



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION  
FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR HCAI SPECIAL SEISMIC  
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0254

HCAI Special Seismic Certification Preapproval (OSP)

Type:  New  Renewal

Manufacturer Information

Manufacturer: Tramont Manufacturing

Manufacturer's Technical Representative: Frank Langenecker

Mailing Address: 326 E Keefe Ave, Milwaukee, WI 53212

Telephone: (414) 967-8800

Email: frank@tramont.com

Product Information

Product Name: Emergency and Standby Power Systems

Product Type: Fuel Tanks

Product Model Number: See Attachments

General Description: Carbon steel UL-142 standalone fuel day tanks with integral and remote base pumping systems.

Mounting Description: Rigid, Floor Mounted

Tested Seismic Enhancements: None

Applicant Information

Applicant Company Name: Tramont Manufacturing

Contact Person: Frank Langenecker

Mailing Address: 326 E Keefe Ave, Milwaukee, WI 53212

Telephone: (414) 967-8800

Email: frank@tramont.com

Title: Vice President Engineering





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**California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)**

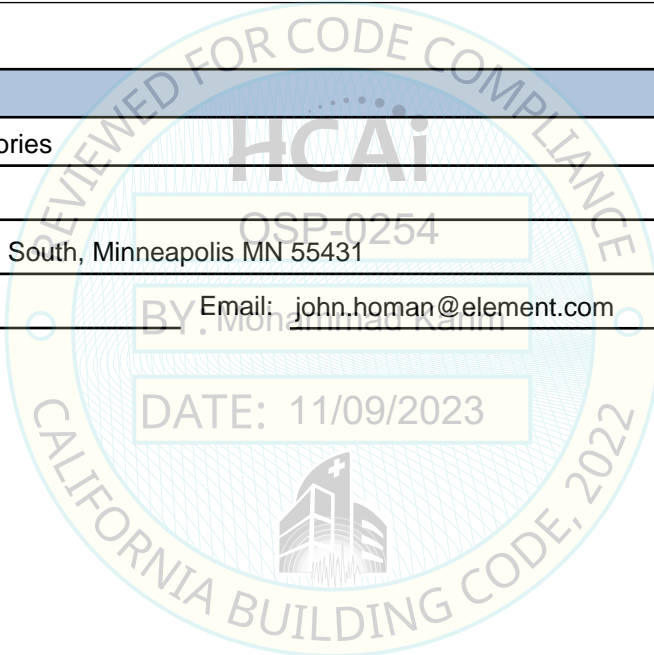
Company Name: LARSON ENGINEERING  
Name: Kevin Schultz California License Number: S5608  
Mailing Address: 3524 Labore Road, White Bear Lake, MN 55110-5126  
Telephone: (651) 481-9120 Email: kschulz@larsonengr.com

**Certification Method**

GR-63-Core       ICC-ES AC156       IEEE 344       IEEE 693       NEBS 3  
 Other (Please Specify): \_\_\_\_\_

**Testing Laboratory**

Company Name: Environ Laboratories  
Contact Person: John Homan  
Mailing Address: 9725 Girard Ave South, Minneapolis MN 55431  
Telephone: (952) 888-7795 Email: john.homan@element.com





