



National Defence

Défense nationale

National Defence Headquarters
Ottawa, Ontario
K1A 0K2

Quartier général de la Défense nationale
Ottawa (Ontario)
K1A 0K2

REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION

RETURN BIDS TO: RETOURNER LES SOUMISSIONS À :

Bid receiving – PWGSC / Réception des soumission

tpsgc.dgareceptiondessoumissions-
abbidreceiving.pwgsc@tpsgc-
pwgsc.gc.ca

Via epost \ Postel
Bid Fax: 819-997-9776

Proposal To: National Defence Canada

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods and services listed herein and on any attached sheets at the price(s) set out therefor.

Proposition à : Défense nationale Canada

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens et services énumérés ici et sur toute feuille ci-annexée, au(x) prix indiqué(s).

Title/Titre: Hoses		Solicitation No – N° de l'invitation W8482-231247/B Amendment 001 Date of Amendment: 29/05/2023
Date of Solicitation – Date de l'invitation May 12, 2023		
Address Enquiries to – Adresser toutes questions à Katharine Barker D Mar P 4-3-3-5 Katharine.Barker2@forces.gc.ca		
Telephone No. – N° de téléphone	FAX No – N° de fax	
Destination Specified herein / Précisée dans les présentes		

Instructions:

Municipal taxes are not applicable. Unless otherwise specified herein all prices quoted must include all applicable Canadian customs duties, GST/HST, excise taxes and are to be delivered Delivery Duty Paid including all delivery charges to destination(s) as indicated. The amount of the Goods and Services Tax/Harmonized Sales Tax is to be shown as a separate item.
Instructions: Les taxes municipales ne s'appliquent pas. Sauf indication contraire, les prix indiqués doivent comprendre les droits de douane canadiens, la TPS/TVH et la taxe d'accise. Les biens doivent être livrés « rendu droits acquittés », tous frais de livraison compris, à la ou aux destinations indiquées. Le montant de la taxe sur les produits et services/taxe de vente harmonisée doit être indiqué séparément.

Solicitation Closes – L'invitation prend fin

At – à : 1400 hours/heures EDT

On - June 16, 2023

Delivery required - Livraison exigée	Delivery offered - Livraison proposée
Vendor Name and Address - Raison sociale et adresse du fournisseur	
Name and title of person authorized to sign on behalf of vendor (type or print) - Nom et titre de la personne autorisée à signer au nom du fournisseur (caractère d'imprimerie)	
Name/Nom _____	Title/Titre _____
Signature _____	Date _____

Amendment # 001 is raised to provide bidders with packaging specification document D-LM-008-030/SF-001.

And to extend solicitation closing to June 16, 2023.

All other terms and conditions remain the same.



CANADIAN FORCES SPECIFICATIONS

SPECIFICATION FOR THE PACKAGING OF HOSE – RUBBER, PLASTIC, FABRIC, OR METAL (INCLUDING TUBING), AND FITTINGS, NOZZLES, AND STRAINERS

(ENGLISH)

(Supersedes D-LM-008-030/SF-001 dated 1981-09-03)

Issued on Authority of the Chief of the Defence Staff

OPI: DSCO 3

2023-01-06

Canada



NOTICE

This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document shall continue to apply.

AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues originalement doivent continuer de s'appliquer.

NOTES TO USERS

LAWS / REGULATIONS OF CANADA

1. Laws and regulations pertaining to packaging, safe handling and shipment of products, established by the various levels of government (federal, provincial and municipal), must be adhered to.

DEVIATION FROM SPECIFICATION

2. If the contractor wishes to suggest other proposals or otherwise depart from the current issue of this specification, they must forward their proposals immediately, to the Contracting Authority for approval.

INQUIRIES

3. Any questions relating to this specification will be referred to [DSCO 3-4-3](#) via the Contracting Authority.

1. SCOPE

1.1 This specification covers the preservation, packaging, and packing of various types of hose, hose fittings, nozzles, and strainers.

2. APPLICABLE DOCUMENTS

2.1 The following documents of the issue in effect on date of invitations for bids or request for proposal, form a part of the specification to the extent specified herein.

