

Appendix A: Tank Manufacturer Compatibility

Table A1: Tank Manufacturer Compatibility with Ethanol Blends

	E10	E100		E10	E100
Manufacturer	✓	✓	<i>Continued from below</i>		
FIBERGLASS^a			Highland Tank	✓	✓
Containment Solutions	✓	✓	J.L. Houston Co.	✓	✓
Owens Corning (single wall 1965-1994)	✓	✗	Kennedy Tank and Manufacturing Co., Inc.	✓	✓
Owens Corning (double wall 1965-July 1, 1990)	✓	✗	Lancaster Tanks and Steel Products	✓	✓
Owens Corning (double wall July 2, 1990-December 31, 1994)	✓	✓	Lannon Tank Corporation	✓	✓
Xerxes (single wall prior to February 1981)	✗	✗	Mass Tank Sales Corp.	✓	✓
Xerxes (single wall February 1981-June 2005)	✓	✗	Metal Products Company	✓	✓
Xerxes (single wall since July 2005)	✓	✓	Mid-South Steel Products, Inc.	✓	✓
Xerxes (double wall prior to April 1990)	✓	✗	Modern Welding Company	✓	✓
Xerxes (double wall April 1990 and after)	✓	✓	Newberry Tanks & Equipment, LLC	✓	✓
STEEL^b			Plasteela	✓	✓
Acterra Group Inc.	✓	✓	Service Welding & Machine Company	✓	✓
Caribbean Tank Technologies Inc.	✓	✓	Southern Tank & Manufacturing Co., Inc.	✓	✓
Eaton Sales & Service LLC	✓	✓	Stanwade Metal Products	✓	✓
General Industries	✓	✓	Talleres Industriales Potosinos, S.A. de C.V.	✓	✓
Greer Steel, Inc.	✓	✓	Tanques Antillanos C. x A.	✓	✓
Hall Tank Co.	✓	✓	Watco Tanks, Inc.	✓	✓
Hamilton Tanks	✓	✓	We-Mac Manufacturing Company	✓	✓

Letters stating compability:

a. Petroleum Equipment Institute
www.pei.org/ust-component-compatibility-library

b. Steel Tank Institute
www.steeltank.com/FabricatedSteelProducts/ShopFabricatedTanks/SteelAndAlternativeFuels/tabid/465/Default.aspx

Appendix B: Pipe and Associated UST Manufacturer Compatibility

Table B1. Pipe Manufacturer Compatibility with Ethanol Blends

Manufacturer	Product	Model	Ethanol Compatibility
<i>Piping—All Companies have UL 971 listing for E100</i>			
Advantage Earth Products	Piping	1.5", 2", 3", 4"	E0-E100
Brugg	Piping	FLEXWELL-HL, SECON-X, NITROFLEX, LPG	E0-E100
Franklin Fueling	Piping	Franklin has third-party certified piping compatible with up to E85. Contact manufacturer for specific part numbers.	E0-E85
OPW	Piping	FlexWorks, KPS, Pisces (discontinued)	E0-E100
NOV Fiberglass	Piping	RedThread IIA, Ameron Dualoy	E0-E100
NUPI	Piping	Smartflex	E0-E100
OMEGAFLEX	Piping	DoubleTrac (brass and stainless steel fittings)	E0-E100

Letters stating compatibility:

Petroleum Equipment Institute

www.pei.org/ust-component-compatibility-library

Appendix B: Pipe and Associated UST Manufacturer Compatibility

Table B2. Associated UST Manufacturer Compatibility with Ethanol Blends

Manufacturers introduce and discontinue models over time. If you do not see your equipment on this list please contact the manufacturer. Note X in these lists can be substituted for any value.

Federal code requires compatibility of this equipment with specific fuels. This is achieved through either third-party listing or a letter from the manufacturer stating compatibility. Husky has UL listing for E85. The following companies have issued letters stating compatibility: Bravo, Morrison Brothers, Vaporless Manufacturing, Veeder-Root, and Western Fiberglass. Please contact other manufacturers for a compatibility letter or to inquire if they have UL E85 listed products. Compatibility letters are available at: www.pei.org/ust-component-compatibility-library

Manufacturer	Product	Model	Ethanol Compatibility
Bravo Systems	Fiberglass fittings	Series F, FF, FPE, FR, Retrofit-S, D-BLR-S, D-INR-S, FLX, FLX-INR, FPS, TBF	E0-E100
Bravo Systems	Spill buckets	B3XX	E0-E100
Bravo Systems	Tank sumps & covers	B4XX	E0-E100
Bravo Systems	Transition sumps	B5XX, B6XX, B7XX, B8XX	E0-E100

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Appendix B: Pipe and Associated UST Manufacturer Compatibility

