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**WOOD MANUFACTURING**  
**Recommend production planning and**  
**information systems improvements in**  
**wood manufacturing operations**

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| <b>level:</b>                | <b>6</b>   |
| <b>credit:</b>               | <b>25</b>  |
| <b>planned review date:</b>  | September 2005   |
| <b>sub-field:</b>            | Wood Processing Technology   |
| <b>purpose:</b>              | People credited with this unit standard are able to: analyse production planning methods for a wood manufacturing operation;<br>optimise production planning methods to improve wood manufacturing performance; compare optimised production plan with previously achieved outcomes in the selected wood manufacturing operation; analyse information systems for their effectiveness in a specified wood manufacturing operation; and recommend ways in which information systems can be improved in the specified wood manufacturing organisation. |
| <b>entry information:</b>    | Recommended: Unit 20267, <i>Relate operations management principles to wood manufacturing operations</i> , or demonstrate equivalent knowledge and skills.   |
| <b>accreditation option:</b> | Evaluation of documentation and visit by NZQA and industry.  |
| <b>moderation option:</b>    | A centrally established and directed national moderation system has been set up by Forest Industries Training.   |
| <b>special notes:</b>        | Definitions<br><i>Wood manufacturing operation</i> means any operation involved in solid wood processing, wood product manufacturing, or plywood and laminated veneer lumber manufacture.<br><i>Production planning</i> refers to the application of resources to achieve planned outcomes in an effective and efficient manner.   |

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## **Elements and Performance Criteria**

### **element 1**

Analyse production planning methods for a wood manufacturing operation.

#### **performance criteria**

- 1.1 Analysis identifies production planning methods relevant to the wood manufacturing operation.
- 1.2 Analysis of selected planning method justifies the rationale for its selection in terms of raw materials movement and location, process flows, and materials requirements planning in the wood manufacturing operation.
- 1.3 Analysis demonstrates how all aspects that impact on the wood manufacturing process are considered in its optimisation.

Range: cost minimisation, availability of upstream and downstream processing capability, labour requirements and skill levels, maximising of raw materials recovery, efficient product mix selection, comparison of cost and value added for each process stage.

### **element 2**

Optimise production planning methods to improve wood manufacturing performance.

#### **performance criteria**

- 2.1 Optimisation plan identifies how the selected method is implemented from the current situation in the wood manufacturing operation.

Range: time lines, resource allocation, interim production arrangements, staff development and recruiting.

- 2.2 Optimisation plan identifies budgetary requirements for efficient expenditure throughout the process improvement in the wood manufacturing operation.

Range: timely capital expenditure, efficient resource allocation costs.

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2.3 Optimisation plan is evaluated to ensure wood manufacturing customer expectations are met.

Range: product quality, agreed product cost, delivery in specified time frames.

**element 3**

Compare optimised production plan with previously achieved outcomes in the selected wood manufacturing operation.

**performance criteria**

3.1 Comparison may demonstrate any combination of a reduction or prevention of bottle-necks, reduction of process flow impediments, reduced lead times, minimised inventory, minimised downtime; and their impact on production costs, productivity and use of resources in the wood manufacturing operation.

**element 4**

Analyse information systems for their effectiveness in a specified wood manufacturing operation.

Range: information systems – quality, performance management, financial, production, sales, purchasing, human resource.

**performance criteria**

4.1 Analysis identifies information flows and their rationale within the wood manufacturing operation.

Range: information flows may include - management, functional, operations systems, process systems.

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4.2 Analysis identifies strengths and weakness of a specified information system in a wood manufacturing operation.

Range: strengths and weaknesses include but are not limited to - timeliness, technological capability, systems planning, external linkages.

**element 5**

Recommend ways in which information systems can be improved in the specified wood manufacturing organisation.

**performance criteria**

5.1 Recommendations identify improvements to be made and how these would be achieved for a specified information system in the wood manufacturing operation.

5.2 Recommendation identifies team structure and methods to develop solutions to improve information system weaknesses in the wood manufacturing operation.

5.3 Recommendation identifies how and what technology can be applied to improve information system weaknesses in the wood manufacturing operation.

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**Comments on this unit standard**

Please contact Competenz at [info@competenz.org.nz](mailto:info@competenz.org.nz) if you wish to suggest changes to the content of this unit standard.

**Please Note**

Providers must be accredited by the Qualifications Authority or a delegated inter-institutional body before they can register credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by the Qualifications Authority before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

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Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for providers wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

This unit standard is covered by AMAP 0173 which can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.