SPECIFICATIONS

D-LM-008-001/SF-001	Methods of Packaging
D-LM-008-002/SF-001	Marking for Storage and Shipment
MIL-STD-1186	Cushioning, Anchoring, Bracing, Blocking, and Water proofing, with appropriate test methods
MIL-PRF-121	Barrier Materials, Greaseproof, Waterproof, Flexible, Heat-Sealable
NAS847	Caps and Plugs, Protective, Dust and Moisture Seal
MIL-I-52211B	Industrial Gas Production Equipment, Accessories, and Support Items; Packaging of

3. REQUIREMENTS

3.1 **Material** – The material shall be as specified herein and in the applicable referenced specification.

3.1.1. **New Material** – The use of newly developed packaging and packing materials are encouraged and recommended and will be permitted under the conditions specified herein, provided they are equal to or better than the specified materials.

3.1.1.1 **Certification of New Materials** – Where the material is not covered by a specific specification, listed in D-LM-008-001/SF-001, the manufacturer or fabricator shall furnish to the procuring activity; documented evidence, certified by an approved testing laboratory that the material is equal to or exceeds the requirements of the specification for a similar material. If, after a review of its material and the related certified compliance reports, it is the opinion of the procuring agency that the material meets or exceeds the criteria established for similar materials, authorization for use will be granted.

3.2 **Process of Cleaning and Methods of Preservation** – Cleaning processes and methods of preservation indicated by symbols in tables I and II shall conform to the corresponding symbols in D-LM-008-001/SF-001 and as specified herein.

3.2.1 **Cleaning** –

- (a) **Process C-1** – where cleaning process C-1 is specified in table I and II, and deposit foreign to the composition of the part shall be removed;
- (b) **Process C-3** – Where cleaning process C-3 is specified in table II, the cleaning solvent shall not come in contact with materials such as fabric and rubber, or with painted surfaces; and
- (c) **Hose Hardware** – All hose hardware shall be cleaned in accordance with Table II prior to installation on hose or when furnished loose with hose.

3.3 **Preservatives and Application** – Preservatives shall conform to type P-1 or P-19 of D-LM-008-001/SF-001. Preservatives shall be applied only to couplings, fittings, and metal parts subject to corrosion. Preservatives shall not be applied to fabric, rubber, rubber-impregnated parts, plastic or non-ferrous metals or to surfaces that are painted, plated, coated, or that are inherently resistant to corrosion. Application of preservatives, to couplings and other fittings attached to hose, shall be in a manner to insure a complete homogenous coating. Preservative compound shall not be applied to any metal surfaces of hose, tubing, or fittings intended for installation or use in conjunction with oxygen systems.

Table I – Hose, rubber, plastic, fabric, or metallic, including tubing.

Type of hose or tubing	Process of cleaning	Methods of preservation	Special Requirements
Air:			
With couplings or other fittings	C-1	I	See 3.4.4
Without couplings or fittings	C-1	III	See 3.4.4
Chemical engine:			
With couplings or other fittings	C-1	I	See 3.4.8
Fire:			
Cotton or linen, rubber lined or unlined, single or double jacket, with coupling	C-1	I	See 3.4.3 and 3.4.8
Polyester fiber jacketed with couplings	C-1	I	See 3.4.3 and 3.4.8
Fuel:			
Rubber, self-sealing, without couplings or fittings	C-1	III	See 3.4.5 or 3.4.6

Table I – Hose, rubber, plastic, fabric, or metallic, including tubing, (continued).

Type of hose or tubing	Process of cleaning	Methods of preservation	Special Requirements
Gas:			
Acetylene, Red	C-1	I	See 3.4.7 and 3.4.8
Oxygen, green, double combination, with couplings	C-1	III	See 3.4.8
Gasoline:			
Metal tube, neoprene-lined, without couplings	C-1	III	See 3.4.5 or 3.4.6
Nonmetallic, with couplings or other fittings	C-1	I	See 3.4.5 or 3.4.6 and 3.4.8
Sea service, with couplings or other fittings	C-1	I	See 3.4.5 or 3.4.6 and 3.4.8
Hydraulic control and lubrication:			
Wire braided and non-wire braided:			
With couplings or other fittings	C-1	I	See 3.4.8
Without couplings or fittings	C-1	III	See 3.4.8
Metallic:			
Flexible, cotton-covered, rubber lined, steel galvanized			See 3.4.5 or 3.4.6
Flexible, corrugated tube, with braided reinforcement or interlock construction:			
With or without couplings	C-1	I	See 3.4.8
With couplings	C-1	I	See 3.4.8
With or without couplings	C-1	III	See 3.4.8
Oxygen			See 3.4.7
Paint Sprayer:			
With Couplings	C-1	I	See 3.4.8

Table I – Hose, rubber, plastic, fabric, or metallic, including tubing, (continued).

