

D Running Gear		
1	Suspension	Hendrickson Intraxx AANT23K, 23,000 lb.
1a	Axle Spacing (inches)	49"
1b	ZMD Ride Bags	None-Optional
2	Axles	71 1/2" Track with 5.75" diameter; HP Spindles with Same Inner and Outer Bearings.
3	Number of Axles	Two (2)
4	Lift Axle(s)	Install Electric Operated UBL Lift Kit on Front Axle wired to ISO Plug with Override
4a	Ride Height Control	Standard Hendrickson Height Control Valve
5	Hub(s)	Dura-Light 10 Stud Hub Piloted, 11 1/4" B.H.C.
6	Drum(s)	Centrifuse 16 1/2" x 7", 10-Stud Outboard Mount Drums
7	Dump Valve	Push/Pull Valve with Auto Reset mounted in Control Cabinet
8	Brakes/Brake Chambers	23,000# Rating with S-Cam 16 1/2" x 7", 2.5" stroke, 3030 Chambers, and Non-Asbestos Linings
9	Dust Shields	None-Optional
10	Slack Adjusters	Automatic
11	Warranty	Hendrickson Extended Life System "HXL5" with Federal Mogul Hub Seals
12	Gladhands	Quick Release Service Gladhand
13	ABS	Wabco 4S/2M System Wired to Blue Wire with Rear Malfunction Warning Light
14	Roll Stability System	ABS with Roll Stability System
14a	Diagnostic Cable	None-Optional
15	Air System	Aluminum Air Tanks
16	Tank Drain/Dryer	Petcock Valve at bottom of each Tank
17	Suspension Frame	Aluminum
18	DOT PHMSA Bumper	One (1) Aluminum rectangular tube, per PHMSA specifications
19	Bumper Overlay	Full width Aluminum Buffed Cosmetic Bumper Overlay.
20	DOT NHTSA Bumper	None when DOT 12" Wheels Back Exemption Applies
21	Rear Closeout	Rear Tank Frame Closeout Panel
E Tires/Wheels		
1	Wheels	Accuride Accu-Lite
2	Tires	Goodyear Marathon RSS 11R22.5
3	Number of Tires	Eight (8)
4	Tire Inflation System	Axles Prepped for Hendrickson Tiremaax Pro Inflation System
5	Hubodometer	None-Optional
6	Load Gauge	None-Optional
F Fenders		
1	Fenders-Front	Roadside Aluminum Contour Fender. Hose Tray on Curbside Doubles as Fender
1a	Closure Plate	None-Optional
2	Fenders-Rear	Roadside Aluminum Contour Fender. Hose Tray on Curbside Doubles as Fender.
3	Mudflaps	MAC LTT Mudflaps on Rear of Fenders and Front Curbside of Rear Tires
3a	Anti-Sail	Standard MAC LTT Fabricated Anti-Sails installed where necessary
4	Spray Guard	None-Optional
G Landing Gear		
1	Landing Gear	Jost AX150 Alumilight Landing Gear
2	Crank Location	Roadside
H Upper Fifth Wheel		
1	King Pin Plate	5/16" External Upper Plate with Hubbed Kingpin.
2	Pick-Up-Plate	Aluminum Pick-Up-Plate Installed if neccesary
I Ladder/Platform/Walkway		
1	Ladder(s)	Front Bolt-On Aluminum at Center of Head. Rails to have Rolled Radius at Top of Ladder and Top Deck plate Step
2	Safety Hand Rails	None-Optional
3	Top Walkway	Non-Skid Tape Between Top Vapor Rails
4	Fall Protection	None-Optional
J Cabinet(s) & Components		
1	Tool Cabinet(s)	One (1) Aluminum Cabinet, 48" Wide x 30" High x 27" Deep with Two Aluminum Side Hinged Doors. Mounted curbside forward of suspension.
