Forklift / Pallet Jack Scales

TABLE OF CONTENTS

**FORKLIFT /
PALLET JACK SCALES**

CLS NextGen
Forklift Scale

NEW

Approvals

Standard Features

- NTEP Certified
  - 5,000 × 5 lb capacity and resolution, up to 42-in forks
  - 4,500 × 5 lb capacity and resolution, up to 72-in forks
  - Two 5,000-lb stainless steel load cells
  - iQUBE series digital junction box, stainless steel enclosure
- Large viewing window for operator
- 1.5-in thick steel front and rear plates
- Top cleats are pinned, bolted and welded
- Four flexure system made from high strength stainless steel
- Debris guards for top and sides
- Stainless steel load cell rod bolts
- Replaceable centering pin
- Replaceable centering notch
- Overload and underload stops
- Field serviceable flexures and load cells
- Wired or cable-less connectivity

Weight Indication Choices
- CLS-680
- CLS-920i
- Windows® Mobile PC, Tablets and handhelds, compatible with VIRTUi³

Presale Requirements
- Provide completed forklift questionnaire for quotation
- Compatible with most Class II forklift attachments, consult factory

Installation Recommendations
- When installing a forklift scale, OSHA requires the end user to de-rate the lift capacity of the forklift

Options

- Weigh in-motion
- Narrow width backplate
- Front plate width variations
- CLS-680, 18 to 72 VDC
- Mobile printer

Specifications

Warranty:
Two-year limited

Approvals:
NTEP 06-074

Part Number/Price

Part #	Capacity	Description	Est. Weight	Price
Class II, CLS-680, NTEP Certified				
231800	5000 × 5 lbs	CLS680-3436, 16 × 36 in carriage plate, 9 to 36 VDC, wired	465 lbs	$9,950.00
231801	5000 × 5 lbs	CLS680-3436, 16 × 36 in carriage plate, 9 to 36 VDC, cableless	480 lbs	$12,050.00
Class II, CLS-920i, NTEP Certified				
231810	5000 × 5 lbs	CLS920-3436, 16 × 36 in carriage plate, 9 to 36 VDC, wired	475 lbs	$11,200.00
231811	5000 × 5 lbs	CLS920-3436, 16 × 36 in carriage plate, 9 to 36 VDC, cableless	490 lbs	$13,300.00
Class II, VIRTUi³ M Series, NTEP Certified				
231815**	5000 × 5 lbs	CLSM-3436, 16 × 36 in carriage plate, wired with DB9 adapter	450 lbs	$9,350.00

** Weight indication device (PC/tablet) is not included, consult factory to verify compatibility with your device.
For indicator drawings and dimensions, please see page 410 and page 411
For scale drawings and dimensions, visit www.ricelake.com.

VIRTU*i*³

CLS-680

CLS-920i

CLS NextGen Pro
Forklift Scale

NEW
NTEP Certified
2 lb Resolution

Approvals

Standard Features

- NTEP Certified
    - 5,000 × 2 lb capacity and resolution, up to 42-in forks
    - Two 5,000-lb stainless steel load cells
    - iQUBE series digital junction box, stainless steel enclosure
- Large viewing window for operator
- 1.5-in thick steel front and rear plates
- Top cleats are pinned, bolted and welded
- Four flexure system made from high strength stainless steel
- Debris guards for top and sides
- Stainless steel load cell rod bolts
- Replaceable centering pin
- Replaceable centering notch
- Overload and underload stops
- Field serviceable flexures and load cells
- Wired or cable-less connectivity

Weight Indication Choices
- CLS-680
- CLS-920i
- Windows® Mobile PC, Tablets and handhelds, compatible with VIRTUi^3

Presale Requirements
- Provide completed forklift questionnaire for quotation
- Compatible with most Class II forklift attachments, consult factory

Installation Recommendations
- When installing a forklift scale, OSHA requires the end user to de-rate the lift capacity of the forklift

Options
- Narrow width backplate
- Front plate width variations
- CLS-680, 18 to 72 VDC
- Mobile printer

