

Field Manufacturing**Review of *Boating Industries and Composites* unit standards**

Subfield	Domain	ID
Boating Industries	Boatbuilding	9946, 23245, 23246, 23249, 23253, 23255, 25343
Composites	Industrial Composites	3163, 3172, 3190
	Production Composites	3164-3166, 3168, 3169, 3171, 3173, 3177, 3179, 3181, 3182, 3189, 3192, 3198

NZ Marine and Composites Industry Training Organisation (NZMAC ITO) has completed the review of the unit standards listed above.

Date new versions published

April 2017

Planned review date

December 2021

Summary

NZMAC ITO carried out a review to better align these unit standards to the graduate outcomes of the New Zealand qualifications relating to the marine and composite industries, and also to reflect the new health and safety legislation. The review was conducted at NZMAC ITO workplace with consultation of the subject matter experts.

Main changes

- Unit standards 23245, 23246, 23249, 23253 and 23255 increased in credits to better reflect the learning and assessment time.
- Unit standards 3169 and 23249 increased in level from 3 to 4 to better represent the level of the outcomes.
- Unit standard 3198 decreased in level from 5 to 4 to better represent the level of the outcomes (inflated level on previous version).
- Unit standard titles and content have been updated to better reflect the standard outcomes.
- Guidance Information has been updated to reflect changes in legislation.

The last date for assessment of superseded versions of Category B unit standards is December 2018.

Impact on existing organisations with consent to assess

Current consent for			Consent extended to		
Nature of consent	Classification or ID	Level	Nature of consent	Classification or ID	Level
Domain	Production Composites	3	Standard	3169	4

Detailed list of unit standards – classification, title, level, and credits

All changes are in **bold**.

Key to review category	
A	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
B	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
C	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

Manufacturing > Boating Industries > Boatbuilding

ID	Title	Level	Credit	Review Category
9946	Assemble multiple and complex metal boat components for joining Join complex metal boat components	4	10	B
23245	Fit hatches, windscreens, and screen rails on production trailer boats Install deck hatches, windscreens, and screen rails on production trailer boats	3	3 6	B
23246	Apply linings and floor coverings on production trailer boats Fix lining and floor coverings on production trailer boats	3	3 5	B
23249	Fit electrical systems to production trailer boats Install electrical systems in a production trailer boat	3 4	3 5	B
23253	Join composite production trailer boat hulls and decks Join a composite production trailer boat hull and deck	4	4 8	B
23255	Install an outboard motor on a production trailer boat	4	3 8	B
25343	Identify boat fittings and fastenings Describe boat fittings and fastenings	2	4	B

Manufacturing > Composites > Industrial Composites

ID	Title	Level	Credit	Review Category
3163	Produce a bisphenol resin item to a product specification for composites Produce a bisphenol resin item to a product specification	3	5	B
3172	Produce an item by resin injection for composites Produce composite items by resin injection	4	7	B
3190	Repair damaged or faulty composites Repair damaged or faulty composite items	4	5	B

Manufacturing > Composites > Production Composites

ID	Title	Level	Credit	Review Category
3164	Produce a phenolic resin item to a product specification for composites Produce a phenolic resin item to a product specification	3	5	B
3165	Produce a laminated item using resins that cure at elevated temperatures for composites Produce a laminated item using resins that cure at elevated temperatures	4	6	B
3166	Produce an item using resin pre-impregnated reinforcement for composites Produce a composite item using resin pre-impregnated reinforcement	4	5	B
3168	Deposit a polyester gel coat by hand for composites Deposit a polyester gel coat by hand	3	4	B
3169	Deposit a polyester gel coat by spray method for composites Deposit a polyester gel coat by spray method	3 4	6	B
3171	Produce a cored laminate for composites Produce a cored laminate item	3	3	B
3173	Produce an item by resin infusion for composites Produce a composite item by resin infusion	4	7	B
3177	Cure an item in an autoclave for composites	4	3	B
3179	Produce a laminate using a pre-wet machine for composites Produce a laminate item using a pre-wet machine	3	2	B
3181	Produce a plug or pattern for composites	4	12	B
3182	Produce an open mould from a plug or pattern for composites Produce an open mould from a plug or pattern	4	5	B
3189	Produce composite items by casting for composites Produce a composite item by casting	2	5	B
3192	Provide for and attach fixings and fastenings in composites Attach fixings and fastenings to composite products	4	4	B
3198	Alter resin rheology with fillers, extenders and additives for composites Blend resin components to alter resin rheology for composites	5 4	3	B