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K1A 0S5

Bid Fax: (819) 997-9776

**Revision to a Request for Supply  
Arrangement - Révision à une demande  
pour un arrangement en matière  
d'approvisionnement**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address**

**Raison sociale et adresse du  
fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**

Industrial Vehicles & Machinery Products Division  
LEFTD - HS Division  
140, O'Connor Street/  
140, rue O'Connor,  
East Tower, 4th Floor/  
Tour Est, 4e étage  
Ottawa  
Ontario  
K1A 0S5

<b>Title - Sujet</b> Forklift Trucks -Chariots élévateur Forklift Trucks -Chariots élévateur à fourches	
<b>Solicitation No. - N° de l'invitation</b> E60HS-21FRKL/A	<b>Date</b> 2021-06-18
<b>Client Reference No. - N° de référence du client</b> E60HS-21FRKL	<b>Amendment No. - N° modif.</b> 005
<b>File No. - N° de dossier</b> hs653.E60HS-21FRKL	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$HS-653-79868	
<b>Date of Original Request for Supply Arrangement</b> 2021-03-18 <b>Date de demande pour un arrangement en matière d'app. originale</b>	
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> Eastern Daylight Saving Time EDT <b>on - le 2026-03-18</b> Heure Avancée de l'Est HAE	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Martial, Daniel	<b>Buyer Id - Id de l'acheteur</b> hs653
<b>Telephone No. - N° de téléphone</b> (613) 296-7559 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<b>Delivery Required - Livraison exigée</b>	
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	
<b>Security - Sécurité</b> This revision does not change the security requirements of the solicitation. Cette révision ne change pas les besoins en matière de sécurité de l'invitation.	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Acknowledgement copy required</b>	<b>Yes - Oui</b>	<b>No - Non</b>
<b>Accusé de réception requis</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>The Offeror hereby acknowledges this revision to its Offer.</b> <b>Le proposant constate, par la présente, cette révision à son offre.</b>		
<b>Signature</b>	<b>Date</b>	
Name and title of person authorized to sign on behalf of offeror. (type or print) Nom et titre de la personne autorisée à signer au nom du proposant. (taper ou écrire en caractères d'imprimerie)		
<b>For the Minister - Pour le Ministre</b>		

**Amendment 005**

This Amendment 005 is raised to modify the Request for Supply Arrangement as follows:

**1. In Annex "L"**

**Delete:**

Annex "L" - Purchase Description – Group 6B, Dated: 09 October 2020

**Insert:**

Annex "L" - Purchase Description – Group 6B, Dated: 08 June 2021

**2. In Appendix "L1"**

**Delete:**

Appendix "L1" – Technical Evaluation Matrix – Group 6B, Dated: 09 October 2020

**Insert:**

Appendix "L1" - Technical Evaluation Matrix – Group 6B, Dated: 08 June 2021

**ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.**



**NOTICE**

This documentation has been reviewed by the Technical Authority and does not contain controlled goods.

**SUPPLY ARRANGEMENT (SA) FOR CANADIAN FORCES MATERIAL HANDLING  
EQUIPMENT**

**GROUP 6B**

**Purchase Description (PD) For  
Swing Mast, Operator-down, Electric Motor Driven Forklift Trucks**

Date: 08 June 2021

OPI: DSVPM 4/DAPVS 4  
National Defence Headquarters  
Major General George R. Pearkes Building  
Ottawa, Ontario  
K1A 0K2

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Issued on Authority of the Chief of the Defence Staff  
Publiée avec l'autorisation du Chef d'état-major de la Défense

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**TABLE OF CONTENTS**

1.	SCOPE -----	3
1.1	Purpose -----	3
1.2	Instructions -----	3
1.3	Definitions -----	3
2.	APPLICABLE DOCUMENTS -----	4
2.1	Government Furnished Documents -----	4
2.2	Other Publications -----	4
3.	REQUIREMENTS -----	5
3.1	Standard Design -----	5
3.2	Operating Conditions -----	5
3.3	Safety Standards -----	5
3.4	Performance -----	6
3.5	Equipment -----	7
3.6	Operator Station -----	8
3.7	Chassis -----	8
3.8	Motors -----	9
3.9	Drive Unit -----	9
3.10	Brake System -----	9
3.11	Steering -----	9
3.12	Wheels, Rims and Tires -----	9
3.13	Controls -----	9
3.14	Instruments -----	9
3.15	Electrical System -----	9
3.16	Lighting -----	10
3.17	Hydraulic System -----	10
3.18	Lubricants and Hydraulic Fluids -----	10
3.19	Paint -----	10
3.20	Identification -----	10
3.21	Instruments, Decals and Data Plates -----	10
4.	INTEGRATED LOGISTICS SUPPORT -----	11
4.1	Documentation and Support Items -----	11
4.2	Training -----	14
5.	DELIVERY CONDITION -----	17
	APPENDIX A -----	18