Specifications

Warranty:
Two-year limited
Approvals:
NTEP 06-074

Part Number/Price

Part #	Capacity	Description	Est. Weight	Price
Class II, CLS-680, NTEP Certified				
231802	5000 × 2 lbs	CLS680-3436-PRO, 16 × 36 in carriage plate, 9 to 36 VDC, wired	470 lbs	$11,450.00
231803	5000 × 2 lbs	CLS680-3436-PRO, 16 × 36 in carriage plate, 9 to 36 VDC, cableless	485 lbs	$13,550.00
Class II, CLS-920i, NTEP Certified				
231812	5000 × 2 lbs	CLS920-3436-PRO, 16 × 36 in carriage plate, 9 to 36 VDC, wired	480 lbs	$12,700.00
231813	5000 × 2 lbs	CLS920-3436-PRO, 16 × 36 in carriage plate, 9 to 36 VDC, cableless	495 lbs	$14,800.00
Class II, VIRTUi^3 M Series, NTEP Certified				
231816**	5000 × 2 lbs	CLSM-3436-PRO, 16 × 36 in carriage plate, wired with DB9 adapter	455 lbs	$10,850.00

** Weight indication device (PC/tablet) is not included, consult factory to verify compatibility with your device.
For indicator drawings and dimensions, please see page 410 and page 411
For scale drawings and dimensions, visit www.ricelake.com.

VIRTU*i*^{3}

CLS-680

CLS-920i

FORKLIFT / PALLET JACK SCALES

CLS NextGen
Forklift Scale with Mobile Printer

Standard Features

- Preconfigured for use with Zebra® ZQ630 Printer, CLS-680 Mode 608
- Package includes:
    - CLS-680 scale assembly
    - Zebra ZQ630 thermal printer
    - Printer mount kit
    - DC power supply for printer
    - Serial and adapter cables from indicator to printer

Approvals

FORKLIFT / PALLET JACK SCALES

Part Number/Price

Part #	Capacity	Description	Est. Weight	Price
Class II, CLS-680, Zebra Printer, NTEP Certified				
231805	5000 × 5 lbs	CLS-680-3436 with Zebra ZQ630 printer, 12 to 24 VDC, wired	480 lb	$12,100.00
231806	5000 × 5 lbs	CLS-680-3436 with Zebra ZQ630 printer, 12 to 24 VDC, cableless	495 lb	$14,200.00
231807	5000 × 5 lbs	CLS-680-3436 with Zebra ZQ630 printer, 18 to 60 VDC, wired	480 lb	$12,500.00
231808	5000 × 5 lbs	CLS-680-3436 with Zebra ZQ630 printer, 18 to 60 VDC, cableless	495 lb	$14,600.00

For scale drawings and dimensions, visit www.ricelake.com.

Zebra ZQ630

CLS-680

GROSS   1680 lb

11:43 AM 10/20/24

Gross label

GROSS   1930 lb
TARE   510 lb
NET   1420 lb

11:43 AM 10/20/24

Net label

Approvals

**Measurement
Canada
Approved**

Part Number/Price

Part #	Capacity	Description	Est. Weight	Price
Class II, CLS-680 with Measurement Canada Approval				
214091	4,500 × 5 lb	34 in W, 16 in H forklift carriage (36 in W with flexures), 9 to 36 VDC	530 lb	$9,950.00
208269	4,500 × 5 lb	34 in W, 16 in H forklift carriage (36 in W with flexures), 9 to 36 VDC, cableless	545 lb	$12,050.00
Class II, CLS-920i with Measurement Canada Approval				
215114	4,500 × 5 lb	34 in W, 16 in H forklift carriage (36 in W with flexures), 9 to 36 VDC	540 lb	$11,200.00
216947	4,500 × 5 lb	34 in W, 16 in H forklift carriage (36 in W with flexures), 9 to 36 VDC, cableless	565 lb	$13,300.00

For indicator drawings and dimensions, please see page 410 and page 411
For scale drawings and dimensions, visit www.ricelake.com.

