

NATIONAL CERTIFICATE IN BOATBUILDING ALLOY PRODUCTION TRAILER BOATS (Level 4)

253 CREDITS Version 5

An apprentice completing this NZQA registered qualification will gain the knowledge and skills required to be Marine Industry recognized and qualified as a competent **Alloy Production Trailer Boatbuilder**.

This qualification is designed for apprentices in the boatbuilding sector of the Marine Industry who specialise in the building of alloy production trailer boats.

Construction of the frames through to completion of the hull and superstructure are all covered in detail as are welding, cutting, shaping and fabricating and the fitting of interior and exterior components. Support and transport of boats and the correct and safe use of all boatbuilding tools are also addressed.

Alloy production trailer boats is one of the largest sectors of the industry and owning such a boat represents one of the major aspirations of a large number of New Zealanders. Up to a maximum of around 8 metres in length, these boats are mainly owned by individuals and families for recreational purposes, though a number operate as commercial enterprises. It is an exciting part of the industry to be part of!

This qualification takes, on average 3 to 4 years to complete.

Continued on next page

Kieran Raupi



Kieran Raupi completed his National Certificate in Boatbuilding (Alloy) Level 4 in 2009. Being involved with the production of aluminium trailer boats he decided to specialise in this area so is now working through his second qualification, the National Certificate in Boatbuilding (Alloy Production Trailer Boats) Level 4.

Kieran currently works at JMS Boats in Taupo. Completing his first apprenticeship was a great achievement and Kieran enjoyed coming up to Auckland for his graduation. He has already built one boat for himself and for the immediate future will focus on finishing his second qualification. With more experience Kieran is considering working overseas.

'Have a goal because those who aim at nothing always hit it' – Kieran Raupi

NATIONAL CERTIFICATE IN BOATBUILDING (ALLOY PRODUCTION TRAILER BOATS) Level 4 (Version 5)**Unit Standard Content**

Unit Number	Unit Title	Level	Credit Value
414	Demonstrate knowledge of the distribution environment	2	4
2675	Weld aluminium in the dowhand positions using the gas metal arc welding process	3	6
2676	Weld stainless steel sheet using the gas tungsten arc welding process	3	6
2686	Weld aluminium in all positions using the gas metal arc welding process	4	10
5433	Demonstrate knowledge of electrical and electronic applications for marine use	4	8
9913	Demonstrate a knowledge of the New Zealand marine industry	2	3
9917	Demonstrate knowledge of boatbuilding methods	2	4
9922	Produce templates and patterns used in boatbuilding	3	4
9944	Identify the characteristics of aluminium alloys relevant to boatbuilding	2	2
9946	Assemble multiple and complex metal boat components for joining	4	10
10836	Produce scale drawings of boat surfaces from corrected offsets	2	6
18158	Select, use and care for hand tools used in boat building	2	5
18159	Select, use and care for portable power tools used in boatbuilding	2	5
18160	Operate mechanical plant used in boatbuilding	2	12
18161	Perform measurements and calculations used in boatbuilding	2	5
18162	Calculate quantities and costs for boatbuilding projects	3	4
18163	Demonstrate a knowledge of boatbuilding construction drawings and produce related freehand sketches	3	2
18166	Participate in a project team in the boating industry	2	4
18170	Contribute to a project team in the boating industry	3	3
21907	Demonstrate and apply knowledge of safe welding procedures under supervision	2	3
23241	Loft a boat hull	4	10
23242	Loft full sized decks and superstructures.	4	6
23243	Identify and explain the causes and prevention of material deterioration in the marine environment	4	8
23244	Identify and apply health and safety procedures for the boatbuilding industry	3	4
23245	Fit hatches, windscreens & screen rails on production trailer boats	3	3
23247	Describe upholstery applications on production trailer boats	3	3
23248	Detail production trailer boats	3	3
23249	Fit electrical systems to production trailer boats	3	3
23250	Demonstrate knowledge of production trailer boat support and transport requirements	3	3
23251	Demonstrate knowledge of production processes used in trailer boatbuilding	3	8
23252	Demonstrate knowledge of production trailer boat design	4	4
23255	Install an outboard motor on a production trailer boat	4	3
23256	Demonstrate knowledge of quality control for production trailer boats	4	3
23257	Install and describe a production trailer boat fuel system	4	5
25075	Perform basic fabrication operations under supervision	2	12
25343	Identify boat fittings and fastenings	2	4
25344	Demonstrate knowledge of marine trades and expectations of employees	2	3
25345	Demonstrate knowledge of terminology used in the marine industry	2	6
25700	Assemble and join light fabrication materials	4	20
25874	Lay out and mark off light fabrication shapes	4	15
26542	Demonstrate basic knowledge of the operation of recreational craft by day	2	6

NATIONAL CERTIFICATE IN BOATBUILDING (ALLOY PRODUCTION TRAILER BOATS) Level 4 (Version 5)

Elective Unit Standard Content Plus at least **15** credits from the following list:

Unit Number	Unit Title	Level	Credit Value
2683	Cut metals using manual thermal processes	3	4
2688	Weld stainless steel tube using the gas tungsten arc welding process	4	12
3161	Produce an Epoxy resin item to a product specification for composites	3	5
3162	Produce a vinyl ester resin item to a product specification for composites	3	5
11777	Install production inboard engine packages in boats	3	6
11790	Prepare aluminium substrates for marine surface coatings	4	5
18165	Demonstrate knowledge of computer technology used in the boating industry	3	6
23246	Apply linings and floor coverings on production trailer boats	3	3
25113	Describe filling and fairing technology used in boatbuilding	3	4
25115	Describe, install and test plumbing systems in boats	3	6
25152	Apply 2D CAD/CAM in boatbuilding	4	5
25153	Describe computerised manufacturing processes used in boatbuilding	4	3