## 1. **SCOPE**

- 1.1. **Scope** - This purchase description covers the requirements for a Swing Mast, Operator-down, Electric Motor Driven forklift truck.
- 1.2. **Instructions** - The following instructions apply to this Purchase Description:
- a) Requirements, which are identified by the word “**must**”, are mandatory. Deviations will not be permitted;
  - b) Requirements identified with a “will” define actions to be performed by Canada and require no action/obligation on the Contractor’s part;
  - c) Where “**must**”, or “will” are not used, the information provided is for guidance only;
  - d) Requirements identified by “**must**” or “**Equivalent**” are mandatory. The **Technical Authority** will consider substitutes/alternatives for acceptance as a **Technical Authority** approved **equivalent**;
  - e) Where a standard is specified and the Contractor has offered an **Equivalent**, that **equivalent** standard **must** be supplied by the Contractor, at no cost to Canada, when requested by the **Technical Authority**;
  - f) Where technical certification is required, a copy of the certification or an **Equivalent must** be provided by the Contractor upon request;
  - g) Metric measurements **must** be used to define the requirement. Other measurements are for reference only and may not be exact conversions; and
  - h) Dimensions stated as nominal **must** be treated as approximate dimensions. Nominal dimensions reflect a method by which materials or products are generally identified for sale commercially, but which differ from the actual dimensions.
- 1.3. **Definitions** - The following definitions apply to the interpretation of this Purchase Description:
- 1.3.1. “**Provided**” **must** mean “provided and installed”; and
  - 1.3.2. “**Equivalent**” – A standard, means, or component type, which has been accepted by the **Technical Authority** as meeting the specified requirements for form, function and performance.

2. **APPLICABLE DOCUMENTS**

2.1 **Other Publications** – The following documents form part of this Purchase Description. Websites for the organization are given when available. Unless otherwise specified, effective documents are those in effect on the date of manufacture. Sources are as shown:

2.1.1 **CAN/CSA Standards**

CAN/CSA-B335-04 Safety Standard for Lift Trucks

Canadian Standards Association (CSA)

5060 Spectrum Way, Mississauga, Ontario, L4W 5N6

<http://www.scc.ca/en/standardsdb/standards/19235>

2.1.2 **UL Standards**

UL 583 Standards for Safety, Electric Battery Powered Industrial Trucks

Underwriters' Laboratories of Canada

7 Crouse Road, Scarborough, Ontario, M1R 3A9

<http://www.ulc.ca/>

2.1.3 **ANSI Standards**

ANSI/ITSDF B56.1 Standard for Safety for Low Lift and High Lift Trucks

Industrial Truck Standards Development Foundation

1750 K Street NW, Suite 460

Washington DC 20009, USA

<http://www.itsdf.org/>

2.1.4 **Hazardous Product Act**

Ministry of Justice, Government of Canada

<http://laws-lois.justice.gc.ca>

### 3. REQUIREMENTS

#### 3.1. **Standard Design**

- 3.1.1. The vehicle **must** be the latest model from a manufacturer who has demonstrated acceptability by manufacturing and selling this type and size class of vehicle for at least one (1) year;
- 3.1.2. The vehicle **must** have engineering certification available, upon demand, for this application from the original equipment manufacturers (OEM) of major equipment systems and assemblies;
- 3.1.3. The vehicle **must** conform to all applicable laws, regulations and industrial standards governing manufacture, safety, noise levels and emissions in effect in Canada at the time of manufacture;
- 3.1.4. The vehicle **must** have systems and components not operating at greater than their ratings published by the systems or components manufacturers; and
- 3.1.5. The vehicle **must** include all components, equipment and accessories normally supplied for the model offered, although they may not be specifically be described in this Purchase Description.

#### 3.2. **Operating Conditions**

- 3.2.1. **Weather** - The vehicle/equipment **must** operate in temperatures ranging from 0 to 40° C (32 to 104° F) in Canada.
- 3.2.2. **Terrain** – The vehicle **must** operate on used-roughened concrete floors while being used stacking, un-stacking and moving general supplies in warehouses.

#### 3.3. **Safety Standards**

- 3.3.1. **Vehicle's Stability and Safety** – All vehicle design, construction and safety aspects **must** be in accordance with the latest edition of ANSI B56.1.
- 3.3.2. **"E" Rating** – The vehicle **must** be manufactured to meet the requirements of an "E" Rating in accordance with Standard UL 583 or equivalent.
- 3.3.3. **"EE" Safety Rating Feature**
  - a) The vehicle **must** be manufactured to meet the requirements of an "EE" safety rating in accordance with Standard UL 583, or an **Equivalent**, in lieu of the "E" safety rating (paragraph 3.3.3);
  - b) The UL or equivalent certification **must** be provided to the Technical Authority, upon request; and
  - c) An authorized certification mark confirming the vehicle meets the UL or equivalent safety rating **must** be permanently affixed to the vehicle before delivery.

3.3.4. **Hazardous Materials**

- (a) The contractor **must** minimize the use of hazardous materials, ozone depleting substances, polychlorinated biphenyls, asbestos and heavy metals used in the fabrication of the product supplied; and
- (b) Items considered as hazardous materials **must** be those given in the Hazardous Products Acts.