Standard Features

Measurement Canada Approved
- 4,500 × 5 lb/5,000 × 10 lb
- 1-1/2-in thick front and back painted steel plates coupled by four flexures
- Top cleats are welded, pinned and bolted
- Welded centering pin
- Two 5,000-lb S-beam load cells
- iQUBE²® junction box with inclinometer
- Molded coiled cable, up to 15 ft uncoiled

Presale Requirements
- Provide completed forklift questionnaire for quotation
- Compatible with most Class II forklift attachments, consult factory

Installation Recommendations
- When installing a forklift scale, OSHA requires the end user to de-rate the lift capacity of the forklift

Options
- Narrow width backplate, 28 in
- Mobile printer

Specifications

Warranty:
Two-year limited
Approvals:
Measurement Canada AM-5893

**FORKLIFT /
PALLET JACK SCALES**

CLS Series Class III

Forklift Scale

Part Number/Price

Part #	Capacity	Description	Est. Weight	Price
Class III, CLS-680, Non-NTEP Certified				
212521	8,000 × 5 lb	38 in W, 20 in H forklift carriage, 9 to 36 VDC	985 lb	$13,140.00
214092	8,000 × 5 lb	38 in W, 20 in H forklift carriage, 9 to 36 VDC, cableless	990 lb	$15,190.00
Class III, CLS-920i, Non-NTEP Certified				
219975	8,000 × 5 lb	38 in W, 20 in H forklift carriage, 9 to 36 VDC	990 lb	$14,390.00
214093	8,000 × 5 lb	38 in W, 20 in H forklift carriage, 9 to 36 VDC, cableless	1,005 lb	$16,440.00

For indicator drawings and dimensions, please see page 410 and page 411
For scale drawings and dimensions, visit www.ricelake.com.

Standard Features

Scale Carriage
- 38 in, 8,000 × 5 lbs, non-NTEP
- 1-1/2-in thick front and back painted steel plates coupled by four flexures
- Top cleats are welded, pinned and bolted
- Welded centering pin
- Two 5,000-lb S-beam load cells
- iQUBE²® junction box with inclinometer
- Molded coiled cable, up to 15 ft uncoiled

Presale Requirements
- Provide completed forklift questionnaire for quotation
- Compatible with most Class III forklift attachments, consult factory

Installation Recommendations
- When installing a forklift scale, OSHA requires the end user to de-rate the lift capacity of the forklift

Options

- CLS-680, 18 to 72 VDC
- Virtui[3]
- Mobile printer

Specifications

Warranty:
Two-year limited

CLS Indicator

CLS-680 (page 410)

The CLS-680 was designed from the ground-up specifically for forklift applications. With a machined aluminum anodized enclosure, the CLS-680 is ideal for demanding, general-purpose forklift applications. Its compact size is attached with a RAM® mount for flexible positioning and minimal obstruction. Additional features include rounded corners, vibration protection and surge suppression.

- Six-digit, seven-segment LED display
- Battery backed time and date
- On/off power switch
- 9 to 26 VDC or 18 to 72 VDC power supply
- Cabled or cableless
- RS-232 serial port
- Wi-Fi
- Bluetooth®

CLS Indicator

CLS-920i (page 411)

The CLS-920i incorporates the flexibility, intelligence and programmability of the 920i in a smaller enclosure with a DC power supply for use on forklifts. The standard program offers weight indication, configuration, calibration and diagnostics specific to the CLS. Customize it for your application with an optional user program.

- Painted mild steel enclosure
- Backlit graphical LCD display
- Battery backed time and date
- On/off power switch
- 9 to 36 VDC power supply
- Cabled or cableless
- Two available RS-232 ports for added options
- Optional Wi-Fi
- Optional Bluetooth®

CLS Virtual Solution

VIRTUi³® (page 412)

Weight data is displayed on a device using VIRTUi³ software, creating a virtual indicator. The CLS connects to your device using RS-232, USB or Bluetooth®. Choose between the CLS-M or CLS-IM configuration for static or in-motion use.

