

Royal Canadian Mounted Police Gendarmerie royale du Canada Doc. no: G.S. 1045-140 Date: 2017-08-28

Specification

Hardware, Equipment, Sam Browne

This document has 11 pages including the drawings.

This document was created in English.

The document is available in English and French.

English/Anglais Français/French

The photograph on this page is for reference only.

Issued on the authority of the Commissioner, Royal Canadian Mounted Police.

Modifications

| Date | Para. No's | Modifications |
|------------|------------------------------------|--|
| 1992-10-22 | | Original Specification |
| 2013-07-23 | Paras. 2.2, 2.3, 4.1, 4.1.1, 4.1.2 | ASTM standards updated, Certificate of |
| | (new), 4.3, Appendix 'A' (new) | Compliance requirement added. |
| 2014-04-08 | Para. 4.1 | Material composition detail re-worded. |
| | Para. 4.1.3 (new) | Alternative metal alloy added. |
| | Para. 4.4 | Finish detail for claw added. |
| | Para. 5 | Deleted, Para. 6 renumbered. |
| | Appendix 'A' | Table of certification requirements added. |
| 2017-08-28 | Entire specification. | Re-formatted and revised specification to |
| | | include stock number and titles. Removed |
| | | items that are not directly purchased. |
| | | Construction details modified. Standards |
| | | updated. |
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RCMP VIEWING SAMPLE

A viewing sample, when available, will be supplied to the successful bidder.

This will be used for the guidance of the manufacturer in all factors not covered by this specification or referred to therein. Variation from the specification may appear in the sample in which case the specification must govern.

It may be obtained from:

Royal Canadian Mounted Police ATTN: Uniform & Equipment Program (440 Coventry Road, Warehouse Building) 1200 Vanier Parkway Ottawa, Ontario K1A 0R2

It will be sent "prepaid" and is to be returned "prepaid".

The viewing sample must be returned to the RCMP in the same condition as received by the manufacturer. Lost or damaged viewing samples must be replaced by an identical item or the RCMP must be reimbursed for the cost of an acceptable replacement.

SPECIFICATION HARDWARE, EQUIPMENT, SAM BROWNE

1. **Definition**

- 1.1 This specification must govern the manufacture and inspection of Hardware, Equipment, Sam Browne. The specific items covered under this specification with stock numbers where applicable are as follows:
 - i. 8562-100 Buckle Belt, Equipment Sam Browne / Boucle de ceinturon Sam Browne;
 - ii. 8565-100 Buckle, Claw, Equipment Sam Browne / Griffes pour boucle de ceinturon Sam Browne;
 - iii. 8700-100 Roller Buckle / Boucle à rouleau;
 - iv. 8710-100 Swivel, Hook / Crochet à émerillon.
- 1.2 This specification, viewing sample, drawing or other information issued in connection therewith, may only be used for specific enquiries, solicitations, or orders placed on behalf of the Royal Canadian Mounted Police.
- 1.3 This specification supersedes all previous specifications for Hardware, Equipment, Sam Browne.
- 1.4 This specification has been translated into French from this original English language document.

2. <u>Applicable Specifications</u>

- 2.1 The following publications are applicable to this specification and to the issues in effect on the date of the solicitation, unless otherwise specified.
- 2.2 ASTM, American Society for Testing and Materials, Method B36/B36M-13, B584-14 and B86-13.

3. <u>General Requirements</u>

3.1 The article or material covered by this specification must be free from material and manufacturing defects that may affect its appearance or serviceability. In all

particulars not covered by this specification or contract documents, production must be equivalent in all respects to the viewing sample.

3.2 **Design** - The hardware must be designed in accordance with the drawings attached and forming part of this specification, and the viewing sample.

4. **Detail Requirements**

4.1 <u>Components</u>

4.1.1 <u>Composition Requirements</u> – The base metal must be brass conforming to one of the following brass composition requirements when tested to their respective ASTM standard, see Table I and Table II below. The solder must be brazing brass and borax fired at approximately 482°C; or electric fusion process may be used. Items may be sand cast yellow brass.

| Table I | | | | |
|---------------------------------|-------------|--|--|--|
| ASTM B584-14 | | | | |
| Composition Requirements | % by Weight | | | |
| Copper | 58.0-64.0 | | | |
| Tin | 0.5-1.5 | | | |
| Lead | 0.8-1.5 | | | |
| Zinc | 32.0-40.0 | | | |

| Table II | | | | |
|--------------------------|-------------|--|--|--|
| ASTM B36/B36M - 13 | | | | |
| Composition Requirements | % by Weight | | | |
| Copper | 68.5-71.5 | | | |
| Iron | 0.05 max | | | |
| Lead | 0.07 max | | | |
| Zinc* | remainder | | | |