3.4. **Performance**

3.4.1. **Vehicle**

- a) The vehicle **must** be an operator-down type forklift where the operator compartment does not move with the mast movement;
- b) The vehicle **must** be provided with a swing mechanism that allows the operator to place and remove loads to/from the right side of the aisle only; and
- c) The vehicle **must** be a non-articulated type.

3.4.2. **Forklift Performance**

- a) The vehicle **must** have a load capacity, at a 610 mm (24 inches) load center of at least that given as “**LIFT CAPACITY**” in the A.1 - Data Table of Appendix A;
- b) The vehicle **must** have a lift height of at least that given as “**LIFT HEIGHT**” in the A.1 - Data Table of Appendix A, when measured from the floor to the top of the forks with mast in vertical position;
- c) The load capacity **must** not de-rate to below specified load capacity before a load lift height of 3,302 mm (130 inches) but **must** lift a load of at least 907 kg (2000 lbs) to the specified “**LIFT HEIGHT**” in A.1- Data Table of Appendix A;
- d) The vehicle **must** have an overall vehicle height and a collapsed mast of no more than that given as “**COLLAPSED HEIGHT**” in the A.1 - Data Table of Appendix A; and
- e) The vehicle **must** have a free lift height (load backrest removed) of at least that given as “**FREE LIFT**” in the A.1 - Data Table of Appendix A;
- f) The vehicle **must** be able to handle standard 1,016 mm (40 inches) x 1,220 mm (48 inches) pallets;
- g) The vehicle’s entire mast assembly **must** rotate 90° to the right side of the driver (facing front of the vehicle) for placing and removing pallets; and
- h) The vehicle **must** have an overall width of not exceeding 1,371 mm (54 inches).

3.5. **Equipment**

- a) **Mast** - The vehicle **must** be provided with a wide, see-through, vertically extendible hydraulic mast;
- b) **Forks**
  - (i) The vehicle **must** be provided with a forks having a nominal fork length of 1,016 mm (40 inches) or 1,067 mm (42 inches);
  - (ii) When requested, forks with a nominal length of 914 mm (36 inches) **must** be provided.
- c) **Backrest** - The vehicle **must** be provided with a load backrest having a minimum height of 914 mm (36 inches);
- d) **Fork Positioner** - The vehicle **must** be provided with a fork positioner to hydraulically increase and decrease the spacing between the forks; and
- e) **Fire Extinguisher**
  - i. Electric vehicles must be provided with a fire extinguisher having at least 1 kg (2.2 lb) of fire extinguishing chemicals;
  - ii. The fire extinguisher must be readily accessible to the operator; and
  - iii. The fire extinguisher must not interfere with the operation of the vehicle or the view of the operator

3.5.1. **Application Equipment** - The following accessories, attachments and features **must** be provided, when requested:

(a) **Mast 1**

- i. The vehicle **must** be provided with Mast 1, in lieu of the standard mast (paragraph 3.5 (a));
- ii. Mast 1 **must** have a lift height, measured from the floor to the top surface of the forks in the full-up position, of at least that given as “**MAST 1 – LIFT HEIGHT**” in A.1 - Data Table (Appendix A);
- iii. The vehicle, with Mast 1 in its lowest position, **must** pass under a horizontal beam with a height above ground level of that given as “**MAST 1 – VEHICLE HEIGHT**” in A.1 - Data Table (Appendix A); and
- iv. Mast-1 **must** have full free lift.

(b) **Mast 2**

- i. The vehicle **must** be provided with mast 2, in lieu of the standard mast (paragraph 3.5 (a));
- ii. Mast 2 **must** have a lift height, measured from the floor to the top surface of the forks in the full-up position, of at least that given as “**MAST 2 – LIFT HEIGHT**” in the A.1 - Data Table (Appendix A).
- iii. The vehicle, with Mast 2 in its lowest position, **must** pass under a horizontal beam with a height above ground level of that given as “**MAST 2 – VEHICLE HEIGHT**” in the A.1 - Data Table (Appendix A); and