- Weight indication device (PC/tablet) is not included
- Consult factory to verify compatibility with your device
- Bluetooth® connection available
- USB connection available

Cableless

The cableless option removes the coiled communications/power cable between the scale and the indicator. A rechargeable battery is secured to the scale, and it powers the scale and the paired wireless modules provide communication.

- 802.15 wireless interface
- Lithium-ion battery and charger
- On/off power switch
- Battery life: 24 hours of constant use
- Battery recharge time: 8 hours to fully recharge
- Reinforced battery box

Wi-Fi

Wi-Fi is a standard feature for the CLS-680 and is available as a factory installed option for the CLS-920i.

- Wireless LAN card 802.11 b/g
- Range: Up to 328 ft indoors
- Operating frequency: ISM 2.4 GHz

Bluetooth®

Bluetooth® communication is a standard feature for the CLS-680 and is available as an external option for the CLS-920i. It is also available in a communications/power box for the virtual solution.

FORKLIFT / PALLET JACK SCALES

Forklift Capacity Derating

During the initial scale installation, remind the customer that they must have an updated ID plate on the forklift stating the new lifting capacity and center of gravity information. This is required per OSHA rules and regulations.

Forklift scale dimensions and capacity derating available on www.ricelake.com
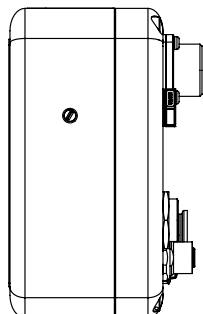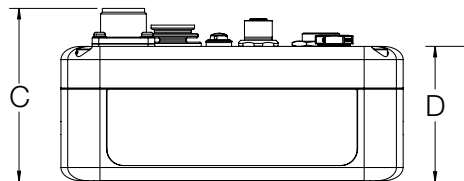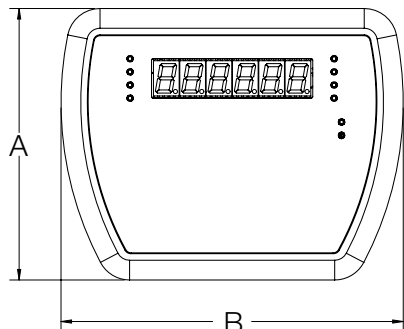
CLS-680
Forklift Scale Display

Approvals

Standard Features

- LED display
- Battery backed time and date
- Full numeric keypad
- Numeric keyed entry allowed for tare
- Configurable print formats
- CLS user modes
- Machined aluminum enclosure with rounded corners
- Wi-Fi standard
- Bluetooth® standard
- Embedded antenna
- RAM® style mount ability
- M16 socket, CLS scale connection
- M12 socket RS-232
- Power cable socket
- PreVent™ breather vent
- Illuminated power switch

Options

- Cableless interface to CLS with Zigbee module
- RAM style mounts
- Molded M12 serial cables

Specifications

Power:
DC voltages: 9 to 36 VDC or 18 to 72 VDC

Communication Ports:
Two RS-232 full duplex, one reserved for CLS
Bluetooth® SSP
Wi-Fi: Wireless 802.11 b/g/n 2.5 GHz
Zigbee, reserved for CLS cableless option

Annunciators:
10 LED

Display:
Six-digit, 0.5 in tall, seven-segment digits

Keys/Buttons:
Flat membrane panel, tactile feel (18 buttons)

Temperature:
Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Industrial: 14 °F to 122 °F (-10 °C to 50 °C)

Dimensions:
(L × W × H)
6.5 × 5.2 × 3.3 in
(165 × 132 × 84 mm)

Estimated Weight:
3.7 lb (1.7 kg)

Material:
Machined aluminum enclosure, anodized finish

EMC Immunity:
EN 50082 Part 2 IEC 61000-4-2,3,4,5,6,8 and 11

Warranty:
Two-year limited

Approvals:
NTEP 21-092, Class III/IIIL, 5,000d

Part Number/Price

Part #	Description	Price
206439	CLS-680 indicator, 9 to 36 VDC	$1,310.00
204239	CLS-680 indicator, 18 to 72 VDC	$1,590.00