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**Seismic Parameters**

Design Basis of Equipment or Components ( $F_p/W_p$ ) = 1.44

SDS (Design spectral response acceleration at short period, g) = 2.0

$a_p$  (Amplification factor) = 1.0

$R_p$  (Response modification factor) = 2.5

$\Omega_0$  (System overstrength factor) = 2.0

$I_p$  (Importance factor) = 1.5

$z/h$  (Height ratio factor) = 1

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

**HCAI Approval (For Office Use Only) - Approval Expires on 11/09/2029**

Date: 11/9/2023

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = 2.00 z/h = 1

Condition of Approval (if applicable): DATE: 11/09/2023

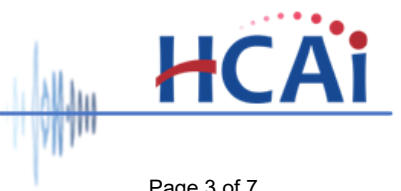
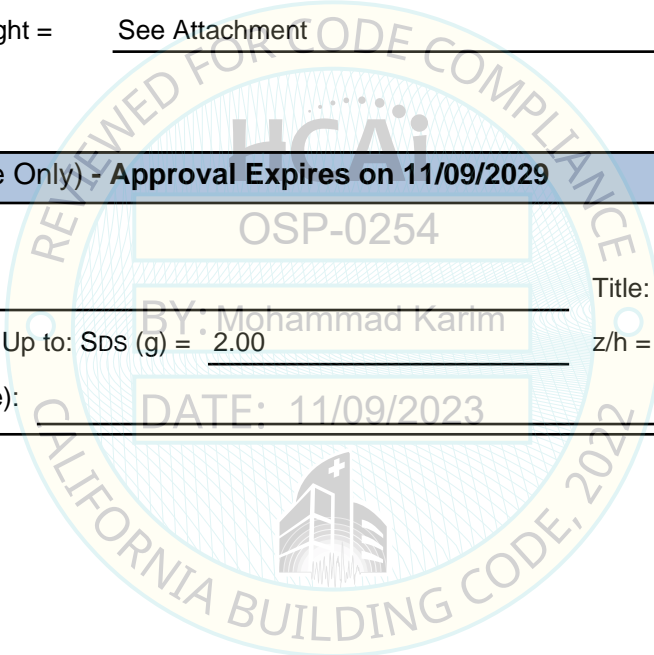


Table 1. Certified Components

Tramont Corporation: Rigid Base Mounted UL-142 Steel Double Walled Fuel Tanks

Model #	Gallons	Empty Weight [lbs]	Full Operating Weight [lbs]	Length [in]	Width [in]	Height [in]	Wall Thickness	Max Stiffener Spacing [in]	Max Tie Rod Spacing [in]	UUT
UOTRS-10, UOTRX-10	10	157	228	16	36	12	12 ga	18"	18"	1
UOTRS or UOTRX-10 to UOTRS or UOTRX-350	10 to 350	157 to 1091	228 to 3576	16 to 51	36 to 48	12 to 50	12 ga	18"	18"	Inter
UOTRS-350, UOTRX-350	350	1091	3576	51	48	50	12 ga	18"	18"	2
Remote Enclosure Duplex	N/A	80 to 219	N/A	24	18	4	10 ga	N/A	N/A	3

Note: UOTRS includes tank with control system, UOTRX is tank only with various pipe fittings.