- iv. Mast – 2 **must** have full free lift.
- (c) **Mast 3**
  - i. The vehicle **must** be provided with Mast 3, in lieu of the standard mast (paragraph 3.5 (a));
  - ii. Mast 3 **must** have a lift height, measured from the floor to the top surface of the forks in the full-up position, of at least that given as “**MAST 3 – LIFT HEIGHT**” in the A.1 - Data Table (Appendix A).
  - iii. The vehicle, with Mast 3 in its lowest position, **must** pass under a horizontal beam with a height above ground level of that given as “**MAST 3 – VEHICLE HEIGHT**” in the A.1 - Data Table (Appendix A); and
  - iv. Mast 3 **must** have full free lift
- (d) **Fork Tine Position Guide**
  - i. The vehicle **must** be provided with a fork tine position guide;
  - ii. The fork tine position guide **must** be permanently attached to the backrest;
  - iii. The fork tine position guide **must** use a laser to create a line that shows the level of the top of the fork tines;
  - iv. The fork tine position guide **must** be connected to the vehicle electrical system;
  - v. The fork tine position guide **must** automatically turn off when the vehicle is turned off; and
  - vi. The fork tine position guide **must** automatically turn off when the forks are within 2,130 mm (84 inches) of ground level.
- 3.6. **Operator Station**
  - a) **Overhead Guard** - The vehicle **must** be provided with a driver's overhead guard with wire mesh or equivalent mounted to protect operator;
  - b) **Seat** - The vehicle **must** be provided with a padded water-resistant operator's seat and backrest equipped with seat belts; and
  - c) **Mirror(s)** - The vehicle **must** be provided with rear view mirror(s) positioned providing a full view of both sides for safe reverse operations.
- 3.7. **Chassis** - The vehicle chassis **must** be the manufacturers standard for a vehicle of this type and size.
- 3.8. **Motors** - The vehicle **must** be provided with a standard motor of this type and size.
- 3.9. **Drive Unit** - The vehicle **must** be provided with a standard drive unit for this type and size of vehicle.
- 3.10. **Brake System** - The vehicle **must** be equipped with manufacturer's standard braking system conforming to CSA B335-04 or an **Equivalent**.

- 3.11. **Steering** - The vehicle **must** be provided with a standard steering system conforming to CSA B335 or an **Equivalent**.
- 3.12. **Wheels, Rims and Tires** - The vehicle **must** be provided with commercial standard wheels, tires and rims for this type and size of vehicle.
- 3.13. **Controls** - The vehicle **must** be provided with commercial standard joystick control systems for this type and size of vehicle.
- 3.14. **Instruments** – The vehicle **must** be provided with commercial standard instruments for this type and size of vehicle including an hour-meter which records accumulated running time up to 9,999 hours as well as a battery state-of-charge indicator with lift interrupt.
- 3.15. **Electrical System**
- a) The electrical system of the vehicle **must** have a minimum battery capacity of that given as "**BATTERY CAPACITY**" in the A.1 - Data Table of Appendix A;
  - b) Batteries **must** have a minimum voltage of at least that given as "**BATTERY VOLTAGE**" in the A.1 - Data Table of Appendix A with battery connectors colour coded to indicate the polarity;
  - c) The battery charger **must** be capable of charging the forklift batteries from the designated source of a 550 volt, three phase, 60Hz power source;
  - d) The vehicle **must** be provided with a back-up alarm system to alert personnel that the vehicle is in back-up mode;
  - e) The vehicle **must** be provided with an emergency power disconnect located within easy reach of the operator;
  - f) The vehicle **must** have battery compartment rollers and other features, which allow the rapid changing of the battery with a recharged battery; and
  - g) When requested, the vehicle **must** be provided with battery charger capable of charging the forklift batteries from a 220 volt/three phase and 220 volt/single phase, 60 Hz power sources in lieu of charger specified in section 3.15.1(c) above.
- 3.16. **Lighting**
- a) **Working Lights** – The vehicle **must** be provided with lights illuminating the front and rear working areas for operations in dark locations; and
  - b) **Reverse Movement Strobe Light** – The vehicle **must** be provided with a red strobe mounted on the rear of the forklift, which is activated when the vehicle travels in reverse.
- 3.17. **Hydraulic System** - The vehicle **must** be provided with a hydraulic system that supports the operation of all hydraulic components.

- 3.18. **Lubricants and Hydraulic Fluids** - The vehicle **must** be serviced with the manufacturer's non-proprietary standard lubricants and hydraulic fluids.
- 3.19. **Paint** - The vehicle **must** be painted using commercial colors having a high-durability, corrosion-resistant type coating.
- 3.20. **Identification** - The vehicle **must** be provided with an identification plate having manufacturer's name, model and serial number permanently marked in a conspicuous and protected location.
- 3.21 **Instruments, Decals and Data Plates**
  - 3.21.1 Instruments, decals and data plates provided on the vehicle **must** be marked in metric units;
  - 3.21.2 Instruments, decals and data plates **must** be marked using international symbols. Where international symbols are not possible, bilingual markings (English and French) must be provided; and
  - 3.21.3 Warning and precautionary data plates **must** be provided in a bilingual format.

#### 4. Integrated Logistic Support

##### 4.1. Documentation and Support Items

##### 4.1.1. Items Provided to Technical Authority

###### a) Manuals for Approval

- i. The Contractor **must** supply, no later than thirty (30) days prior to the forklift(s) being shipped to their delivery destination, a set of manuals for each Configuration/model, in digital format, including the operator, parts and maintenance (shop repair) manuals. Manuals may cover more than one (1) Configuration/model;
- ii. The set of manuals **must** include manuals for all the specified accessories and features for the Configuration/model. Accessory manuals may be included as supplements to the vehicle manuals;
- iii. The operator manuals **must** be supplied in a bilingual format as a package;
- iv. Digital copies **must** be functional without the requirement for a password, an auto-run installation procedure or an Internet connection;
- v. Digital copies **must** be supplied on a CD or DVD;
- vi. Digital copies **must** be supplied in a searchable PDF format;
- vii. The CD or DVD **must** be permanently and legibly marked with a list of contents;
- viii. Manual approval or comments will be supplied within 15 working days of receipt;
- ix. The Contractor **must** supply responses to the Technical Authority's (TA) comments. If comments are acceptable, the TA will approve manuals.
- x. Manuals will not be returned; and
- xi. Paper copies of manuals delivered under this contract **must** have the same content as the electronic format approved by the **Technical Authority**.

