

# STANDARDLINE

## Long Range A-Frame (LRA) Bottom Loading Arm

StandardLine Loading Arms by OPW Engineered Systems raise the bar in quality and performance for the industry. Get OPW's best-in-class loading systems in pre-engineered sizes, materials and feed orientations.

The Long Range A-Frame (LRA) Loader is engineered to easily and effectively span tanker trucks with tandem trailers, allowing both to be loaded without moving the truck. Operator ergonomics were considered so that the loading arm can be easily positioned at 6' (1.8m) and fully extended at 18' (5.5m). Standard and low-temperature configurations are available.

### Features and Benefits:

- Available in standard and low-temperature configurations
- Carbon steel, stainless steel, and aluminum construction
- Hi-Load 891 Torsion Spring
  - Easily adjusts with a simple turn of the adjustment bolt provides
  - No special tools required, only a socket wrench
  - Adjustments made from grade
- 6' (1.8m) to 18' (5.5m) span easily allows tandem tanker trucks to be loaded without moving the truck
- Available with Lynx or 1004D3 Bottom Loading Coupler
- CRN-approved



### ALL STANDARDLINE ARMS FEATURE

- Fast Delivery – Starting at 20 days
- Menu of Options to customize your arm
- Freight is included across continental U.S. & Canada
- Exclusive 3-Year Warranty included

Technical Features	LRA – Standard Configuration	LRA-LT – Low-Temperature Configuration
Materials	Carbon Steel/Stainless Steel/Aluminum	Low Temp Carbon Steel/Stainless Steel/Aluminum
Seals	FKM (-20°F, -29°C) GFLT	FKM (-40°F, -40°C)
Working Pressure	80 PSI (5.5 Bar) 75 PSI for 1004D3	75 PSI (5.2 Bar)
Test Pressure	120 PSI (8.2 Bar) 112 PSI (7.7 Bar) for 1004D3	112 PSI (7.7 Bar)
Operating Temperature	-20°F to 150°F (-29°C to 65°C)	-40°F to 150°F (-40°C to 65°C)
Riser Height	58" (1.5M)	58" (1.5M)
Typical Reach (radius)	6' (1.8M) to 18' (5.5M)	6' (1.8M) to 18' (5.5M)
Nominal Diameter	4"	4"
Typical Flow Rates (Velocities < 15 ft/sec (4.6 M/sec)	600 GPM (2271 L/min)	600 GPM (2271 L/min)
Weight	~540 lbs*	~540 lbs*
Code Approval	CRN	CRN

Materials of Construction	LRA – Standard Configuration	LRA-LT – Low-Temperature Configuration
Inlet Flange	4" 150 lbs B16.9 ASTM A105/ 4" 300 lbs B16.9 ASTM A105	4" 150 lbs B16.9 ASTM A350 LF2/ 4" 300 lbs B16.9 ASTM A350 LF2
Inlet Swivel	Carbon Steel A350 LF2	Carbon Steel A350 LF2
Primary Arm Piping	Alum ASTM B241 / SS ASTM A312 / CS A106	Alum ASTM B241 / SS ASTM A312 / CS A333 Gr6
Apex Swivel (8700 series)	SS ASTM A351 CF8M/CF3M	SS ASTM A351 CF8M/CF3M
Coupler Swivel (Item #3655FT-0402-GRP)	Aluminum ASTM B26 A356 T6	Aluminum ASTM B26 A356 T6
API Coupler	Options: Item # 1004D3, Lynx852VG - See Datasheets	Options: Item # 1004D3-0402-LT - See Datasheets

Additional Information	LRA and LRA-LT Configurations
Weld Program	Per the ASME Boiler & Pressure Vessel Code Section IX
Radiograph/X-Ray	5% X-ray, 100% Visual
Testing	All assembled Loading Arms shall be hydrotested to 1.5X the rated design pressure.
Surface Treatments	Carbon Steel components to be protected with a 2-part paint process. Aluminum and Stainless Steel components to be unpainted.
Lubricant	OPW 880 High-Performance Synthetic Lubricant
Gasketing	Garlock 3300
Warranty	Standard warranty of three years after date of invoice shall apply.
Freight	All shipments are F.O.B. Factory Hamilton, OH. Full freight is allowed on surface transportation within continental U.S. and Canada.
Factory Assembly, Testing & Boxing (ATB)	Loading Arm will be fully assembled, tested and shipped in protective wooden crate. Note: It may be necessary to ship Loading Arm in sections to accommodate crating, shipping and rigging. Arm will be shipped as fully assembled as possible.

**RECOMMENDED SPARE PARTS LIST – LRA – Standard Configuration**

Part #	Description	Where Used	Qty/ Arm
3000RK-0402	3000 Series Swivel Seal Kit, 4" Fluorocarbon	End of Arm Drop Swivel	3
8000RK-0402	8000 Series Swivel Seal Kit, 4" Fluorocarbon	Inlet and Apex	2
<b>API Coupler/Seal Kit Options:</b>			
API980SK	Lynx Coupler Seal Repair Kit, 4" Fluorocarbon	Lynx API Coupler	1
1004D3SRK-0402	D3 API Coupler Seal Repair Kit, 4" Fluorocarbon	D3 API Coupler	1
1004D3SRK-0402-LT	D3 API Coupler Seal Repair Kit, 4" Fluorocarbon LT	D3 API Coupler	1