Type of hose or tubing	Process of cleaning	Methods of preservation	Special Requirements
Pneumatic: Braided or wrapped, with couplings or other fittings	C-1	I	See 3.4.8
Radiator	C-1	III	See 3.4.8
Refrigerant: Rubber composition, fabric, neoprene, with couplings or other fittings	C-1	I	See 3.4.8
Solvent resistant: With couplings or other fittings	C-1	I	See 3.4.8
Steam: Wrapped; with couplings or other fittings	C-1	I	See 3.4.5 or 3.4.6 and 3.4.8
Suction water: Cotton, soft, suction, rubber-lined: Smooth bore, reinforced rubber; smooth bore, wrapped fabric: With couplings or other fittings	C-1	I	See 3.4.8 See 3.4.5 or 3.4.6 and 3.4.8
Without couplings or other fittings	C-1	III	See 3.4.5 or 3.4.6
Water: Braided; wire-braided; wrapped with couplings or other fittings	C-1	I	See 3.4.5 or 3.4.6 and 3.4.8
Without couplings	C-1	III	See 3.4.5 or 3.4.6
Tubing: Rubber, without couplings or fittings	C-1	III	See 3.4.3

Table II – Hose Hardware

Type of hose or tubing	Process of cleaning	Methods of preservation	Special Requirements
Adapter: Hose; National Standard Fire hose thread	C-3	I	
Cap: Hose; brass, with chain and spanner lugs	C-1	III	
Clamp: Hose	C-3	I	
Connection: Hose	C-3	I	
Coupling: Hose	C-3	I	
Ejector: Steam	C-1	I	
Filler: Barrel, automatic, with 2 m hose and female coupling	C-1	III	
Gland: Acetylene, with nut 0.635 mm to 0.793 mm Hose connection, welding, 0.793 mm hose Oxygen, with nut, 0.635 mm to 0.793 mm			See 3.4.7 See 3.4.7 See 3.4.7
Injector: Steam	C-1	I	
Joint: Diving-apparatus air-hose union: Double female and double male	C-3	I	

Table II – Hose Hardware (continued)

Type of hose or tubing	Process of cleaning	Methods of preservation	Special Requirements
Nipple: Hose, air	C-3	I	
Nozzle: Hose	C-3	I	
Nozzle: Steam Injector	C-3	I	
Nut: Hose	C-3	I	
Play pipe: Stub, shut-off	C-3	I	Cushioned or blocked in fibreboard box
Ring: Hose expansion, brass	C-1	III	
Splicer: Hose, air	C-3	I	
Strainer: 	C-3	I	
Tip: 	C-3	I	
Valve: Brass	C-1	III	
Washer: Hose, rubber	C-1	III	

3.4 Packaging

3.4.1 Hose and Tubing – Hose and tubing with or without installed fittings, or with fittings furnished loose shall be supplied in coils, reels, or in straight lengths as specified in the applicable commodity specification, or as required by the contract or order and shall be packaged as specified herein for the form (coil, reel, straight length) required.

3.4.2 Hose and Tubing Ends With or Without Fittings – Open ends of hose and tubing, with or without fittings shall be sealed with plugs or caps conforming to NAS847. Alternatively, open ends of hose and tubing may be sealed with greaseproof barrier material conforming to grade A of MIL-PRF-121. Barrier material when used shall extend a minimum of 100 mm over the open ends onto the body of the hose or tubing. Barrier material shall be secured with pressure sensitive tape. Hose or tubing with fittings installed shall not have the fittings connected. Hose or tubing coil shall be enclosed within a bag of fabricated 4 mil thick polyethylene film. Bag closure shall be by heat sealing.