		*Install MAC preferred Shelving and Partitions for Petroleum Units
2	EVO Cabinet(s)	One (1) 30" High Single Door Box with Overfill System and Emergency Valve Controls mounted at Front flush with top of Curbside Equipment Cabinet.

K Hose Carrier(s)		
1	Hose Carrier(s)	One (1) 3.5" x 22"W x Full Length Aluminum Extruded Tray functions as Curbside fenders. Includes tarp straps to retain hoses.
2	Trough Cover(s)	None-Optional
3	Gauge Stick	16 Foot Gauge Stick and Holder on Curbside at Rear with Tension Pin at Front
L Venting & Vapor Recovery System		
1	Relief Vent(s)	One (1) 10" Pressure/Vacuum Relief Valve with Set Pressure at 3.63 PSI Installed in Each Manhole Cover. One (1) BETTS #3686-AL Vent in the Vapor Line Under the Belly of the Tank.
3	Discharge Vent	Inward opening Sequential Vent with Viton seals in each manhole cover.
4	Recovery Piping	Vents connected to nipples in curbside flashing rail with 3½” I.D. hose. Internal Vapor Pipe Through Tank with connections at the following locations: (1) 4" outlet Curbside 15" to rear of last discharge valves (1) 4" outlet Curbside 15" forward of discharge valves (1) 4" outlet to extreme rear facing Curbside sloped down 15 degree
5	Adapter & Cap	Vapor outlet(s) equipped with 4" flanged poppeted vapor adapter & 4" orange cap.
6	Vapor Drain	None-Optional
N Valving/Piping/Hose		
1	Outlet(s)	One (1) 4" Aluminum Drain Pocket at Bottom each compartment
2	Splash Deflector	Bolt-on Splash Deflector above each Emergency Valve
3	Extra Drain Troughs	None-Optional
4	Equipment Warranty	Civacon System V (5-year Warranty Package)
5	Discharge Valve(s)	Elbow or Straight Air Operated Emergency Valves with Flanged Outlet and AL Body
6	Discharge Controls	Note(s): *All connections on emergency valves to be flanged connections, NO VICTAULIC GROOVES Installed in EVO Cabinet with Air Tank Pressure Gauge
7	Emergency Valve Closure	Emergency Closure located at Front Head Roadside
8	Piping	4" Sch 10 Aluminum discharge piping with formed long radius sweeps from Emergency Valves to Curbside of tank, per API standards.
9	Manifold	None-Optional
10	Front Pump-off Line	None-Optional
11	Outlet Valve(s)	API Valves with Aluminum Handle and Viton seals per compartment.
12	Sight Glass	Sight Bubble on API Valves
13	Adapter(s)/Cap(s)	4" Aluminum Male Gravity Drop Adapter with 4" Aluminum Dust Cap
14	Secondary Discharge(s)	None-Optional
15	Security Seal Provisions	None-Optional
16	Product Indicators	8-sided commodity tags on bracket over each API valve with Compartment Capacity.
17	Flanged Gaskets	Viton or Equivalent Gaskets used on all Flanged Connections
18	Grooved Gaskets	Baylast or Equivalent Gaskets used on all Grooved Connections
21	Brake Interlock Valve(s)	One (1) Aluminum Pipe Style Interlock Bar Installed Over Bottom Loading Adapters and Extended to Vapor Outlet(s) at Discharge with (1) Brake Interlock Valve. One (1) Brake Interlock Valve Mounted on Each Vapor Outlet not within API Bar.