Table B2 (continued). Pipe Manufacturer Compatibility with Ethanol Blends

Manufacturer	Product	Model	Ethanol Compatibility
Bravo Systems	Under dispenser containment sumps	B1XXX, 7XXX, B8XXX, B9XXX	E0-E100
Cimtek	Filter	300MB-10, 300MB-30, 400MB-10, 400MB-30, 475XLMB-10	E0-E15
Cimtek	Filter	300BHA-01, 400BHA-01, 400BHA-05, 800BHA-01	E0-E85
Clay and Bailey	AST emergency vent	354, 365, 366, 367, 368, 369, 370	E0-E85
Clay and Bailey	AST manhole	API-650	E0-E85
Clay and Bailey	AST overfill prevention valve	1228	E0-E85
Clay and Bailey	AST spill containment	all	E0-E85
Clay and Bailey	Fill cap	94, 232, 233, 234, 235, 254	E0-E85
Franklin Fueling	All	Franklin has third-party certified equipment compatible with up to E85. Contact manufacturer for specific part numbers.	
Husky	Pressure vacuum vents	4620, 4885, 5885, 11730, 11735, 11740	E0-E85
Morrison Bros	Anodized farm nozzle	200S	E0-E85
Morrison Bros	Anti-syphon valve	912	E0-E85
Morrison Bros	AST adaptor	927	E0-E85
Morrison Bros	Ball valves	691BSS	E0-E85
Morrison Bros	Caps	305C	E0-E85
Morrison Bros	Clock gauge with alarm	918	E0-E85
Morrison Bros	Clock gauges	818	E0-E85
Morrison Bros	Combination vent/overfill alarm	922	E0-E85
Morrison Bros	Diffuser	539TO, 539TC	E0-E85
Morrison Bros	Double tap bushing	184	E0-E85
Morrison Bros	Drop tubes	419A	E0-E85
Morrison Bros	Emergency vents	244	E0-E85

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Appendix B: Pipe and Associated UST Manufacturer Compatibility

Table B2 (continued). Pipe Manufacturer Compatibility with Ethanol Blends			
Manufacturer	Product	Model	Ethanol Compatibility
Morrison Bros	Expansion relief valve	076DI, 078DI	E0-E85
Morrison Bros	External emergency valves	346DI, 346FDI, 346SS, 346FSS	E0-E85
Morrison Bros	Extractors	560/561/562/563	E0-E85
Morrison Bros	Flame arrester	351S	E0-E85
Morrison Bros	Float vent valves	317	E0-E85
Morrison Bros	Frost proof drain valve	128DIS	E0-E85
Morrison Bros	In-line check valve	958	E0-E85
Morrison Bros	Internal emergency valves	272DI, 72HDI	E0-E85
Morrison Bros	Overfill alarm	918TCP	E0-E85
Morrison Bros	Overfill prevention valve	9095A-AV, 9095SS	E0-E85
Morrison Bros	Series tank monitor adaptor and cap kits	305XPA	E0-E85
Morrison Bros	Solenoid valves (3" must be all teflon version)	710SS	E0-E85
Morrison Bros	Spill containers	515/516/517/518	E0-E85
Morrison Bros	Strainer	285	E0-E85
Morrison Bros	Swing check valves	246ADI, 246DRF	E0-E85
Morrison Bros	Tank monitor adaptor and cap kits	305XPA	E0-E85
Morrison Bros	Vapor recovery adaptor	323	E0-E85
Morrison Bros	Vapor recovery caps	323C	E0-E85
Morrison Bros	Vent-double outlet (small UST)	155	E0-E85
Morrison Bros	Vent-pressure vacuum	548, 748, 749	E0-E85
Morrison Bros	Vent-updraft	354	E0-E85
National Environmental Fiberglass	Sumps-dispenser	All	E0-E85
National Environmental Fiberglass	Sumps-tank	All	E0-E85
National Environmental Fiberglass	Sumps-transition	All	E0-E85

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Appendix B: Pipe and Associated UST Manufacturer Compatibility