**RECOMMENDED SPARE PARTS LIST – LRA-LT – Low-Temperature Configuration**

Part #	Description	Where Used	Qty/ Arm
3000RK-0402	3000 Series Swivel Seal Kit, 4" Low-Temp Fluorocarbon	End of Arm Drop Swivel	3
8000RK-0402	8000 Series Swivel Seal Kit, 4" Low-Temp Fluorocarbon	Inlet and Apex	2
<b>Low-Temperature API Coupler/Seal Kit Options:</b>			
1004D3SRK-0402-LT	D3 API Coupler Seal Repair Kit, 4" Low-Temp Fluorocarbon	D3 API Coupler	1
1004D3SRK-0402	D3 API Coupler Seal Repair Kit, 4" Low-Temp Fluorocarbon	D3 API Coupler	1

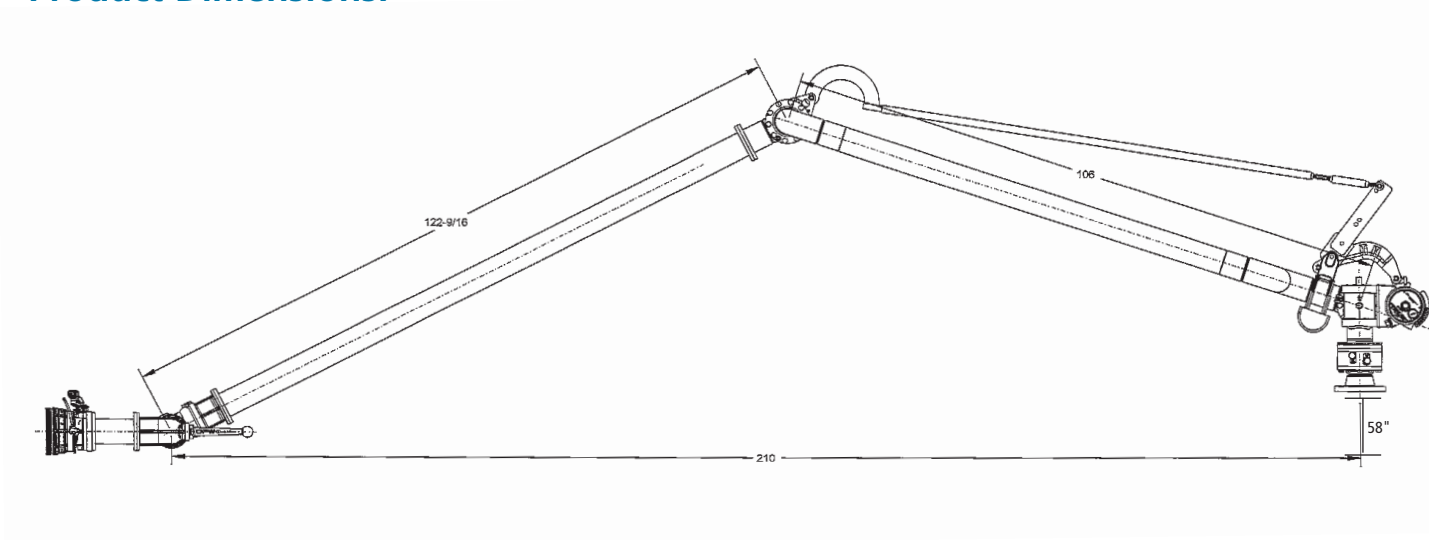
**Long Range A-Frame Loader Part Number**

1	2	3	4	5		6	7	8	9	10	11
LRA	CSA	210	UR	0200	-	1	0	0	1	2	1

<b>1</b>	<b>ARM STYLE</b> LRA	<b>6</b>	<b>INLET OPTION #</b> 1 - 150# RFWN 2 - 300# RFWN
<b>2</b>	<b>MATERIAL OPTION</b> CSA (CST/SST/ALUM)(-20° F) *LSA (LOW-TEMP CST/SST/ALUM)(-40° F)	<b>7</b>	<b>ISOLATION VALVE</b> 0 - NOT AVAILABLE
<b>3</b>	<b>DIMENSION OPTION</b> 210" REACH	<b>8</b>	<b>SPACER SPOOL OPTION</b> 0 - NONE/BY OTHER 1 - HX112122
<b>4</b>	<b>ORIENTATION</b> UR - UPFEED/RIGHT HAND UL - UPFEED/LEFT HAND	<b>9</b>	<b>SITE GLASS</b> 0 - SITE GLASS BY OTHER 1 - BF4-SG-25-CRN
<b>5</b>	<b>SEAL TYPE</b> 0200 - FKM (-20° F) *02LT - FKM (-40° F)	<b>10</b>	<b>API COUPLER</b> 0 - API COUPLER BY OTHER 1 - 1004D3-0402 (-20° F) 2 - LYNX COUPLER (852VG) (-20° F) 3 - 1004D3-0402-LT (-40° F)
		<b>11</b>	<b>ASSEMBLY, TESTING, AND BOXING</b> 1 - ATB INCLUDED 2 - ATB EXPORT

\*Must be included as part of the Low-Temperature Configuration

## Product Dimensions:



## Other Productivity-Improving Products from OPW!

### 8870 Series Overfill Prevention & Ground Verification Controller

The 8870 Series Overfill Prevention & Ground Verification Controller from OPW Engineered Systems helps make miscommunication at the loading rack a thing of the past. The 8870's remote shutdown ability, along with its visually intuitive communication system, enables it to be recognized as the industry's leading fail-safe rack monitor for use in API bottom loading of multi-compartment tank trucks.