###### b) Photographs and Line Drawings

- i. The Contractor **must** supply, no later than thirty (30) days prior to the forklift(s) being shipped to their delivery destination, two (2) digital colour photographs, one left-front three-quarter view, and one right-rear three-quarter view of each Configuration/Model;
- ii. One (1) digital colour photograph of each attachment taken at the three-quarter view that best illustrates the attachment **must** be supplied;

- iii. One (1) front-view and one side-view line drawing showing dimensions of the vehicle **must** be supplied. Brochure line drawings are acceptable;
  - iv. Photographs **must** have a plain background;
  - v. Photographs **must** be in a JPEG (*Joint Photographic Experts Group*) format; and
  - vi. Photographs **must** have a resolution of at least eight (8) Mega pixels.
- c) **Data Summary**
- i. The Contractor **must** supply, no later than thirty (30) days prior to the forklift(s) being shipped to their delivery destination, a bilingual data summary for each Configuration/model, with vehicle data (including accessories and features) and a vehicle picture;
  - ii. The **Technical Authority** will supply a bilingual template of a data summary to the Contractor;
  - iii. The Contractor **must** supply a digital copy (MS Word) of the completed data summary for approval;
  - iv. Data summary approval or comments will be supplied within 15 working days of receipt; and
  - v. The Contractor **must** supply responses to the **Technical Authority's** comments.
- d) **Safety Data Sheets**
- i. The Contractor **must** supply, no later than thirty (30) days prior to the forklift(s) being shipped to their delivery destination, a list, in digital format, of all hazardous materials used on the vehicle;
  - ii. If there are no hazardous materials used, this **must** be stated on the list; and
  - iii. The Contractor **must** supply safety data sheets in both official languages, in digital PDF format for all hazardous materials in the list
- e) **Warranty Letter**
- i. The **Technical Authority** will supply, no later than thirty (30) days prior to the forklift(s) being shipped to their delivery destination, a bilingual warranty letter template to the Contractor;
  - ii. The Contractor **must** supply a complete description of the warranty with the requested warranty terms and any system or sub system warranty that exceeds the minimum requested;
  - iii. The warranty letter **must** include the name and contact information of the closest designated warranty provider and other designated warranty providers across Canada; and

- iv. The Contractor **must** supply the original warranty letter in digital format, for each vehicle delivered, to the **Technical Authority**.
- f) **Initial Parts Kit List**
  - i. The Contractor **must** supply, no later than thirty (30) days prior to the forklift(s) being shipped to their delivery destination, a list of parts needed to perform preventive maintenance on one (1) vehicle for a period of one (1) year in accordance with the maintenance manual for each Configuration/Model;
  - ii. A complete change of all filters and filter elements **must** be included in the list; and
  - iii. The list **must** include the following elements: part description; Original Equipment Manufacturer (OEM) Part number; suggested quantity; and unit cost.
- g) **Training Plan(s)** - The Contractor **must** supply, no later than thirty (30) days prior to the forklift(s) being shipped to their delivery destination, a training plan for approval for each of the training courses listed in this purchase description to the **Technical Authority**. Approval or comments will be supplied within 15 working days of receipt of the training plan.

4.1.2. **Items with Each Vehicle**

- a) **Operator's Manual** - The Contractor **must** supply an approved bilingual operator's manual in both paper and digital format with each vehicle delivered;
- b) **Warranty Letter** - The Contractor **must** supply a copy of the warranty letter with each vehicle delivered;
- c) **Safety Data Sheets**
  - i. The Contractor **must** supply a set of safety data sheets; and
  - ii. The safety data sheets **must** be the same as those supplied to the **Technical Authority** as described in the purchase description.
- d) **Initial Parts Kit**
  - i. One (1) initial parts kit **must** be supplied; and
  - ii. The initial parts kit **must** include a set of parts in the approved initial parts kit list as described in this purchase description.
- e) **Maintenance Manual**
  - i. The Contractor **must** supply the approved maintenance (shop repair) manuals in paper and digital format in English required for the maintenance and repair of the vehicle, features and accessories; and
  - ii. The Contractor may supply this deliverable as a bilingual package

f) **Parts Manual**

- i. The Contractor **must** supply the approved parts manuals for the vehicle, features and accessories;
- ii. The parts manual **must** be supplied in English in paper and digital format;
- iii. It is desirable to supply the parts manual in French in addition to the English version; and
- iv. Digital parts manuals **must** be supplied in a searchable PDF format CD/DVD-ROM.