Table B2 (continued). Pipe Manufacturer Compatibility with Ethanol Blends

Manufacturer	Product	Model	Ethanol Compatibility
OPW	AST anti-siphon valve	199ASV	E0-E85
OPW	AST ball valve	21BV SS	E0-E85
OPW	AST check valve	175, 1175	E0-E85
OPW	AST emergency shut off valve	178S	E0-E85
OPW	AST emergency vent	201, 202	E0-E85
OPW	AST emergency vent	301	E0-E85
OPW	AST mechanical gauge	200TG	E0-E85
OPW	AST overfill prevention valve	61fSTOP A or M versions	E0-E85
OPW	AST overfill prevention valve	61fSTOP	E0-E25
OPW	AST pressure vacuum vent	523V, 623V	E0-E100
OPW	AST solenoid valve	821	E0-E25
OPW	AST spill container	211-RMOT, 331, 332	E0-E85
OPW	AST swing check valve	all	E0-E85
OPW	AST tank alarm	444TA	E0-E85
OPW	AST vapor adaptor	1611AVB-1625	E0-E100
OPW	AST vapor cap	1711T-7085-EVR, 1711LPC-0300	E0-E100
OPW	Ball float vent valve	53VML, 30MV	E0-E100
OPW	Check valve	70, 70S	E0-E100
OPW	Dispenser sumps & accessories	FlexWorks	E0-E100
OPW	Drop tube	61FT	E0-E25
OPW	Drop tube	61T, 61TC, 61TCP	E0-E15
OPW	Drop tube	61TSS	E0-E100
OPW	Extractor fittings and plug	233, 233VP	E0-E100
OPW	Face seal adaptor (threaded riser adaptor)	FSA	E0-E100
OPW	Fill adaptor-side	61AS	E0-E100

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Appendix B: Pipe and Associated UST Manufacturer Compatibility

Table B2 (continued). Pipe Manufacturer Compatibility with Ethanol Blends

Manufacturer	Product	Model	Ethanol Compatibility
OPW	Fill adaptor-top	633T, 633TC	E0-E100
OPW	Fill Cap	634TT-7085-EVR, 634LPC, 634TT-4000	E0-E100
OPW	Fill cap-side	62TT	E0-E100
OPW	Fill-swivel adaptor	61SALP-MA, 61SALP-1020-EVR	E0-E100
OPW	Flexible connectors	FCxx	E0-E100
OPW	Float kit	61SOK-0001	E0-E15
OPW	Jack screw	61JSK, 71JSK	E0-E100
OPW	Manhole	Conquistador, Fiberlite, 104A, 104FG, 104C, 6110, 6120	E0-E100
OPW	Monitoring well cap kit	634TTM	E0-E100
OPW	Monitoring well probe cap	62M, 116M, 62M-MA	E0-E100
OPW	Multi-port spill containment	6511, 6421, 6511, 6521, 6561, 6571, Fiberlite	E0-E100
OPW	Overfill prevention valve	71SOM, 61SOM, 61SOCM-4000	E0-E100
OPW	Overfill prevention valve	71SO, 71SO-C, 71SO-CT, 61SOC, 61SOP, 61SOR	E0-E15
OPW	Pressure vacuum vent	523V, 623V	E0-E100
OPW	Spill container (bucket)	1-2100, 1SC-2100, 1C-2100, 1C-2200, EDGE, '1-2105, 101-BG2100	E0-E100
OPW	Tank bottom protectors	6111, 61TP	E0-E15
OPW	Tank sumps & accessories	Fiberlite, FlexWorks	E0-E100
OPW	Transition sumps & accessories	FlexWorks	E0-E100
OPW	Vapor adaptor	1611AV, 1611AVB	E0-E100
OPW	Vapor Cap	1711T-7085-EVR, 1711LPC	E0-E100
OPW	Vapor-swivel adaptor	61VSA-MA, 61VSA-1020-EVR	E0-E100
Vaporless Manufacturing	Leak detector	99LD-2000/2200/3000 without stainless steel tubing/fittings	E0-E20
Vaporless Manufacturing	Leak detector	99LD-2000/2200/3000 with stainless steel tubing/fittings	E0-E100

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Appendix B: Pipe and Associated UST Manufacturer Compatibility

Table B2 (continued). Pipe Manufacturer Compatibility with Ethanol Blends

Manufacturer	Product	Model	Ethanol Compatibility
OPW	Fill adaptor-top	633T, 633TC	E0-E100
Vaporless Manufacturing	Overfill prevention valve	OPF-2/3 with stainless steel tubing/fittings	E0-E100
Veeder-Root	Continuous interstitial tank system	P/N 857280-100, 857280-200, 857280-30X	E0-E15
Veeder-Root	Electronic line leak detector	Series 8484, 8590	E0-E15
Veeder-Root	Ground water monitoring	P/N 794380-621, 794380-622, 794380-624	E0-E15
Veeder-Root	Interstitial and secondary containment monitoring	P/N 794380-XXX, 794390-XXX, 847990-00X, 857080-XXX	E0-E15
Veeder-Root	Interstitial and secondary containment monitoring	P/N 794380-321, 794380-323, 794380-333, 794380-344, 794380-345, 794380-351, 794380-430	E0-E85
Veeder-Root	Magnetostrictive probe	Mag Plus Series 8463XX, Mag Series 8473XX	E0-E15
Veeder-Root	Tall tank probe	Mag-FLEX 889560-XXX, MAGXL-XXX	E0-E90
Veeder-Root	Vapor monitoring	P/N 394390-700	E0-E15
Western Fiberglass	Co-flex piping	all	E0-E100
Western Fiberglass	Cuff fittings	all	E0-E100
Western Fiberglass	Sumps (dispenser, tank, transition, vapor, vent)	all	E0-E100
Western Fiberglass	Co-flow hydrostatic monitoring systems	all	E0-E100

Letters stating compability:

Petroleum Equipment Institute

www.pei.org/ust-component-compatibility-library

Appendix C: Dispenser, Hanging Hardware, Shear Valve, and Submersible Turbine Pump Manufacturer Compatibility

Table C. Dispenser, Hanging Hardware, Shear Valve, and Submersible Turbine Pump Manufacturer Compatibility

Manufacturers introduce and discontinue models over time. If you do not see your equipment on this list please contact the manufacturer.