Options/Accessories

Part #	Description	Price
96915	Power cable assembly	$125.00
125395	Coiled cable assembly	$295.00
200762	Ball mount (indicator)	$20.00
200764	Ball mount clamp style	$40.00
175509	Mount arm	$40.00
205715	RS-232 data cable, DB9	$95.00

Dimensions

CLS-680	
A	5.2 in (132 mm)
B	6.5 in (165 mm)
C	3.3 in (84 mm)
D	2.5 in (64 mm)

CLS-920i®
Forklift Scale Display

Approvals

Measurement Canada Approved

Part Number/Price

Part #	Description	Price
162112	CLS-920i indicator with mounting brackets, 9 to 36 VDC	$3,200.00

Options/Accessories

Part #	Description	Price
96915	Power cable assembly	$125.00
125395	Coiled cable assembly	$295.00
163353	RS-232 data cable, DB9	$58.00

Dimensions

CLS-920i	
A	9.54 in (242 mm)
B	7.20 in (183 mm)
C	9.71 in (247 mm)
D	5.82 in (148 mm)
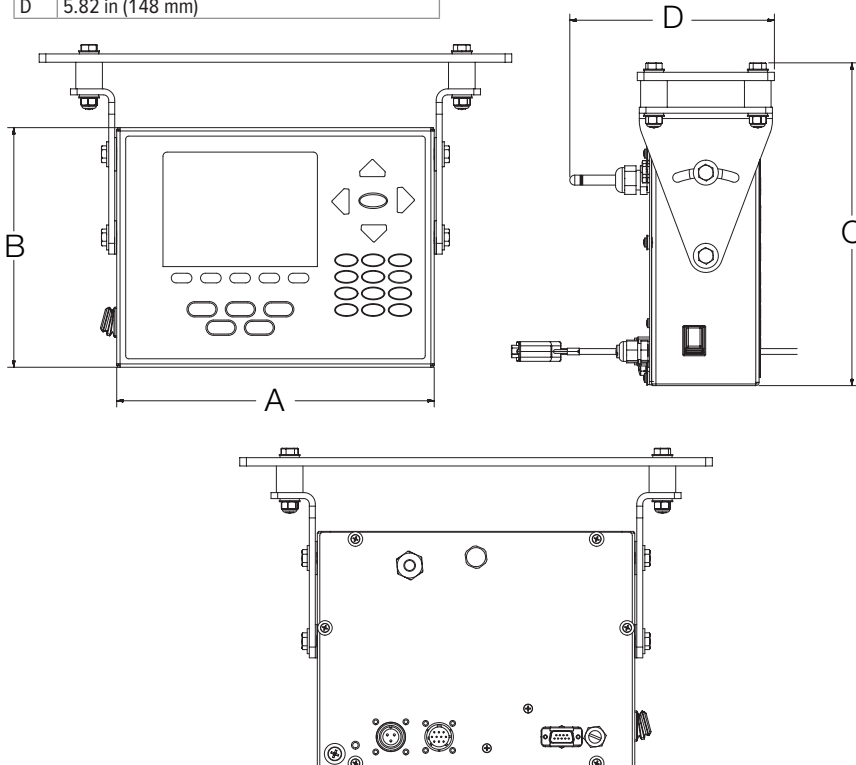
Standard Features

- LCD display
- Standard program
  - Weight indication
  - Configuration
  - Calibration
  - Diagnostics
- Front panel calibration
- On/Off switch to conserve forklift battery life
- Painted mild steel enclosure
- Two-piece top cage indicator mounting assembly with vibration mounts
- Two available RS-232 ports for added options of scanner, Wi-Fi or printer
- 9 to 36 VDC power supply for use on gas powered or electric forklifts

Note: For custom user program, please contact the factory

Specifications

Power:
Line voltage: 9 to 36 VDC, DC input

Power Consumption:
1.5 A max fused at 5.0

Temperature:
Certified: 14 °F to 104 °F (-10 °C to 40 °C)
Operating: 14 °F to 122 °F (-10 °C to 50 °C)

Wireless LAN Option:
Contains FCC ID: R68WIPORATG
Range: Up to 328 ft indoors
Operating frequency: ISM 2.4 GH