4.2. **Training**

a) **Training – Familiarization**

- i. The Contractor **must** supply a familiarization course, at the delivery destination, optimized for operators and technicians who are qualified on the vehicle type but require training on newer or unique features and sub-systems of the delivered model;
- ii. The instructor **must** be an OEM Factory Certified Training Provider;
- iii. The course **must** be delivered in the official language (English or French) specified in the contract for that delivery destination;

iv. **Curriculum**

1. The familiarization course **must** include operation and maintenance segments;
  2. The operation segment **must** include safety precautions to be observed while operating and servicing the vehicle, vehicle operating characteristics, pre-operating and shutdown procedures and daily/weekly operator servicing procedures;
  3. The operation segment **must** include sub-systems including container handling attachment, automatic grease system and pre-heaters; and
  4. The maintenance segment **must** include diagnostics, trouble shooting and operation of any special tools and test equipment (if any).
- v. The familiarization course **must** have a minimum duration of eight (8) hours, divided into four (4) hours for operators and four (4) hours for technicians;
  - vi. The familiarization course **must** accommodate up to eight (8) personnel; four (4) operators and four (4) technicians;
  - vii. The date for the familiarization course **must** be arranged with the **Technical Authority**;

- viii. After completion of the familiarization course, the Contractor **must** have the “**PROOF OF FAMILIARIZATION**” certificate signed by the senior course attendee; and
  - ix. The **Technical Authority** will supply the “**PROOF OF FAMILIARIZATION**” document template in a digital format.
- b) **Training – Troubleshooting**
- i. When requested, the Contractor **must** supply a troubleshooting course in the official language (English or French) specified in the contract for that delivery destination;
  - ii. The instructor **must** be an OEM Factory Certified Training Provider;
  - iii. The troubleshooting course **must** include detailed testing, troubleshooting, problem analysis and adjustments training
  - iv. The troubleshooting course **must** have a minimum duration of twenty four (24) hours but not exceeding eight (8) hours a day;
  - v. The troubleshooting course **must** accommodate up to eight (8) maintenance personnel;
  - vi. The troubleshooting course **must** be supplied at the delivery destination;
  - vii. The date for the troubleshooting course **must** be arranged with the **Technical Authority**;
  - viii. After completion of the troubleshooting course, the Contractor **must** have the “**PROOF OF TROUBLESHOOTING TRAINING**” certificate signed by the senior course attendee; and
  - ix. The **Technical Authority** will supply the “**PROOF OF TROUBLESHOOTING TRAINING**” document template in a digital format.

4.3. **LS Data Deliverables Summary** - This table is for quick reference only. All detailed requirements to be met are contained under Paragraph 4 - Integrated Logistics Support.

Item	Format	Delivered to TA by E-mail	Delivered to TA by mail/courier	Copy with Vehicle	Remarks
Photographs and Line Drawings	Digital	x	-	-	
Data Summary	Digital	x	-	-	TA will provide template
Initial Parts Kit List *	Digital	x	-	-	
Warranty Letter	Digital	x	-	-	TA will provide template
	Paper**	-	-	x	
Listing of HAZMAT and Safety Data Sheets French and English	Digital	x	-	-	
	Paper**	-	-	x	
Operator Manual(s) Bilingual	Digital	-	x	x	On CD/DVD *
	Paper**	-	-	x	
Maintenance (shop repair) Manual(s) English	Digital	-	x	x	On CD/DVD *
	Paper**	-	-	x	
Maintenance (shop repair) Manual(s) French	Digital	-	x	x	On CD/DVD *
	Paper**	-	-	x	
Parts Manual(s)	Digital	-	x	x	On CD/DVD *
	Paper**	-	-	x	
<b>The items below <i>must</i> be provided only if training is requested in the bid solicitation/contract.</b>					
Training Plan/Curriculum	Digital	x	-	-	For each type of course required.
Proof of Familiarization Course Certificate	Digital	x	-	-	PA will provide template

Notes: \*Although a separate CD/DVD *must* be used for each Configuration, a single CD/DVD should ideally be used for all e-manuals covering a specific Configuration and its accessories.

\*\* Paper copy *must* have identical content as the electronic copy approved by the TA

5 **DELIVERY CONDITION**

- 5.1 The vehicle **must** be delivered to destination in a fully operational condition (serviced and adjusted). The vehicle **must** be cleaned;
- 5.2 If the vehicle requires assembly at destination, the Contractor **must** be responsible for all manpower and equipment to perform assembly;
- 5.3 The space for assembly at destination will be provided, if required; and
- 5.4 All items such as wheel wrenches, jacks, and all other tools, equipment and accessories, which are shipped loose with the equipment, **must** be listed on the shipping certificate or to an attached packing note.

