



Royal Canadian Mounted Police  
Gendarmerie royale du Canada

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# Specification

## Hardware, Equipment, Sam Browne

This document has 21 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.



## **RCMP VIEWING SAMPLE**

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

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

## **SPECIFICATION**

### **HARDWARE, EQUIPMENT, SAM BROWNE**

#### **1. Definition**

- 1.1 This specification shall govern the manufacture and inspection of Hardware, Equipment, Sam Browne.
- 1.2 This specification, viewing sample, drawing or other information issued in connection therewith, may only be used for specific enquiries, tenders, or orders placed on behalf of the Royal Canadian Mounted Police.
- 1.3 This specification supersedes all previous specifications for Hardware, Equipment, Sam Browne.

#### **2. Applicable Specifications**

- 2.1 The following publications are applicable to this specification and to the issues in effect on the date of the invitation to tender, unless otherwise specified.
- 2.2 ASTM, B584-13 Standard Specification for Copper Alloy Sand Castings for General Applications.
- 2.3 ASTM, B86-64 Standard Specification for Zinc and Zinc Aluminum Alloy Foundry and Die Castings.

#### **3. General Requirements**

- 3.1 The article or material covered by this specification shall be free from imperfections or blemishes such as may affect its appearance or serviceability. In all particulars not covered by this specification or contract documents, production shall be equivalent in all respects to the viewing sample.
- 3.2 **Design** - The hardware shall be designed in accordance with the drawings attached and forming part of this specification, and the viewing sample.
- 3.3 In the event of any inconsistency in contract documents, specification, drawing, or viewing sample, the aforementioned shall prevail in the following order:

- (i) Contract
- (ii) Specification
- (iii) Drawing
- (iv) Viewing sample

4. **Detail Requirements**

4.1 **Material** - The items listed in para. 4.3 below shall be made of brass, conforming to the following composition requirements when tested to ASTM B584-13. Items No. 1 to 8 may be sand cast yellow brass and items No. 9 to 11 may be free turning brass rod.

4.1.1 **Composition Requirements**

	<u>Min %</u>	<u>Max %</u>
Copper	60	65
Lead	0.75	1.5
Tin	0.05	1.5
Zinc	32	38.75

**Certification of Compliance required to show the alloy content.**

4.1.2 **Alternative Alloy Composition**

An alternative alloy may be substituted for Items No. 5, 6 and 10. These items may be made of zinc alloy for pressure die casting, as per Alloy No. 3, ASTM B86-64.

**Composition Requirements**

	<u>Min %</u>	<u>Max %</u>
Copper	---	0.25 max.
Aluminium	3.5	4.3
Magnesium	0.02	0.05
Iron Max.	---	0.100
Lead Max.	---	0.005
Cadmium Max.	---	0.004
Tin Max.	---	0.003
Zinc (99.99 + % purity)	Remainder	

**Certification of Compliance required to show the alloy content.**

4.1.3 **Alternative Brass Alloy** - As an alternative to the brass alloy composition requirement outlined above, the following brass material composition may also be used:

Content	Minimum %	Maximum %
Copper	80	90
Zinc, percent	10	20

**Certification of Compliance required to show the alloy content.**

4.2 **Dimensions** - The dimensions shall be in accordance with the item drawings and subject to a tolerance of +/- 0.75 mm.

4.3 **Construction** - The hardware shall be made of material in accordance with para. 4.1 and constructed and assembled in accordance with the following item drawing and viewing sample:

- Item No. 1            Buckle, Double Prong,
- Item No. 2            Claw, Buckle, Double Prong
- Item No. 3            Buckle, Loose Roller, Single Prong
- Item No. 4            Buckle, Single Prong
- Item No. 5            "D" Ring, Large
- Item No. 6            "D" Ring, Small
- Item No. 7            Swivel, Snap
- Item No. 8            Hook, Sword
- Item No. 9            Stud, Round Head, Rivet
- Item No. 10           Stud, Round Head, Flange
- Item No. 11           Stud, Flat Head, Flange
- Item No. 12           Fastener, Snap
- Item No. 13           Fastener, Snap, "Dot"

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

4.4 **Finish** - Shall be electroplated in accordance with the best commercial standards. The hardware shall be adequately cleaned and polished prior to plating and have an acid-nickel plating. A final electroplated hard acid 18 karat gold is then applied which shall be of the proper shade and shall be not less than 0.2 µm thickness. There shall be no cut through, shaded, peeled or blistered plating, and it shall match the colour of the viewing sample. The Claw, Buckle, Double

Prong, Item No. 2 and the snap fasteners, Items No. 12 and 13, shall be unplated and left in their natural brass state. The button for both snap fasteners shall be bright brass with a hard lacquer finish.

5. **Quality Assurance Provisions**

- 5.1 **Responsibility for Inspection** - Unless otherwise stipulated in the contract, it is the prime contractor's responsibility to satisfy the RCMP, Uniform & 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 & Equipment Program that conformity to this specification of manufacturing processes is assured. The contractor may use his own facilities or any commercial testing establishment acceptable to the RCMP, Uniform & Equipment Program.
- 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 shall 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.

**Appendix ‘A’**

**Certification & Evaluation Criteria**

Appendix A contains definitions of compliance and certification requirements for all materials specified in this document. These definitions shall be used by RCMP Uniform & Equipment Program Section to ensure all documentation is received and meets the requirements outlined in this specification.

**Definitions:**

**Certification of compliance:** A Certificate of Compliance is defined, for this solicitation, as a signed and dated certification by an appropriate official of the component manufacturer (e.g. slide fastener, hook and loop, webbing, etc.). It must specifically address the adherence of the offered component to the specification or manufacturing data of the technical requirement.

A separate certificate of compliance is required for each individual product or component. It must be dated within 18 months of the solicitation posting date; and must certify that the product for which the certificate of compliance was issued is the same product used in the bid submission, or in the pre-award samples or in the pre-production samples, or in the production units as applicable.

**Test Report:** Test report documents shall include the test method, test conditions and test results performed by a laboratory or test facility acceptable to the RCMP to verify requirements as specified in this specification.

**Certification & Evaluation Criteria**

<b>Para. Title/Test</b>	<b>Certification of Compliance</b>	<b>Test Report</b>	<b>Pass/Fail</b>
Material Composition (Paras. 4.1.1 – 4.1.3)	Required for all alloy compositions with each item listed accordingly		