3.4.3 Coils – Coils shall be uniform, compact and of a diameter to prevent deformation or kinking. Each coil shall be secured equidistant a minimum of 3 places for lengths up to 6 m and 5 places for lengths exceeding 6 m. Commercial flat cotton tape, or pressure sensitive adhesive tape shall be used for tying. Hose or tubing furnished with loose fittings, shall have the fittings attached to the inside of the coil with one additional tie, or the loose fittings may be placed in a commercial bag and secured on the inside of the coil. After tying, individual coils shall be unit protected by any one of the following means at the option of the supplier:

- (a) The coil shall be enclosed within a bag of fabricated 4 mil thick polyethylene film. Bag closure shall be by heat sealing.
- (b) The coil shall be individually wrapped with waterproof barrier material. All seams, joints and closures shall be sealed with adhesives or other suitable materials to afford waterproofing equal to that of the wrap material:
and
- (c) The coil shall be placed in a close-fitting fibreboard box.

3.4.4 Reels – Single lengths of hose exceeding 90 kg and, single lengths less than 90 kg shall be wound on wood reels normally used for the product and the following requirements shall be adhered to:

- (a) After winding on the reel, the hose end shall be secured to prevent coil looseness or unwinding;
- (b) The hose shall be provided with a full wrap of either waterproof barrier material or 4 mm thick polyethylene film. The barrier material shall extend between the reel flanges with the ends and sides of the barrier secured with pressure sensitive tape;
- (c) Staples shall not be used to secure the barrier material to the reel flanges; and
- (d) A minimum clearance of 50 mm shall be provided between the inner face of the lagging and the outer wrapped layer of hose.

3.4.5 Straight Lengths 3 m in Length or Less – Hose ends shall be sealed or wrapped as specified in 3.4.2. Hose assemblies with fittings attached shall be additionally wrapped with waterproof barrier material. The wrap shall extend 150 mm onto the body of the hose and be secured with pressure sensitive tape.

- 3.4.6 Straight Lengths Exceeding 3 m in Length** – Hose ends shall be sealed or wrapped as specified in 3.4.5. Upon completion of the end wrappings, the entire unit length, including ends, shall be overwrapped with a triple thickness of burlap.
- 3.4.7 Oxygen Systems Hose and Hose hardware** – Hose and hose hardware used in conjunction with oxygen systems shall be cleaned, preserved and unit protected as indicated in method B, in accordance with MIL-I-52211. In addition, products shall be individually unit packaged in containers as specified in 3.4.8.
- 3.4.8 Hose Hardware** – Fittings, hose nozzles and strainers cleaned, preserved, or unit protected in accordance with table II shall be packaged one each in paperboard or fibreboard containers. Box closure shall conform to the applicable container specification or appendix thereto. The gross weight of paperboard boxes shall not exceed 4.5 kg or 9 kg for fibreboard boxes.
- 3.5 Intermediate Packaging** – Unit quantities in intermediate containers shall be uniform in size and shape and shall contain equal quantities.
- 3.6 Commercial Packaging** – Hose, tubing and fittings shall be cleaned, preserved, and packaged to afford protection against corrosion, deterioration, and physical damage from the supply source to the first receiving authority.
- 3.7 Packaging Requirements** – Shipping containers shall be of a minimum weight and cube consistent with the requirements of this specification. Shipping containers, when packed with the same items shall be of similar construction and of uniform size and of minimum cube and tare, consistent with the protection required and shall contain identical quantities of identical items when practicable. Cushioning methods and materials required to protect items from damage due to shock and vibration shall be in accordance with MIL-STD-1186. Materials that have not been chemically refined for noncorrosiveness are unacceptable unless they are enclosed in a sealed water-proof barrier.