Warranty:
Two-year limited

Approvals:
NTEP 06-074, 5,000 lb only, Class III, 1,000d
Measurement Canada AM-5893, Class III

VIRTUi³®
PC-based Program for CLS Series Forklift Scale

Approvals

Standard Features

- Virtual front panel consists of display and two or three button keypad
- Printer port configuration, serial or TCP/IP
- Provides CLS configuration screen
- Supports CLS diagnostics
- Weight indication screen
- Weight display
- Zero, print and in-motion clear buttons
- Capacity, resolution, units, motion and center of zero status annunciators
- Unit ID
- Configuration, calibration and diagnostics menus
- VIRTUi³ Mini, minimized weight display screen
- Scale test menu

Specifications

Minimum System Requirements:
Windows® 8.1 or greater
Serial port connection to CLS Series forklift scale
Additional serial ports are required for connections to printers/remote displays 100 MB space needed
8 GB or greater RAM

Annunciators:
Units, capacity, resolution, motion, center of zero

Approvals:
NTEP 04-058

Part Number/Price

Part #	Description	Price
188745	VIRTUi³ software	$495.00

QR Code Application Software

- Windows 10 or greater
- Interfaces to the Virtui³ Server to generate a QR Model 2 Bar Code that is scannable
- Requires installation of Virtui³ (purchased separately)

Part Number/Price

Part #	Description	Price
226345	QR Code application software	$395.00
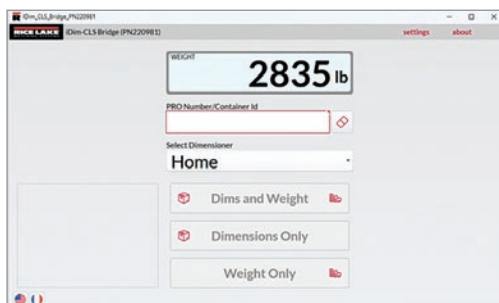
Middleware Forklift/Dimensioning Software

- Windows 10 or greater
- Connection between iDimSS and indicators

Part Number/Price

Part #	Description	Price
220981	Middleware forklift/dimensioning software	$595.00

Standard Features

- Steering wheels and double loading polyurethane rollers
- Four stainless steel IP68 load cells
- Weight indicator in IP65 stainless steel water-resistant enclosure
- Configuration, calibration and diagnostics from keyboard
- Rechargeable battery mounted on the pallet jack
- Accumulation
- Formulation
- ± Checkweighing
- Percentage weighing
- Peak hold

Specifications

Power:
Lead acid battery (included)
Battery charger: 115 VAC 50/60 Hz (included)

Battery Life:
80 hours of continuous use or one month of non-continuous use

Resolution:
Internal: 1,500,000 counts

Display:
1 in (25 mm) LCD display high contrast digits

Keys/Button:
Gross/net, lb/kg, zero, tare

Capacity:
Maximum lifting capacity 5,000 lb

Accuracy:
± 0.1% of the maximum capacity

Keys/Buttons:
17 functional keys

Temperature:
Operating:
14 °F to 104 °F (-10 °C to 40 °C)

Material:
Heavy-gauge steel with a durable powder coat finish

Fork Dimensions:
48.75 × 26.75 × 3.125 in
(1240 × 680 × 80 mm)

Weight:
Approx. 360 lb (163 kg)

Warranty:
One-year limited

Part Number/Price

| Part #	Description	Est. Weight	Price
183592	Pallet jack scale, RL-HPJ, 5,000 × 1 lb	360 lb	$2,495.00
220672	Pallet jack scale, RL-HPJ, 5,000 × 1 lb, with printer	365 lb	$2,920.00

Options/Accessories

Part #	Description	Price
215143	Power supply, 7.2 VDC, 3 A SLA battery charger	$132.00
215142	Battery, rechargeable	$158.00
182053	Printer paper roll, 57 mm × 30 m, 12 mm core 51 mm OD	$3.00

NOTE: See replacement parts page to detail correct part numbers for previous generations