Table 2. Certified Subcomponents

Day Tank Mounted Options

Equipment Description	Mfr	Mfr #	Desc	UUT	Tank Mounted	Remote Mounted
					OSHPD Apprvd	OSHPD Apprvd
Pump	Oberdorfer	N61K10G01	2 gpm, 3/8" NPT	2	X	X
Pump	Oberdorfer	N991	2gpm, 1/4" NPT	1,3	X	X
Pump	Oberdorfer	N992	4 gpm		X	X
Pump	Oberdorfer	N993	7 gpm		X	X
Pump	Oberdorfer	N994	10 gpm		X	X
Pump	Oberdorfer	N970	19 gpm		X	X
Pump	Oberdorfer	N990	23 gpm	2,3	X	X
Pump	Oberdorfer	N1100	30 gpm	2	X	X
Motor	Marathon Elec	5KH32FN5586X	1/3 Hp, 1725 rpm, 115 VAC, 1 ph	2	X	X
Motor	Leeson	A4C17DB2H	1/3 Hp, 1725 rpm, 115/208-230 VAC, 1 ph	1,3	X	X
Motor	Leeson	C4C17DK18H	1/2 Hp, 1725 rpm 115/208-230 VAC, 1 ph		X	X
Motor	Leeson	C4C17DK19H	3/4 Hp, 1725 rpm 115/208-230 VAC, 1 ph		X	X
Motor	Leeson	C6C17DK11F	1 Hp, 1725 rpm, 115/208-230 VAC, 1 ph		X	X
Motor	Leeson	C6K17DK16E	1.5 Hp, 1725 rpm, 115/208-230 VAC, 1 ph	2,3	X	X
Motor	Baldor	36-3301	1.5 Hp, 1200 rpm, 208 VAC, 1 ph	2	X	
Motor	Eaton	ECX09	Motor Starter	1,2,3	X	X
Motor	Tramont	2116-22887	Motor Starter Mount	3		X
Control System	MEC	System 2000 Plus	Controller, Single	1	X	X
Control System	MEC	System 2000 Plus	Controller, Duplex	2,3	X	X
Control System	Tramont	2300004	Pump Running / Critical High Plug-in Relay	1,2	X	X
Control System	Madison Switch	92400	Float Switch	1,2	X	
Control System	Rochester	9340-8140	Level Sensor	1,2	X	
Control System	Krueger Sentry	H-1.5	Visual Level Gauge	1,2	X	
Control System	Tramont	#2425	Steel Weatherproof Tank Cover	1,2,3	X	X
Vent	OEM	4023	1 1/4" Mushroom Vent	1	X	
Vent	OEM	4025	2" Mushroom Vent	2	X	
Vent	GTC	Series 100-2	2" NPT Emergency Vent	1	X	
Vent	GTC	Series 100-3	3" NPT Emergency Vent		X	
Vent	GTC	Series 100-4	4" NPT Emergency Vent	2	X	
Valve, Solenoid	GC Valve	S201GF02V5CG4E	3/8" NPT, 120 VAC, N. C. Solenoid Valve		X	X
Valve, Solenoid	GC Valve	S201GF02V5DG4E	1/2" NPT, 120 VAC, N. C. Solenoid Valve		X	X
Valve, Solenoid	GC Valve	S201GF02V5EG5E	3/4" NPT, 120 VAC, N. C. Solenoid Valve		X	X
Valve, Solenoid	GC Valve	S201GF02V5FG9E	1" NPT, 120 VAC, N. C. Solenoid Valve		X	X
Valve, Solenoid	GC Valve	S201GF02L7DG4	1/2" NPT, 120 VAC, N. O. Solenoid Valve S.S.	1,3	X	X
Valve, Solenoid	GC Valve	S202GF02L7DG4	1/2" NPT, 120 VAC, N. O. Solenoid Valve S.S.		X	
Valve, Solenoid	GC Valve	S201GF02V5DG4ME	1/2" NPT, 120 VAC, N. C. Solenoid Valve w/ MO		X	X
Valve, Solenoid	GC Valve	S201GF02V5EG5ME	3/4" NPT, 120 VAC, N. C. Solenoid Valve w/ MO		X	X
Valve, Solenoid	GC Valve	S201GF02V5FG9ME	1" NPT, 120 VAC, N. C. Solenoid Valve w/ MO	2,3	X	X



**Unit Under Test (UUT)  
 Summary Sheet**

<b>Manufacturer:</b>	Tramont Corporation					
<b>Model Line:</b>	10 Gallon Day Tank					
<b>Model Number:</b>	UOTRS-10, UOTRX-10					
<b>Product Construction Summary:</b>						
Tramont 10 Gallon Day Tank, 12 gauge, formed and welded cold rolled carbon steel double walled tank with painted finish.						
<b>Options/ Subcomponent Summary:</b>						
See Table 2 for certified subcomponents. Tested empty and full.						
<b>UUT Properties</b>						
Weight (lb)	Dimensions (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
228	16	36	12	>33	>33	>33
<b>UUT Highest Passed Seismic Test Information</b>						
<b>Building Code:</b>	CBC 2022			<b>Test Criteria:</b>		ICC-ES AC156
<b>S<sub>DS</sub></b>	<b>z/h</b>	<b>I<sub>p</sub></b>	<b>A<sub>FLX-H</sub></b>	<b>A<sub>RIG-H</sub></b>	<b>A<sub>FLX-V</sub></b>	<b>A<sub>RIG-V</sub></b>
2.00g	1	1.5	3.20g	2.40g	1.34g	0.54g

**Test Mounting Details:**



Component maintained structural integrity and functionality after shake table tests. Rigid base mounted to the test table fixture using (4) 3/8" diameter SAE Grade 8 bolts.



