

ORCA LNG

LNG DELIVERY SYSTEM



3450 Trailer



6200 Trailer



3450 Chassis

Patent no's. 5,616,838 • 5,682,750

LNG Trailer Fueling Station & Truck Chassis Delivery System

The Orca LNG trailers are specifically designed to provide safe LNG fueling capabilities as a fueling station. The completely self-contained Orca LNG 3450 chassis is designed to be mobile to service refueling sites. The Orca LNG units have key technologies built-in — starting with our patented liquid submersed pump and meter system. Operators enjoy fast start-ups and single hose filling with auto shutoff. Additional system benefits are zero filling losses and fast, 30 to 50 GPM fills. The programmable “Smart” flow meter’s system is the center of control and complies with the most stringent Weights & Measure requirements. The submerged pump design is inherently reliable because there are no external pump seals to replace and the meter section has no moving parts to wear out. A liquid saturation coil is included as a standard feature to warm the liquid, if required, before it is dispensed. Since 1991, Chart’s innovation and proven performance in the LNG fueling market makes our vehicle fueling systems the most comprehensive and versatile products available today.



“Smart” Flow Meter



Submerged Pump

PRODUCT HIGHLIGHTS

- Submerged delivery pump capable of 30-50 gpm at 210 psig
- Auto-fill termination options include flow rate (for Chart vehicle tanks) or total volume & pressure
- Single-hose with Quick disconnect for fast & safe no loss delivery
- Push-button Programmable Logic Controller (PLC) with manual override simplifies operator dispensing
- National Conference on Weights & Measures and California Weights & Measures approved delivery system
- Integrated saturation coil allows pump filling for spark ignited natural gas or high pressure direct injection engine platforms
- Robust lined delivery hose for long-life and quiet laminar flow
- Stainless steel plumbing for long service life



Innovation. Experience. Performance.®

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SPECIFICATIONS			
Model	ORCA LNG-3450 (Chassis)	ORCA LNG-3450 (Trailer)	ORCA LNG-6200 (Trailer)
Dispense Method/Technology	Submerged Pump	Submerged Pump	Submerged Pump
Pressure Builder/Saturation	Pump Force-Feed	Saturation Coil	Saturation Coil
Orca System Design Codes	ASME Section VIII, Div. 1, USDOT MC-338, NFPA 52		
Electrical Design Codes	UL, NEMA 12 (NEMA 7 as required)		
Meter approval (Weights & Measures)	Certified ^a	Certified ^a	Certified ^a
Dispense Pump	ACDTC-34	ACDTC-34	ACD 30HP KA
Tanker Off-Load Pump	N/A	N/A	TC-30
Application	Mobile ^b	Mobile/Stationary	Stationary ^c
Specifications			
Capacity (gross) cold	3,398 gal / 12,862 ltr	3,398 gal / 12,862 ltr	6,280 gal / 23,772 ltr
Capacity (Full trycock @ 90% of gross)	N/A	N/A	5,660 gal / 21,425 ltr
Capacity (US DOT - Full trycock)	2,755 gal / 10,428 ltr	2,755 gal / 10,428 ltr	5,120 gal / 19,381 ltr
Maximum Allowable Working Pressure (MAWP)	175 psig / 12.1 barg	175 psig / 12.1 barg	160 psig / 11.03 barg
Bottle Length (overall)	23.56 ft / 7.18 m	23.56 ft / 7.18 m	32.33 ft / 9.85 m
Bottle Diameter (tank outer)	6.67 ft / 2.03 m	6.67 ft / 2.03 m	7.58 ft / 2.31 m
Bottle Height (overall)	7.12 ft / 2.17 m	7.12 ft / 2.17 m	8.08 ft / 2.46 m
Bottle Weight (tare)	14,181 lbs / 6,432 kg	14,181 lbs / 6,432 kg	18,440 lbs / 8,364 kg
Trailer Length (overall)	Chassis Dependent	Trailer Dependent	46.42 ft / 14.1 m
Trailer Width (overall)	Chassis Dependent	Trailer Dependent	8.5 ft / 2.59 m
Height with Vessel on Trailer (overall)	Chassis Dependent	Trailer Dependent	11.75 ft / 3.58 m
Trailer Weight (tare)	Chassis Dependent	Trailer Dependent	33,500 lbs / 15,193 kg
Trailer Weight (90% trycock)	Chassis Dependent	Trailer Dependent	53,310 lbs / 19,381 kg
Performance			
Submersed Pump Dispense Rate	30 – 50 GPM / 114 – 189 LPM @ 210 psig / 14.5 barg		
Pressure Building Coil	25 psi/hr (1.7 bar/hr)	25 psi/hr (1.7 bar/hr)	N/A
Saturation Coil	N/A	N/A	70 psi (4.8 bar)/half-hr
Emergency Shut Downs (ESDs)	2	2	4
Requirements			
Shore Power Recommended	480VACx30 Amp	480VACx30 Amp	480VACx60 Amp
Truck ^d (Air ride required)	Double axel sized for service	N/A	N/A
Trailer	N/A	Chart Supplied	Chart Supplied

^a National Conference on Weights & Measures NTEP

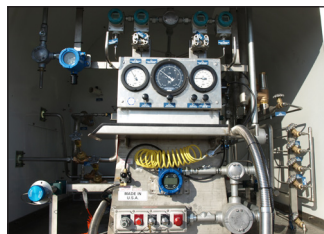
^b Mobile: The 3450 Chassis Orca is driven to the equipment to be fueled

^c Stationary: The equipment to be fueled is transported to the 6200 Trailer Orca

^d Customer supplied per Chart's specifications



J.C. Carter® Quick-Connect Fill Fitting



Ergonomic Controls & Plumbing

STANDARD FEATURES

- ACD 30HP KA pump HL-6200/ACDTC-34 pump HL-3450
- J.C. Carter® quick-connect fill fitting
- Macro-Tech® quick-connect vent fitting
- Gas monitoring system, FM and ATEX approved
- Fenwal® heat detectors, FM and UL approved
- Siemens® differential pressure transmitter, FM approved
- Burns® resistance temperature detector, FM approved
- 16 foot lined delivery hose
- Air compressor system for pneumatic controls
- Electrical disconnect to allow shore power
- Consult Chart for generator options

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