

Title	Describe a marine diesel fuel system		
Level	3	Credits	3

Purpose	People credited with this unit standard are able to describe diesel fuel, and a marine diesel fuel system.
----------------	--

Classification	Boating Industries > Boatbuilding
-----------------------	-----------------------------------

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

Guidance Information

None.

Outcomes and performance criteria

Outcome 1

Describe diesel fuel.

Performance criteria

1.1 The physical and chemical properties of diesel fuel are described.

Range properties may include – viscosity, flashpoint, self-ignition temperature, ignition qualities, sulphur content, cloud point, effects of contamination, energy content.

Outcome 2

Describe a marine diesel fuel system.

Performance criteria

2.1 A marine diesel fuel system is described in terms of component location, fuel flow path, fuel feed, and return line.

Range components may include – primary filter, secondary filter, lift pump, injection pump, injectors, fuel tank.

2.2 Safety considerations for a marine diesel fuel system are described.

Range fuel pressure, personal safety, environmental safety.

2.2 Components are described in terms of their purpose.

Range primary filter, secondary filter, lift pump, injection pump, injectors, fuel tank, return lines, rail fuel, sealing washers, copper washers, insulators, high pressure pipes.

2.3 Function of types of injectors are described.

Range injector types may include – unit, pencil, pintle, multi-hole.

2.4 Injection controllers are described in terms of their function.

Range mechanical pump, pump timing, electronic timing, electronic control unit, sensors.

Planned review date	31 December 2030
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	14 December 2017	31 December 2027
Review	2	29 May 2025	N/A

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

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

Comments on this unit standard

Please contact Hanga-Aro-Rau Engineering, Manufacturing and Logistics Workforce Development Council at qualifications@hangaarorau.nz if you wish to suggest changes to this skill standard.