**APPENDIX A**

**A1 - Data Table** - The following table shows required performance and dimensions by configuration, with a clause reference, that **must** be provided:

CHARACTERISTIC	CLAUSE	UNITS	CONFIGURATION				
			A	B	C	D	E
LIFT CAPACITY	3.4.2(a)	kg	1,361	1,814	2,722	3,628	5,443
		lb	3,000	4,000	6,000	8,000	12,000
LIFT HEIGHT	3.4.2(b)	mm	4,724	4,724	3,658	3,658	3,658
		in	186	186	144	144	144
COLLAPSED HEIGHT	3.4.2(d)	mm	2,235	2,235	2,311	2,311	2,337
		in	88	88	91	91	92
FREE LIFT	3.4.2(e)	mm	1,219	1,219	1,037	1,067	1,067
		in	48	48	42	42	42
MAST ROTATION	3.4.2(f)	degree	90° to the right				
OVERALL WIDTH	3.4.2(g)	mm	1,321	1,321	1,371	1,422	1,778
		in	52	52	54	56	70
MAST 1 – LIFT HEIGHT	3.5.1(a-ii)	mm	5,486	5,486	4,724	4,724	4,724
		in	216	216	186	186	186
MAST 1 – VEHICLE HEIGHT	3.5.1(a-iii)	mm	2,540	2,540	2,642	2,642	2,642
		in	100	100	104	104	104
MAST 2 – LIFT HEIGHT	3.5.1(b-ii)	mm	6,096	6,096	5,385	5,385	5,385
		in	240	240	212	212	212
MAST 2 – VEHICLE HEIGHT	3.5.1(b-iii)	mm	2,794	2,794	2,896	2,896	3,048
		in	110	110	114	114	120
MAST 3 – LIFT HEIGHT	3.5.1(c-ii)	mm	6,705	6,705	6,096	6,096	6,096
		in	264	264	240	240	240
MAST 3 – VEHICLE HEIGHT	3.5.1(c-iii)	mm	3,150	3,150	3,200	3,200	3,200
		in	124	124	126	126	126
BATTERY CAPACITY	3.15(a)	kWh	30	30	50	50	50
BATTERY VOLTAGE	3.15(b)	volt	48	48	72	72	72

**A.2 Feature Table** – The following table indicates, with "X", for each configuration the accessories, attachments and features (with a clause reference) that **must** be provided when specified in the solicitation:

DESCRIPTION	PARAGRAPH	CONFIGURATION				
		A	B	C	D	E
"EE" Safety Rating Feature	3.3.3 (a)	X	X	X	X	X
Mast 1	3.5.1 (a)	X	X	X	X	X
Mast 2	3.5.1 (b)	X	X	X	X	X
Mast 3	3.5.1 (c)	X	X	X	X	X
Fork Tine Position Guide	3.5.1 (d)	X	X	X	X	X
Battery Watering System	3.15.1 (e)	X	X	X	X	X
Battery Rollers	3.15.1 (f)	X	X	X	X	X
220 V, Single Phase Charger	3.15.1 (g)	X	X	X	X	X
220 V, 3 Phase Charger	3.15.1 (g)	X	X	X	X	X
Initial Parts Kit	4.1.1 (f)	X	X	X	X	X
Manuals for Approval	4.1.1 (a)	X	X	X	X	X
Maintenance Manual	4.1.2 (e)	X	X	X	X	X
Parts Manuals	4.1.2 (f)	X	X	X	X	X
Training – Familiarization	4.2 (a)	X	X	X	X	X
Training – Troubleshooting	4.2 (b)	X	X	X	X	X



**NOTICE**

This documentation has been reviewed by the Technical Authority and does not contain controlled goods.

**TECHNICAL EVALUATION CRITERIA  
FOR  
GROUP 6B: SWING MAST, OPERATOR-DOWN, ELECTRIC MOTOR DRIVEN  
FORKLIFT TRUCK**

This questionnaire covers technical information, which **must** be provided for evaluation of the Configurations of the vehicle offered.

Where the specification paragraphs below indicate “**Substantial information**”, the “**Substantial information**” **must** be provided for each performance requirement/specification.

Bidders should indicate the document name/title and page number where the **Substantial information** can be found.

**SUPPLIER INFORMATION**

Supplier Name:

Supplier Address:

Submission Date:

### Substitutes/Alternatives

Are any substitutes/alternatives offered as **Equivalent**? YES  NO

If yes, please identify all equipment substitutes/alternatives offered as **Equivalents** below:

**NOTE: Substantial Information must** be provided for all items offered as a substitute or alternative.

Table of Technical Evaluation Criteria				
PD Reference	Requirement	Substantial Information required	Value	Location of Substantial Information in Bid Proposal
3.1.1	The vehicle must be the latest model from a manufacturer who has demonstrated acceptability by manufacturing and selling this type and size class of vehicle for at least one (1) year	Vehicle Make	document	
		Vehicle Model and Year Introduced	document	Config A: Config B: Config C: Config D: Config E:
3.3.1	All vehicle design, construction and safety aspects must be in accordance with the latest edition of ANSI/ITDSF B56.6	Manufacturing standard	certificate or OEM brochure	Config A: Config B: Config C: Config D: Config E:
3.3.3 (a)	The vehicle <b>must</b> be manufactured to meet the requirements of an “EE” safety rating in accordance with Standard UL 583, or an <i>Equivalent</i> , in lieu of the “E” safety rating (paragraph 3.3.3);	Fire Safety standard	certificate or OEM brochure	Config A: Config B: Config C: Config D: Config E:
3.4.2(a)	The vehicle <b>must</b> have a load capacity, at a 610 mm (24 inches) load	Capacity/load center	lbs/inch	Config A: Config B:

Table of Technical Evaluation Criteria				
PD Reference	Requirement	Substantial Information required	Value	Location of Substantial Information in Bid Proposal
	center of at least that given as "LIFT CAPACITY" in the A.1 - Data Table of Appendix A			Config C: Config D: Config E:
3.4.2(b)	The vehicle <b>must</b> have a lift height of at least that given as "LIFT HEIGHT" in the A.1 - Data Table of Appendix A, when measured from the floor to the top of the forks with mast in vertical position	Lift height	inch	Config A: Config B: Config C: Config D: Config E:
3.4.2(d)	The vehicle <b>must</b> have an overall vehicle height and a collapsed mast of no more than that given as "COLLAPSED HEIGHT" in the A.1 - Data Table of Appendix A	Overall height	inch	Config A: Config B: Config C: Config D: Config E:
3.4.2(e)	The vehicle <b>must</b> have a free lift height (load backrest removed) of at least that given as "FREE LIFT" in the A.1 - Data Table of Appendix A	Free lift	inch	Config A: Config B: Config C: Config D:
3.4.2(g)	The vehicle's entire mast assembly <b>must</b> rotate 90° to the right side of the driver (facing front of the vehicle) for placing and removing pallets.	Mast rotation	degree	Config A: Config B: Config C: Config D: Config E:
3.4.2(h)	The vehicle <b>must</b> have an overall width of not	Overall width	inch	Config A: Config B:



Table of Technical Evaluation Criteria				
PD Reference	Requirement	Substantial Information required	Value	Location of Substantial Information in Bid Proposal
	exceeding 1,371 mm (54 inches).			Config C: Config D: Config E:
3.5(d)	The vehicle <b>must</b> be provided with a fork positioner to hydraulically increase and decrease the spacing between the forks	Fork positioner	document	Config A: Config B: Config C: Config D: Config E:
3.5.1(a)-ii	Mast 1 must have a lift height, measured from the floor to the top surface of the forks in the full-up position, of at least that given as "MAST 1 – LIFT HEIGHT" in A.1 - Data Table (Appendix A);	lift height	Inch	Config A: Config B: Config C: Config D: Config E:
3.5.1(a)-iii	The vehicle, with Mast 1 in its lowest position, <b>must</b> pass under a horizontal beam with a height above ground level of that given as "MAST 1 – VEHICLE HEIGHT" in A.1 - Data Table (Appendix A)	vehicle height	Inch	Config A: Config B: Config C: Config D: Config E:
3.5.1(b)-ii	Mast 2 <b>must</b> have a lift height, measured from the floor to the top surface of the forks in the full-up position, of at least that given as "MAST 2 – LIFT HEIGHT" in the A.1 - Data Table (Appendix A).	lift height	Inch	Config A: Config B: Config C: Config D: Config E:



Table of Technical Evaluation Criteria				
PD Reference	Requirement	Substantial Information required	Value	Location of Substantial Information in Bid Proposal
3.5.1(b)-iii	The vehicle, with the Mast 2 in its lowest position, <b>must</b> pass under a horizontal beam with a height above ground level of that given as "MAST 2 – VEHICLE HEIGHT" in the A.1 - Data Table (Appendix A);	vehicle height	Inch	Config A: Config B: Config C: Config D: Config E:
3.5.1(c)-ii	Mast 3 must have a lift height, measured from the floor to the top surface of the forks in the full-up position, of at least that given as "MAST 3 – LIFT HEIGHT" in the A.1 - Data Table (Appendix A).	lift height	Inch	Config A: Config B: Config C: Config D: Config E:
3.5.1(c)-iii	The vehicle, with Mast 3 in its lowest position, must pass under a horizontal beam with a height above ground level of that given as "MAST 3 – VEHICLE HEIGHT" in the A.1 - Data Table (Appendix A);	vehicle height	Inch	Config A: Config B: Config C: Config D: Config E:
3.15 (a)	The electrical system of the vehicle <b>must</b> have a minimum battery capacity of that given as " <b>BATTERY CAPACITY</b> " in the A.1 - Data Table of Appendix A	Battery Capacity	kWh	Config A: Config B: Config C: Config D: Config E:

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## **DEFINITIONS**

The following definition(s) apply to the interpretation of this Technical Evaluation Criteria (TEC):

- (a) “***Equivalent***” ***must*** mean a standard, means, or component type, which the ***Technical Authority*** has approved for this requirement, in writing, as meeting the specified requirements for fit, form, function and performance.