**Unit Under Test (UUT)  
 Summary Sheet**

<b>Manufacturer:</b>	Tramont Corporation					
<b>Model Line:</b>	350 Gallon Day Tank					
<b>Model Number:</b>	UOTRS-350, UOTRX-350					
<b>Product Construction Summary:</b>						
Tramont 350 Gallon Day Tank, 12 gauge, formed and welded cold rolled carbon steel double walled tank with painted finish.						
<b>Options/ Subcomponent Summary:</b>						
See Table 2 for certified subcomponents. Tested empty and full.						
<b>UUT Properties</b>						
Weight (lb)	Dimensions (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
3576	51	48	50	19.24	33.19	23.99
<b>UUT Highest Passed Seismic Test Information</b>						
<b>Building Code:</b>		CBC 2022		<b>Test Criteria:</b>		ICC-ES AC156
<b>S<sub>DS</sub></b>	<b>z/h</b>	<b>I<sub>p</sub></b>	<b>A<sub>FLX-H</sub></b>	<b>A<sub>RIG-H</sub></b>	<b>A<sub>FLX-V</sub></b>	<b>A<sub>RIG-V</sub></b>
2.00g	1	1.5	3.20g	2.40g	1.34g	0.54g

**Test Mounting Details:**



Component maintained structural integrity and functionality after shake table tests. Rigid base mounted to the test table fixture using (6) 3/8" diameter SAE Grade 8 bolts.

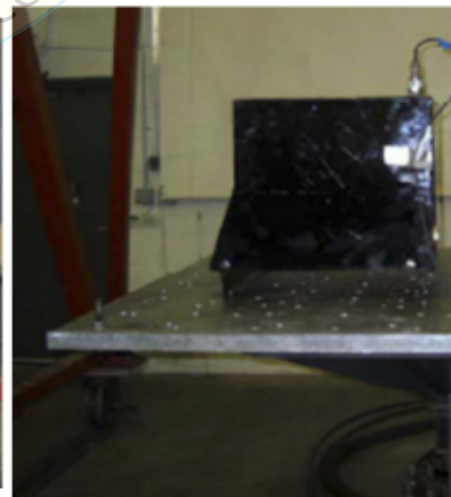
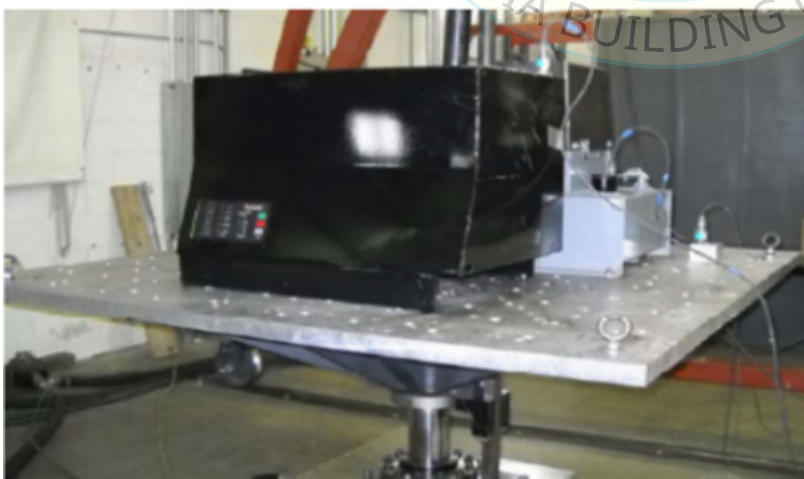




**Unit Under Test (UUT)  
 Summary Sheet**

<b>Manufacturer:</b>	Tramont Corporation					
<b>Model Line:</b>	Remote Base Enclosure					
<b>Model Number:</b>	N/A					
<b>Product Construction Summary:</b>						
Tramont Remote Base Enclosure, 10 gauge, formed and welded cold rolled carbon steel enclosure with painted finish.						
<b>Options/ Subcomponent Summary:</b>						
See Table 2 for certified subcomponents.						
<b>UUT Properties</b>						
Weight (lb)	Dimensions (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
219	24	18	4	19.24	30.41	>33
<b>UUT Highest Passed Seismic Test Information</b>						
<b>Building Code:</b>	CBC 2022			<b>Test Criteria:</b>	ICC-ES AC156	
<b>S<sub>Ds</sub></b>	<b>z/h</b>	<b>I<sub>p</sub></b>	<b>A<sub>FLX-H</sub></b>	<b>A<sub>RIG-H</sub></b>	<b>A<sub>FLX-V</sub></b>	<b>A<sub>RIG-V</sub></b>
2.00g	1	1.5	3.20g	2.40g	1.34g	0.54g

**Test Mounting Details:**



Component maintained structural integrity and functionality after shake table tests.  
 Rigid base mounted to the test table fixture using (4) 3/8" diameter SAE Grade 8 bolts.