Dimensions

RL-HPJ			
A	47.25 in (1,200 mm)	E	26.75 in (680 mm)
B	30.00 in (762 mm)	F	7.00 in (178 mm)
C	64.25 in (1,631 mm)	G	3.125 in (79 mm)
D	45.25 in (1,149 mm)	H	7.75 in (197 mm)

Forklift Questionnaire

RICE LAKE
WEIGHING SYSTEMS
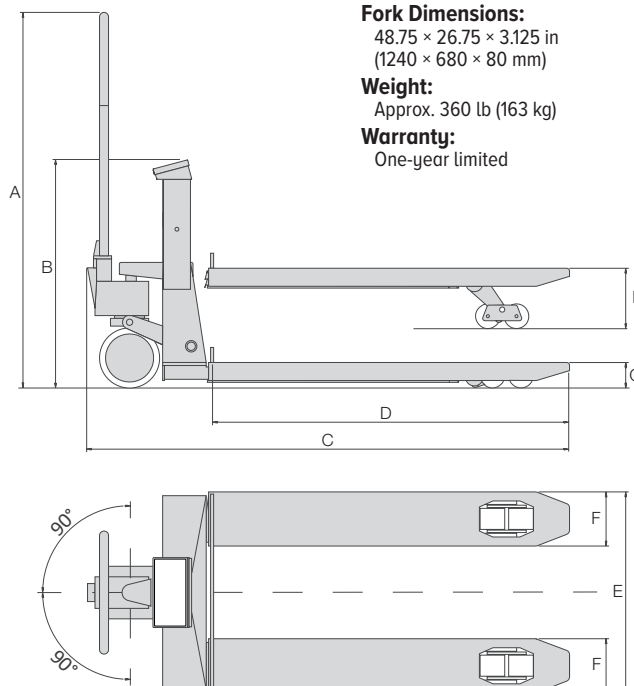
Dealer/Company: _____   Date: _____

Contact Person: _____

Phone: _____   Fax: _____   Email: _____

Forklift Specification *If the answer is no, please explain.*

1. Is the lift a typical counterbalance forklift?   ☐ *Yes* ☐ *No*
   _____

2. Does the forklift have an ITA type carriage?   ☐ *Yes* ☐ *No*
   (clip-on/hook)
   _____

3. Is the carriage a Class II, 16" profile?   ☐ *Yes* ☐ *No*
   _____

4. Is the carriage width greater than 36"?   ☐ *Yes* ☐ *No*
   _____

5. Is the supply power 12 VDC?   ☐ *Yes* ☐ *No*
   _____

6. Forklift capacity: _____

7. Mast Extension: _____

8. Make: _____

9. Model: _____

Load Backstop
If the answer to any question below is no, please provide notes under Additional Comments.

10. Is there a load backstop present?   ☐ *Yes* ☐ *No*
   If yes, please answer questions A and B.

   A. Is the backstop bolted to the side of the carriage   ☐ *Yes* ☐ *No*
      If yes, please complete Drawing #2 on page 2.

   B. Is the backstop bolted to the front of the carriage?   ☐ *Yes* ☐ *No*
      If yes, please complete Drawing #3 on page 2.

