| Title | Produce a composite item by filament winding | | |
|-------|--|---------|---|
| Level | 4 | Credits | 7 |

| Purpose | People credited with this unit standard are able to prepare materials and equipment and produce a composite item by filament winding. |
|---------|---|
|---------|---|

| Available grade | Achieved |
|-----------------|----------|
|-----------------|----------|

Guidance information

1 Definitions

Equipment refers to applicators, dispensers, measuring devices, cutters and cleaning utensils.

Job specifications refers to the standard requirements of the job being undertaken. Product specification refers to the documented requirements of the manufactured item.

Workplace policies and procedures refer to the documented procedures and policies providing guidelines of the tasks and activities carried out in the workplace. This typically includes relevant health and safety requirements to eliminate hazard/risk in the workplace.

All work practices must meet recognised codes of practice such as the Code of Practice for Health and Safety in the Manufacture of Composites Based on Synthetic Resins (Fibreglass), 1998, available at http://composites.org.nz/publications/code-of-practice/ and workplace policies and procedures (where these exceed the code) for personal, product and workplace health and safety, and must meet the obligations required under Health and Safety at Work Act 2015, Resource Management Act 1991, and any subsequent amendments.

Outcomes and performance criteria

Outcome 1

Prepare materials and equipment to produce a composite item by filament winding.

Performance criteria

- 1.1 Materials and equipment are prepared in accordance with job specifications.
- 1.2 Machine and equipment are tested and calibrated in accordance with manufacturer's instructions.

NZQA unit standard 3176 version 6
Page 2 of 2

Outcome 2

Produce a composite item by filament winding.

Performance criteria

- 2.1 Composite item is produced in accordance with process and product specifications.
- 2.2 Machine and equipment are cleaned in accordance with manufacturer's instructions.
- 2.3 Finished item is checked and remedial action is taken if required to ensure product specifications are met.

| Planned review date | 31 December 2023 |
|---------------------|------------------|
|---------------------|------------------|

Status information and last date for assessment for superseded versions

| Process | Version | Date Last Date for Assessmen | | |
|-----------------------|---------|------------------------------|------------------|--|
| Registration | 1 | 9 December 1994 | 31 December 2020 | |
| Revision | 2 | 14 April 1997 | 31 December 2020 | |
| Revision | 3 | 5 January 1999 | 31 December 2020 | |
| Review | 4 | 26 September 2001 | 31 December 2020 | |
| Rollover and Revision | 5 | 21 August 2009 | 31 December 2020 | |
| Review | 6 | 31 May 2018 | N/A | |

| Consent and Moderation Requirements (CMR) reference | 0136 |
|---|------|
| 7 | |

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.

Comments on this unit standard

Please contact the NZ Marine and Composites ITO <u>training@nzmarine.com</u> if you wish to suggest changes to the content of this unit standard.