

Title	Manufacture tubing for use on launch vehicle assemblies		
Level	4	Credits	10

Purpose	People credited with this unit standard are able to: prepare to manufacture tubing for use on launch vehicle assemblies; prepare metal for manufacture of tubing for use on launch vehicle assemblies; manufacture tubing for use on launch vehicle assemblies; and complete finishing activities related to the manufacture of tubing for use on launch vehicle assemblies.
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Classification	Aeronautical Engineering > Aerospace Engineering
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Available grade	Achieved
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Guidance Information

- 1 All tasks must be carried out in accordance with enterprise procedures.
- 2 Definition
Enterprise procedures – procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.
- 3 Tubing may include material selection, including ensuring it meets specification, through preparation and manufacture to production and testing of tube to required specification.

Outcomes and performance criteria

Outcome 1

Prepare to manufacture tubing for use on launch vehicle assemblies.

Performance criteria

- 1.1 Task is determined by reviewing maintenance documentation and manuals.

Range	may include but is not limited to – manufacturer publications, enterprise drawings.
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- 1.2 Work area is prepared, and resources are obtained and checked for serviceability.

Range may include but is not limited to – publications, tools, equipment, safety equipment, environmental conditions established.

Outcome 2

Prepare metal for manufacture of tubing for use on launch vehicle assemblies.

Performance criteria

- 2.1 Metals are prepared.

Range may include but is not limited to – tube, fastenings, end fittings.

- 2.2 Fittings and accessories are prepared.

Range may include but is not limited to – swaged end fittings, sleeves, bends, reducers, expansion valves, line tap valves.

- 2.3 Inspections are obtained.

Outcome 3

Manufacture tubing for use on launch vehicle assemblies.

Performance criteria

- 3.1 Tubing is cut, bent, fabricated, joined, inspected, cleaned and sealed.

- 3.2 Tubing is tested and adjusted.

Range may include but is not limited to – troubleshoot, functionally test, leak check, adjust, document adjustments and performance.

- 3.3 Inspections are obtained.

Outcome 4

Complete finishing activities related to the manufacture of tubing for use on launch vehicle assemblies.

Performance criteria

- 4.1 Completion activities specific to the task and work area are carried out.

Range may include but is not limited to – tool control, cleanliness, tidiness, return of publications.

4.2 Resources are checked for serviceability and returned to service or storage.

Range may include but is not limited to – tools, equipment, safety equipment.

4.3 Leftover parts and materials are disposed of.

Range may include but is not limited to – serviceable, unserviceable, surplus, waste, scrap, hazardous.

4.4 Documentation is completed.

4.5 Work area is left in a state that enables the next task to begin.

Planned review date	31 December 2027
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 April 2020	N/A
Rollover and Revision	2	27 June 2024	N/A

Consent and Moderation Requirements (CMR) reference	0028
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Ringa Hora Services Workforce Development Council qualifications@ringahora.nz if you wish to suggest changes to the content of this unit standard.