11. Is this a cableless application?   ☐ *Yes* ☐ *No*
   If yes, please complete Drawing #4.

Additional Comments
_____

Attachments

12. Are attachments present?   ☐ *Yes* ☐ *No*
   If yes, please list attachments below.

   Description _____
   Make/Model _____
   Description _____
   Make/Model _____
   Description _____
   Make/Model _____
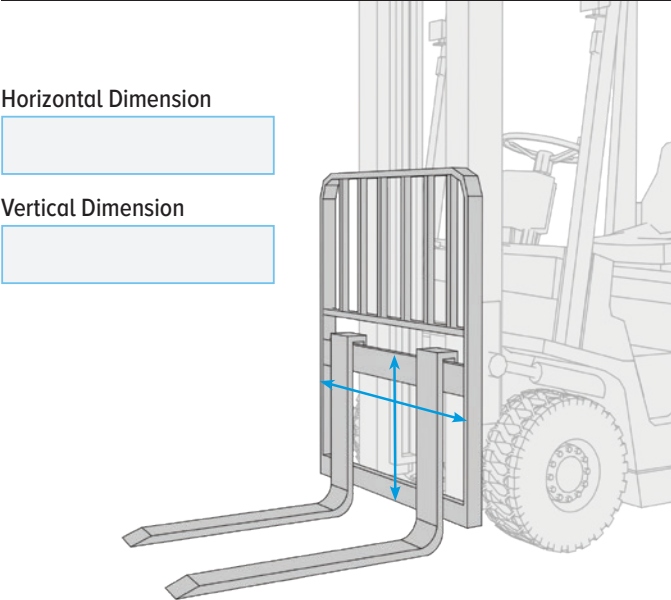
Legal for Trade

13. Is NTEP required?   ☐ *Yes* ☐ *No*

14. Is Measurement Canada required?   ☐ *Yes* ☐ *No*
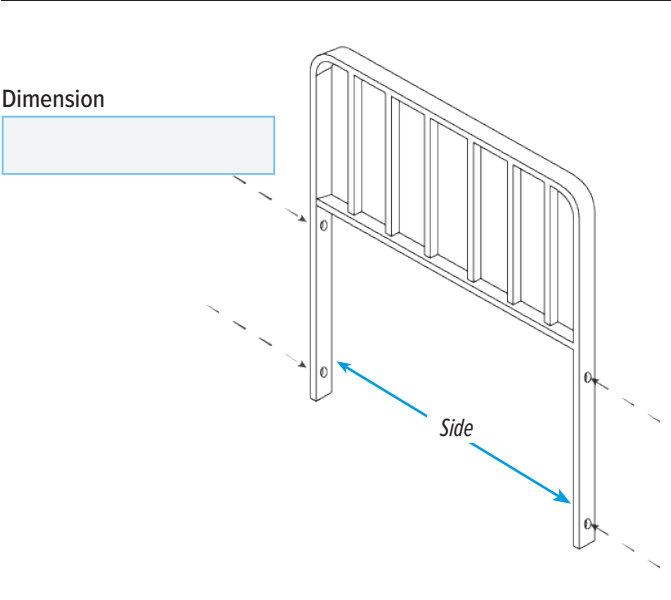
15. Is the fork length 42" of less?   ☐ *Yes* ☐ *No*

Instrumentation

16. Select preferred instrumentation model
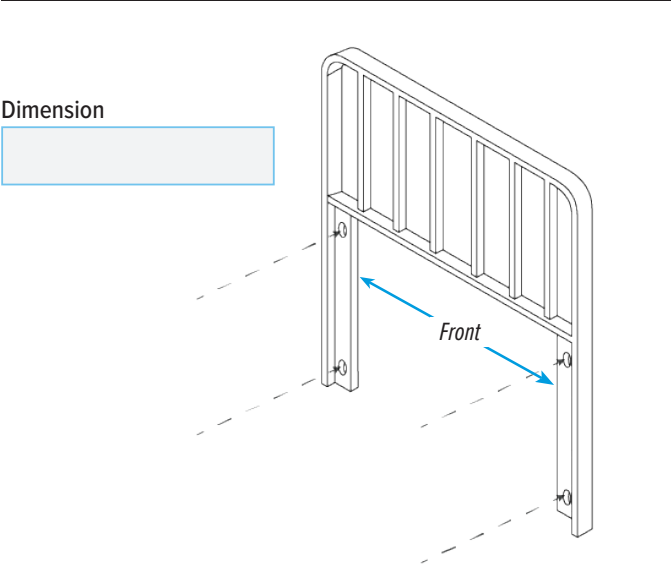   ☐ *CLS-680*   ☐ *CLS-920i*   ☐ *Virtuii[3]*

414 | **RICE LAKE**

Forklift Questionnaire

Drawing #1

Horizontal Dimension

Vertical Dimension

Drawing #2

Dimension

Side

Drawing #3

Dimension

Front

Drawing #4

Battery Box

Dimension