

1. Title	Aeronautical metals and components head treatment
2. Code	EMAMWS462A
3. Range	Aeronautical metals and components heat treatments are performed in an aircraft hangar or workshop by using appropriate tools or machines.
4. Level	4
5. Credit	9
6. Competency	<p style="text-align: center;"><u>Performance Requirement</u></p> <p>6.1 Knowledge ♦ Understand the knowledge of heat treatments.</p> <p>6.2 Methods and procedures</p> <ul style="list-style-type: none"> ♦ Able to review the maintenance documents and procedures to decide on maintenance task. ♦ Able to make preparation for the work area and obtain and check the resources for serviceability or status in accordance with the procedures, e.g. publications, materials, tools, safety equipment, environmental conditions established ♦ Able to set up equipment in accordance with the procedures, e.g. oven, salt bath, temperature stabilized, quenching tank prepared. ♦ Able to confirm the component identification is matched with the documentation. ♦ Able to prepare the component for heat treating in accordance with the procedures. ♦ Able to rack the item in oven or bath in accordance with the procedures. ♦ Able to control the soak time, temperature and ramp rate in accordance with the procedures.

6.3 Professional approach

- ◆ Able to remove and quench the item in accordance with the procedures.
- ◆ Able to control the heat treated state of item in accordance with the procedures, e.g. temperature, time.
- ◆ Able to test the heat treated item in accordance with the procedures, e.g. hardness, conductivity, tensile strength.
- ◆ Able to perform inspections in accordance with the procedures, e.g. independent, duplicate, progressive.
- ◆ Able to understand the legislative requirements, aviation authority requirements, manufacturers' publications and the maintenance organizations' approved maintenance practices and requirements in carrying out the task.
- ◆ Able to complete the task within the stipulated duration.
- ◆ Able to return the work area in a condition enabling the next task to begin.
- ◆ Able to check and return the resources for serviceability in accordance with the procedures, e.g. tools, equipment, safety equipment, publications.
- ◆ Able to complete the documentation in accordance with the procedures, e.g. labels, work cards, release notes, certification.

7. Assessment Criteria	The integral outcome requirement of this UoC is: (i) Able to carry out heat treatment to the aeronautical metals and components.
8. Remarks	Ref: NZQA - 4073