

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.

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 2025
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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

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 ServicelQ qualifications@serviceiq.org.nz if you wish to suggest changes to the content of this unit standard.