[All wood packaging materials \(including pallets\) must comply with the International Standards for Phytosanitary Measures 15 \(ISPM 15\), Regulation of Wood Packaging Material in International Trade. Any deviation requires the prior approval of the Contracting Authority.](#)

- 3.7.1. Hose** – Tubing and hose hardware (excluding hose on reels or straight lengths exceeding 3 m).
- 3.7.2. Hose on Reels** – Each reel with hose shall be completely enclosed with wood lagging. Thickness of the lagging boards shall be equal to or greater than the thickness of one reel flange, but not thicker than nominal 50 mm lumber and shall be positioned so that all boards touch adjacent boards. Lagging shall extend to within 6 mm of the outside edges of the flanges. After lagging, each reel shall be banded with two flat steel straps. The straps shall be placed over the lagging and around the entire circumference of the reel. No further overpacking is required.
- 3.7.3. Straight Lengths Exceeding 3 m** – Straight lengths exceeding 3 m packaged as specified require no further packing. When it is more advantageous to ship the hose bent or coiled, the hose shall not be bent or coiled to a diameter less than 0.3 m for each 25 mm of inside hose diameter. For example, 150 mm inside diameter hose shall not be bent or coiled to a diameter less than 2 m. In no case shall kinking be permitted.

3.8. Commercial Packing – Material packaged as specified shall be packed in a manner to ensure carrier acceptance and safe delivery at destination at the lowest applicable rate. Containers, packaging, or method of shipment shall comply with carrier rules as applicable to the mode of transportation.

3.8.1 Palletization Requirements – For all shipments exceeding 0.566 m³ or 15.88 kg (20 ft³ or 35 lbs), except for those shipped by courier, the following applies:

- (a) The Contractor must strap, and if necessary wrap, shipments on standard 1.22 m x 1.02 m (48 in x 40 in) four-way forklift entry, ISPM 15 certified wood pallets. The pallet must be supplied at no charge to Department of National Defence. Total height, including pallet, must not exceed 1.19 m (47 in.). The pallet load must not extend further than 2.54 (1 in.) from any edge of the pallet.
- (b) The Contractor must group items by DND stock number (on the same pallet) within consolidated shipments. Pallet loads composed of more than one DND stock number must be marked as **"Mixed Items"**.
- (c) Individual items exceeding 1.22 m (48 in.) in length or 453.6 kg (1000 lbs) must be secured to larger pallets or must have 10.16 cm x 10.16 cm (4 in. x 4 in.) skids securely fastened to the bottom of the item. Skids must be separated by a minimum of 71.12 cm (28 in.).

NOTE

Any deviation requires the prior approval of the Contracting Authority

3.9 Marking – In addition to any special marking required by interior packages or shipping container, marking shall be made in accordance with D-LM-008-002/SF-001 and shall include the date of manufacture or date vulcanized for the type of hose specified.

3.9.1 Special Marking – Cure Date – In addition to the markings specified in 3.8.1 the cure date of rubber and other elastomeric materials shall be indicated by quarter and year in which the material was manufactured. Each year shall be divided into quarters as follows:

First quarter – January, February, March shall be designated as 1;

Second Quarter – April, May, June shall be designated as 2;

Third quarter – July, August, September shall be designated as 3; and

Fourth quarter – October, November, December shall be designated as 4.

3.9.2 The year shall be shown by the last two numerals, eg, 2022 would be indicated by 22. A "Q" shall separate the quarter from the year, eg, "3Q22" shall designate the third quarter of 2022.

3.9.3 The cure date shall be shown on all basic and intermediate packages as an additional requirement to the description of contents markings, eg, "CURE DATE 3Q22". Intermediate packages shall contain items with identical cure dates only.

3.9.4 Shipping containers, when practicable, shall contain items with identical cure dates. When items to be packed within the same container include more than one cure date, the description of contents markings on the face of the container shall show "CURE DATE MIXED".

3.9.5 Special Marking – Oxygen Systems Hose and Hose Hardware – Unit packages of products for use in oxygen systems shall be marked with a warning label as specified in MIL-P-52211.

3.10 Workmanship – Workmanship shall be such that when the proper procedure is followed, materials and equipment being processed will receive the required protection against corrosion, deterioration, and damage during shipment and storage and will require the minimum of processing for service.

4. QUALITY

4.1 Responsibility for Inspection – The supplier is responsible for the performance of all inspection requirements as specified herein. The supplier may use their own or any other facilities suitable for the performance of the inspection requirements specified herein, unless, disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies in services conform to prescribed requirements.

4.2 Inspection – The preservation, packaging, packing, and marking of hose, tubing, fittings, nozzles, and trainers shall be examined and tested to determine conformity with all of the requirements of this specification and as required by the specifications referenced herein.