*determined arithmetically by difference

4.1.2 **Pressure Die Cast Construction** – The base metal must be zinc alloy no. 3 for pressure die casting, conforming to the following composition requirements in Table III when tested to ASTM B86-13:

| Table III ASTM B86-13 | | | | |
|-----------------------------|-----------|--|--|--|
| | | | | |
| Aluminium | 3.7-4.3 | | | |
| Magnesium | 0.02-0.06 | | | |
| Copper | 0.1 max | | | |
| Iron | 0.05 max | | | |
| Lead | 0.005 max | | | |
| Cadmium | 0.004 max | | | |
| Tin | 0.002 max | | | |
| Zinc* | remainder | | | |

*determined arithmetically by difference

- 4.2 **<u>Dimensions</u>** The dimensions must be in accordance with the item drawings and subject to a tolerance of ± 0.75 mm.
- 4.3 <u>Construction</u> The hardware must be made of material in accordance with para.
 4.1 and constructed and assembled in accordance with the following item drawing and viewing sample:

| G.S.1045-140 | Stock Number | Item Name |
|--------------|--------------|-----------------------------------|
| Item Number | | |
| 1 | 8562-100 | Buckle Belt, Equipment Sam Browne |
| 2 | 8565-100 | Buckle Claw Equipment Sam |
| | | Browne |
| 3 | 8700-100 | Roller Buckle |
| 4 | 8710-100 | Swivel Hook |

All items must be functional with RCMP Equipment Sam Browne Belts and accessories, and with each other.

4.4 **<u>Finish</u>**

4.4.1 <u>**Gold Plating**</u> – All items with the exception of item # 2 must be electroplated in accordance with the best commercial standards. The hardware must be adequately cleaned and polished prior to plating and have a bright nickel plating as an undercoating for the gold plating. A final electroplated, hard 18k gold finish must be applied which must be of the proper shade and must be no less than 0.2 μ m thickness. The gold plating must be smooth, fine grained, and adherent and free

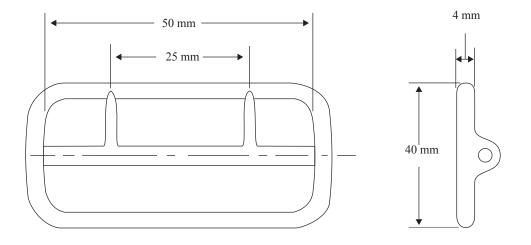
from exposed base material or under plate. It must be free from blisters, pits, nodules, porosity, indications of burning, excessive edge build-up or other defects.

4.4.2 **Brass Finish** – The Item # 2 Buckle, Claw, Equipment Sam Browne, must be unplated and left in its natural brass state.

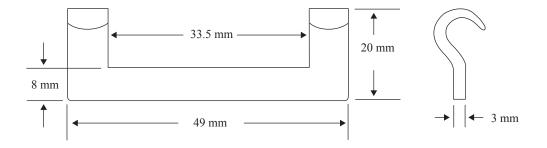
5. **Quality Assurance Provisions**

- 5.1 <u>**Responsibility for Inspection**</u> Unless otherwise stipulated in the contract, it is the prime contractor's responsibility to satisfy the RCMP, Uniform and Equipment Program that the material and services being supplied conform to this specification. This may be accomplished by performing the tests specified in this specification or by demonstrating to the satisfaction of the RCMP, Uniform and Equipment Program that conformity to this specification of manufacturing processes is assured. The contractor must use any independent, North American, ISO 9001 certified and ISO 17025 "Textile" certified testing facilities.
- 5.2 The RCMP, Uniform & Equipment Program reserves the right to perform any inspection considered necessary to ensure the material and services conform to the specified requirements. For the purpose of inspection, a portion of each delivery not exceeding two percent or two out of any number delivered under 100 may be put to tests that could destroy the articles. If found to be inferior or not in accordance with this specification, all articles so destroyed must be replaced by others of proper quality and pattern at the expense of the contractor. The entire delivery may also be rejected if it is found that articles previously rejected due to non-repairable defects are redelivered for inspection.
- 5.3 The contractor will be promptly notified when any articles are not accepted and such articles will be returned at the contractor's risk and expense.

Hardware, Equipment Sam Browne #8562-100 Buckle. Belt, Equipment, Sam Browne

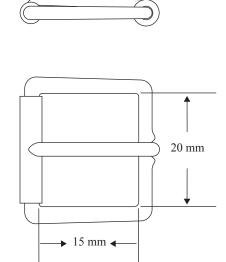


Hardware, Equipment Sam Browne #8565-100 Buckle, Claw, Equipment Sam Browne



THIS ITEM IS NOT GOLD PLATED

Hardware, Equipment Sam browne #8700-100 Roller Buckle



Hardware, Equipment Sam Browne #8710-100 Swivel Hook