Manufacturer	Product	Model	Ethanol Compatibility
UL E25 and E85 Listed Equipment			
Gilbarco	Dispenser	An option on remote control dispenser Models NA0, NA1, NA2, NA3, NG1, NG6, NLO, NL1, NL2, and NL3. Models NG1, NG6, and NLO-NL3 are X+1 configurations where X is a number of blendable grades running through one hose on each side and the +1 indicates a dedicated, independent, set of hydraulics. E25 may only be on the +1 side (no ethanol blending). For such split-type dispensers, the independent non-E25 hydraulics may be constructed.	E0-E25
Gilbarco	Dispenser	An option on remote control dispenser Models NA0, NA1, NA2, NA3, NN0, NN1, NN2, NN3, G1, G6, LO, L1, L2, and L3 and NJ4. Models NG1, NG6, and NLO-NL3 are X+1 configurations where X is a number of blendable grades running through one hose on each side. Model NJ4 is a 3+2 grade (double blender) with two distinct fuel trees as described above, and the +1 indicates a dedicated, independent, set of hydraulics. Hydraulics trees marked as suitable for E85 are suitable for blending mid-level grades.	E0-E85
Wayne	Dispenser	Ovation2 B12//9 and B23//9	E0-E25
Wayne	Dispenser	Ovation 2 EB23/4, EB23/5/M Dual Blender, EB23/5/M5 Double Dual Blender; Helix 3-1-1 H(W/LU)43-43E, 3-1-1 H(W/LU)45-43E/M5 Dual Blender, 3-1-1 H(W/LU)35-33E Double Dual Blender	E0-E85
Franklin Fueling	Shear valve	Franklin has third-party certified shear valves compatible with up to E85. Contact manufacturer for specific part numbers.	E0-E85
Franklin Fueling	Submersible turbine pump	Franklin has third-party certified STPs compatible with up to E85. Contact manufacturer for specific part numbers.	E0-E85
Husky	Nozzle	X E25, X E25 Cold Weather, XS E25, XS E25 Cold Weather	E0-E25
Husky	Nozzle	X E85, X E85 Cold Weather, XS E85, XS E85 Cold Weather	E0-E85
Husky	Breakaway	E25 Safe-T-Breaks	E0-E25
Husky	Breakaway	E85 Safe-T-Breaks	E0-E85

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Appendix C: Dispenser, Hanging Hardware, Shear Valve, and Submersible Turbine Pump Manufacturer Compatibility

Table C (continued). Dispenser, Hanging Hardware, Shear Valve, and Submersible Turbine Pump Manufacturer Compatibility

Manufacturers introduce and discontinue models over time. If you do not see your equipment on this list please contact the manufacturer.

Manufacturer	Product	Model	Ethanol Compatibility
UL E25 and E85 Listed Equipment			
OPW	Balance Adaptor	28CS	E0-E25
OPW	Breakaway	66V-0492	E0-E85
OPW	Breakaway	66V-030RF	E0-E25
OPW	Nozzle	11BP*E85	E0-E85
OPW	Nozzle	11AP*E25 and 11BP*E25 Series Nozzles	E25
OPW	Swivel	241TPS-75RF	E25
OPW	Swivel	241TPS-0492	E0-E85
OPW	Shear valve	10 series	E0-E100
OPW	Shear valve vapor	60VS	E0-E100
Manufacturer approved; equipment is not UL listed for blends above E10			
Veyance	Hose	Flexsteel Futura Ethan-ALL	E0-E85
Husky	Swivel	E85	E0-E85
IRPCO	Hose dispenser	Steelflex Ultra Hardwall, Softwall (2 Braid, 4SP), Marina	E0-E15
IRPCO	Hose transfer	Kanapower ST, RED FLEXTRA, FLEXWING Versafuel	E0-E15
Veeder-Root	Submersible turbine pump	Redjacket Maxxum 410763-XXX (MXP300JX-XXX or MXP500JX-XXX)	E0-E20
Veeder-Root	Submersible turbine pump	Redjacket AG models	E0-E100
Veyance	Hose dispenser	Flexsteel Futura	E0-E15