KSB Indonesia – Learning Center will review the changes made and make plans to transition to the new training package requirements and fulfill settlement arrangements for students if possible.

Transition arrangements must be completed within 12 months of the changes being published.

# Review of Training & Assessment Strategy (TAS)

This TAS will be reviewed as required by changes to the Training Package, organizational resources and in meeting individual client needs. A systematic approach will also be used to review the TAS and any recommended changes will be discussed by trainers, assessors, head of KSB Indonesia – Learning Center, and the management team. These changes will be implemented when/if approved.

# Approved by:

|  |  |
| --- | --- |
| **KSB Indonesia – Learning Center** | Imron Aziz |
| **Signature** | A grey letter with a white backgroundA black signature on a white background  Description automatically generated |
| **Date** | June 11th 2024 |