



**Australian Government**

# **ICPSUP583 Troubleshoot and optimise the production process**

**Release: 1**

# ICPSUP583 Troubleshoot and optimise the production process

## Modification History

| Release   | Comments                                                                                     |
|-----------|----------------------------------------------------------------------------------------------|
| Release 1 | This version first released with ICP Printing and Graphic Arts Training Package Version 1.0. |

## Application

This unit describes the skills and knowledge required to troubleshoot and optimise the production process. This unit focuses on systems analysis and design.

It applies to individuals who perform a broad range of skilled tasks relating to the printing and graphic arts industry, and who may also provide leadership and guidance to others in the application and planning of the skills. They evaluate and recommend changes to the production process, and adjust and tune machinery to make efficiency gains.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

## Unit Sector

Support

## Elements and Performance Criteria

| ELEMENT                                          | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                 |
| 1. Evaluate production for efficiency purposes   | <p>1.1 Machine operations, staff and production process organisation are evaluated on an ongoing basis to make production efficiency gains</p> <p>1.2 Production schedule is analysed according to production output, inventory, procurements, time constraints, supply capacities and requirements</p> <p>1.3 Quality standards and safe work practices are examined to ensure compliance</p> <p>1.4 Changeover/make ready processes are reviewed for production efficiency gains</p> |

| ELEMENT                                         | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                 | 1.5 Recommendations covering the above areas are developed and documented                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 2. Optimise production efficiency               | <p>2.1 Compliance to specified requirements is checked to ensure efficiency is maintained</p> <p>2.2 Non-compliance is identified and investigated to determine causes</p> <p>2.3 Production standards or machines are set and/or changed according to enterprise procedures</p> <p>2.4 Changeover/make ready times and processes are monitored to ensure times are maintained or improved</p> <p>2.5 Production schedule is monitored and adjusted according to production output, inventory, procurements, time constraints and supply capacities and requirements to ensure efficiency is maintained</p>               |
| 3. Troubleshoot production efficiency problems  | <p>3.1 Corrective or preventive action is implemented where appropriate</p> <p>3.2 Changes are communicated to relevant personnel in a logical and easily understood manner</p> <p>3.3 Changes are monitored and adjusted to confirm improvement to production efficiency</p>                                                                                                                                                                                                                                                                                                                                             |
| 4. Troubleshoot material and machining problems | <p>4.1 Evaluation of material or product structure is conducted to identify options for production and required tuning and adjustments are completed</p> <p>4.2 Idiosyncrasies of machines are reviewed and adjustments or tuning undertaken to compensate or to exploit the idiosyncrasy within the manufacturer's specifications</p> <p>4.3 Options are assessed to determine most effective/efficient method of production, ensuring highest quality and yield from materials and ease of production</p> <p>4.4 Options and recommendations are documented for future reference according to enterprise procedures</p> |
| 5. Document changes and remedies                | <p>5.1 Changes to production process are documented according to enterprise procedures</p> <p>5.2 Adjustments to machines are recorded according to enterprise procedures</p> <p>5.3 Documentation is circulated according to enterprise procedures, if required</p>                                                                                                                                                                                                                                                                                                                                                      |

## Foundation Skills

*This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.*

| Skill                      | Performance Criteria                      | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reading                    | 1.1-1.5, 2.1-2.5, 3.2, 4.4, 5.1-5.3       | <ul style="list-style-type: none"> <li>Interprets and comprehends information in a range of texts including relatively complex workplace policies and procedures</li> <li>Examines records to determine compliance</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Writing                    | 1.5, 2.3, 2.5, 3.3, 4.1, 4.4, 5.1, 5.2    | <ul style="list-style-type: none"> <li>Uses clear, specific and industry related terminology to complete and update workplace documentation</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Oral Communication         | 3.2                                       | <ul style="list-style-type: none"> <li>Provides clear explanations using language appropriate to audience and environment</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Numeracy                   | 1.4, 2.4, 2.5, 4.2, 4.3                   | <ul style="list-style-type: none"> <li>Uses simple mathematical calculations and arranges numerical information sequentially when dealing with time constraints and machine optimisation</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Navigate the world of work | 1.3, 2.1, 2.3, 4.4, 5.1-5.3               | <ul style="list-style-type: none"> <li>Takes full responsibility for compliance with organisational policies and procedures</li> <li>Understands how own role meshes with others and contributes to broader work goals</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Interact with others       | 3.2, 5.3                                  | <ul style="list-style-type: none"> <li>Identifies requirements of important communication exchanges, selecting appropriate channels, format, and content to suit purpose and audience</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Get the work done          | 1.1, 1.2, 1.5, 2.2-2.4, 3.1, 3.3, 4.1-4.3 | <ul style="list-style-type: none"> <li>Develops plans to manage relatively complex, non-routine tasks with an awareness of how they contribute to operational and strategic goals</li> <li>Uses systematic, analytical processes to solve problems in complex, non-routine situations; setting goals, gathering relevant information and identifying and evaluating options against agreed criteria</li> <li>Recognises and anticipates an increasing range of familiar problems and develop contingency plans for implementation, as required</li> <li>Reflects on how digital systems and tools are used, or could be used to achieve work goals</li> </ul> |

## Unit Mapping Information

| <b>Code and title<br/>current<br/>version</b>                          | <b>Code and title<br/>previous<br/>version</b>                         | <b>Comments</b>                                             | <b>Equivalence<br/>status</b> |
|------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------|-------------------------------|
| ICPSUP583<br>Troubleshoot<br>and optimise<br>the production<br>process | ICPSU583C<br>Troubleshoot<br>and optimise<br>the production<br>process | Updated to<br>meet<br>Standards for<br>Training<br>Packages | Equivalent<br>unit            |

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

# Assessment Requirements for ICPSUP583 Troubleshoot and optimise the production process

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## Performance Evidence

Evidence of the ability to:

- recommend and implement new, more efficient production processes and troubleshoot problems within the production process that affect efficiency gains
- produce a portfolio that demonstrates each element has been carried out (including records of standards and monitoring procedures, and evidence of effectiveness)
- create production efficiencies – confirmed through discussions with senior management and review of workplace documentation.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

## Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Setting quality standards

- describe how inspection criteria for print quality are set
- explain why quality of artwork/film has a bearing on quality of the printed product
- list quality standards set by the customer
- explain how quality standards determine inspection specifications

Identifying production requirements and capacities

- describe job requirements that determine production processes
- explain how to identify special production requirements and possible problems
- list criteria used to determine availability of machines, materials and labour
- identify work health and safety (WHS) concerns to consider when planning production

Causes of failure

- list common causes of failure in each production area that need to be monitored

- list procedures implemented to minimise the effect of failure.

#### Revising schedules

- explain how production schedules are monitored and amended
- describe consideration given to revising production schedules to take customer requirements and job complexity into account

#### Evaluating re-work methods

- outline who is responsible for evaluating re-work of unacceptable items
- identify the method of re-work that has been determined
- list criteria set to monitor re-work
- describe requirements established for inspection of re-working material to customer's specifications

#### Determining unacceptable items and evaluating production procedures

- identify what causes unacceptable items
- describe records kept on acceptable and rejected items
- describe records kept on the reason for rejection
- determine the cause for the rejection and explain how the problem has been rectified

#### Quality improvements

- explain information that needs to be monitored to maintain standards
- identify who should be involved in monitoring quality standards
- explain how enterprise improvements affect quality standards.

## Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

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