

Title	Peen aeronautical components		
Level	4	Credits	20

Purpose	Persons credited with this unit standard are able to: prepare to peen aeronautical components; prepare a peening machine; peen aeronautical components; inspect peened aeronautical components; prepare aeronautical components; and carry out task completion activities.
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Classification	Aeronautical Engineering > Aeronautical Machining
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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 May include – shot or bead peening.

Outcomes and performance criteria

Outcome 1

Prepare to peen aeronautical components.

Performance criteria

- 1.1 Component identity is confirmed with documentation by comparing serial and part numbers.
- 1.2 Task is established and documented.
- 1.3 Work area is prepared, and resources are obtained.

Range may include but are not limited to – publications, materials, tooling, equipment, safety equipment, environmental conditions.

Outcome 2

Prepare a peening machine.

Performance criteria

2.1 Peening machine is prepared.

Range condition checked, set up, adjusted, made safe to use.

2.2 Media is prepared.

Range size, type, quality.

2.3 Almen test strip is prepared.

Range air pressure, media type and weight, Almen strip type, time and distance.

2.4 Almen strip curvature is measured.

2.5 Machine is set for task requirement.

Range air pressure, distance, time.

Outcome 3

Peen aeronautical components.

Performance criteria

3.1 Component is masked.

Range holes, protected areas.

3.2 Component is peened.

Range time, distance.

3.3 Masking is removed from component.

Outcome 4

Inspect peened aeronautical components.

Performance criteria

4.1 Component is measured and checked for conformity with specifications.

Range dimensional and/or angular accuracy, profile, surface finish.

4.2 Any defects are reported, recorded, and rectified.

Outcome 5

Prepare aeronautical components.

Performance criteria

5.1 Component is prepared.

Range may include but is not limited to – use, storage, transit, inhibiting, cleaning, packing.

5.2 Documentation is completed.

Outcome 6

Carry out task completion activities.

Performance criteria

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

Range may include but are not limited to – tool control, cleanliness, tidiness, return of publications, preparation for next activity, return of aircraft and systems to normal.

6.2 Leftover items, parts, and materials are disposed of.

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

Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 June 1995	31 December 2016
Revision	2	7 August 1997	31 December 2016
Revision	3	8 May 2001	31 December 2016
Review	4	26 March 2007	31 December 2016
Review	5	24 October 2014	31 December 2021
Review	6	26 March 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 ServiceIQ qualifications@serviceiq.org.nz if you wish to suggest changes to the content of this unit standard.