O Pump		
1	Pump	None-Optional
2	Pump Piping	None-Optional
3	Hydraulic Lines	None-Optional
4	Flow Control	None-Optional
5	Platform	None-Optional

P	Capacity Controls		
	1	Overfill System	Hard-Wired Overfill System with a Top Probe in each manhole
	2	Sockets	Dual Optic and Thermistor sockets with vinyl caps in Curbside Control Cabinet
	3	Top Sensor Settings	Top sensors set to provide a 60 gallon minimum vapor space in each compartment.
	4	Bottom Retain	None-Optional
	5	Overfill Operation	Pressure switch to allow permit when all vapor vents are open
	6	Identification Module	Installed in Dual Socket Assembly
	7	Static Studs	Two (2) Brass Studs on 1-3/16” centers installed at Landing Gear on Curbside
8	Ground Bolt/Ball	Ground Wire Installed in Each Socket Assembly	
Q	Wiring		
	1	Nose Box	Dual Receptacle Nose Box with Main J-560 7-Way Plug and Circuit Breakers, and One ISO 3731 7-Way Receptacle for Auxiliary Functions, Located Low Roadside Front Head.
	2	Light System	Truck-Lite LED Junction Box Lighting System with Front Markers, Combination Side Center Turn/Marker Lights, and Three (3) Upper Clearance
	2a	End Dam Turn Lights	None-Optional
	3	Lamp Mounting	Stainless Steel Security Rings
	4	Light Boxes	Two (2) Aluminum Light Boxes on the Rear of the Trailer with Two (2) Red Stop/Marker Lamps and One (1) Amber Turn with Rear Side Marker Lights.
	5	Wide-Turn Light(s)	None-Optional
	6	Work Light(s)	Two (2) Grote LED work lamps, Mounted at Curbside Discharge Area with switch in Cabinet. MAC Extreme LED Lighting Assembly to Illuminate Discharge Valves
	6a	Work Light(s) Operator	All work lights operated by switch in EVO Cabinet
	7	Cabinet Light(s)	Install One (1) LED Strip Light in each Cabinet
	8	Backup Lights	Two (2) LED Backup Lights on inside of Lightboxes directed down and out
			Note: *wired to ISO Plug
	9	Backup Alarm	None-Optional
	10	Extra Light(s)	None-Optional
11	Closeout Light Panels	None-Optional	
R	T.A.L.K- Total Area Lighting Kit		
	1	T.A.L.K- SAFETY ARMS	Yes
	2	T.A.L.K- INTERLOCK BAR	Yes
	3	T.A.L.K- LIGHTED HOSE GUARD	Yes
	4	T.A.L.K- LIGHTED REAR HEAD	Yes
	5	T.A.L.K- LIGHTED LADDER	Yes
	6	T.A.L.K- Complete System	Yes
S	Paint/Decals		
	1	Corrosion Resistance	Electrolysis barrier between all dissimilar metals.
	2	Conspicuity	DOT 3M Tape per N.H.T.S.A. Requirements.
	3	Decals	Standard Safety/DOT-406 Warning and Safety Decals
	4	Customer Decals	None-Optional
	5	Emergency Drain Decals	Four (4) 3” diameter round DOT decals, (1) curbside and (1) roadside on horizontal centerline on each end head.
	6	MAC Logo	Red MAC Logo Placards on Vapor Rails and Rear Bumper
7	Pin Striping	Red	
T	Other/Options		
	1	Document Holder	Document Holder installed on Roadside, near landing gear frame.
	2	Static Cable	1/8" Stainless Steel Static Cables, Double Looped, One (1) Each Compartment.
	3	Placards	Four (4) Aluminum Slide-in Placard Holders. One (1) per side
	4	Safety Cone/Bucket Holder	Dual Safety Cone and Bucket Holder mounted near Discharge Area
	5	Fire Extinguisher	Jonesco Cabinet with 20 lb. Fire Extinguisher mounted at Roadside
	12	Calibration	Theoretical Calibration Chart - 1/4" Increments
	14	Bicycle Guard	None-Optional
	17	Standard Inspections	Initial Annual DOT Inspection, EPA Method 27, External Visual, Internal Visual, Pressure, and Leakage Tests.
	18	Additional Inspections	None-Optional
	20	Backup Camera	None-Optional
	21	Approvals	3D Model and Design Review available upon Customer Request