



APPLICATION FOR PREAPPROVAL SPECIAL SEISMIC CERTIFICATION OF EQUIPMENT AND COMPONENTS

For Office Use Only

APPLICATION NO.

OSP – 0208-10

Check whether application is: NEW RENEWAL

1.0 Lescure Fuel Oil Equipment, LLC.

Mike Lescure

Manufacturer

Manufacturer's Technical Representative

3667 Mt. Diablo Blvd., Lafayette, CA 94549

Mailing Address

925-283-2528

mlescure@lescurecompany.com

Telephone

E-mail Address

2.0 Lescure Fuel Oil Control System

Fuel Oil Control System

Product Name

Product Type

248204-MCP001, 248204-RPC001, 248204-FPC001

Product model No (List all unique product identification numbers and/or serial numbers)

General Description: **Rigid Floor Mounted Lescure Fuel Oil Control System includes a Master Control Panel (248204-MCP001), Return Pump System (248204-RPC001) and Filtration System (248204-FPC001) for diesel generators. Approval is limited to components and configurations identical to tested units.**

3.0 Lescure Fuel Oil Equipment, LLC.

Mike Lescure

Applicant Company Name

Contact Person

3667 Mt. Diablo Blvd., Lafayette, CA 94549

Mailing Address

925-283-2528

mlescure@lescurecompany.com

Telephone

E-mail Address

I hereby agree to reimburse the Office of Statewide Health Planning and Development for the actual costs incurred by the department for review.

Signature of Applicant

8/19/11

Date

President

Title

Lescure Fuel Oil Equipment, LLC.

Company Name



4.0 Registered Design Professional Preparing the Report

Pacific Earthquake Engineering Research Center, University of California, Berkeley
 Company Name

Amir Gilani S4733
 Contact Name California License Number

1450 Halyard Drive, Suite One, West Sacramento, CA 95691
 Mailing Address

916-373-1995 x845 AGilani@MiyamotoInternational.com
 Telephone E-mail Address

5.0 California Licensed Structural Engineer Review and Acceptance of the Report

Miyamoto International, Inc.
 Company Name

Tom K. Chan S2759
 Contact Name California License Number

3736 Mt. Diablo Blvd., Suite 210, Lafayette, CA 94549
 Mailing Address

925-284-3700 x111 TChan@MiyamotoInternational.com
 Telephone E-mail Address

6.0 Anchorage Pre-Approval

- Anchorage is pre-approved under OPA-
(Separate application for anchorage pre-approval is required)
- Anchorage is not Pre-approved

7.0 Certification Method

- Testing in accordance with: ICC-ES AC-156 Other (Please Specify):

- Analysis
- Experience data
- Combination of Testing, Analysis, and/or Experience Data (Please Specify):

8.0 Testing Laboratory (if applicable)

Pacific Earthquake Engineering Research Center,
 University of California, Berkeley
 Company Name

Wesley Neighbor
 Contact Name

1301 S. 46th Street, Building 420, Richmond, CA 94804
 Mailing Address

510-665-3409 wdn@berkeley.edu
 Telephone E-mail:



9.0 Approval Parameters

Design in accordance with ASCE 7-05 Chapter 13: Yes No

Design Basis of Equipment or Components (F_p/W_p) = 1.8g

S_{DS} (Spectral response acceleration at short period) = 2.50 g

a_p (In-structure equipment or component amplification factor) = 1.0

R_p (Equipment or component response modification factor) = 2.5

I_p (Importance factor) = 1.5

z/h (Height factor ratio) = 1.0

Equipment or Component fundamental period(s) = See attached table

Building period limits (if any) = N/A

Overall dimensions and weight (or range thereof) = See attached tables

Equipment or Components @ grade designed in accordance with ASCE 7-05 Chapter 15: Yes No

Design Basis of Equipment or Components (V/W) =

S_{DS} (Spectral response acceleration at short period) =

S_1 (Spectral response acceleration at 1 second period) =

R (Response modification coefficient) = 1.0

Ω_0 (System overstrength factor) = 1.0

C_d (Deflection amplification factor) = 1.0

I_p (Importance factor) = 1.5

Height to Center of Gravity above base =

Equipment or Component fundamental period(s) = Sec

Overall dimensions and weight (or range thereof) =

Tank(s) designed in accordance with ASME BPVC, 2007: Yes No

10.0 List of attachments supporting the special seismic certification of equipment or components:

- Test Report
- Drawings
- Manufacturer's Catalog
- Calculations
- Others (Please Specify): Operability witness letter

11.0 OSHPD Approval (For Office Use Only)

 _____ Signature & Date Timothy J. Piland, SSE _____ Name & Title	9/2/2011	December 31, 2016 Approval Expiration Date S_{DS} (g) = 2.50 z/h = 1.0 Special Seismic Certification Valid Up to
Condition of Approval (if any):		

Seismic Certification Product Listing

Manufacturer:	Lescure Fuel Oil Equipment, LLC.
Product Name	Lescure Fuel Oil Control System
Product Type:	Automated Fuel Oil Control System
Model Number	248204



Product Construction Summary
Dripshield F/NEMA12 Enclosure; (manufacturer Huffman)
A48R3616HCR NEMA3R HNG CVR BO Enclosure; (manufacturer Huffman)
60"x71"x30" GA12 Galv Enclosure; (manufacturer Lescure Fuel Oil Equipment, LLC.)

Certified Subcomponent Summary	
Incon	Fuel Management System Console, FMS Expansion Module Console, Smart Controller
Square D	NEMA, Thermal Unit, Relay, Manual Switch
Cutler Hammer	Time Delay Relay, 8 Pin Base for TRN1P120V
Crouse Hinds Condulets	Reducer Bushing
Haight	Universal Pump, Universal Relief Valve Pump
Leeson	Electric Pump Motor
Versa-Mount	Flowmeter
RCI Technologies	Fuel Purifier
Franklyn Fueling	Leak Sensor

Certified Mounting Summary
All panels will be floor mounted.
Each of the three cabinets are bolted to its support platform using ten (10) ½-in A307 bolts
Support platforms are ground mounted and bolted to shake table with four (4) ½-in A307 bolts, one at each leg.

Building Code	Test Criteria	S_{DS}, g	z/h	I_p
IBC 2009/CBC 2010	ICC-ES AC 156	2.50	1.0	1.5

Item	Model Tested	Dimensions (in.)			Weight, (lbs)	UUT
		Width	Depth	Height		
Master Control Panel (MCP)	248204-MCP001	48	16	72	650	1
Return Pump Console (RPC)	248204-RPC001	34	16	60	455	2
Filtration Pump Console (FPC)	248204-FPC001	60	30	71	1,085	3

Summary Sheet for Unit Under Test (UUT) 1

Product Description	
Manufacturer:	Lescure Fuel Oil Equipment, LLC.
Product Name:	Master Control Panel (MCP)
Model Number:	248204-MCP001

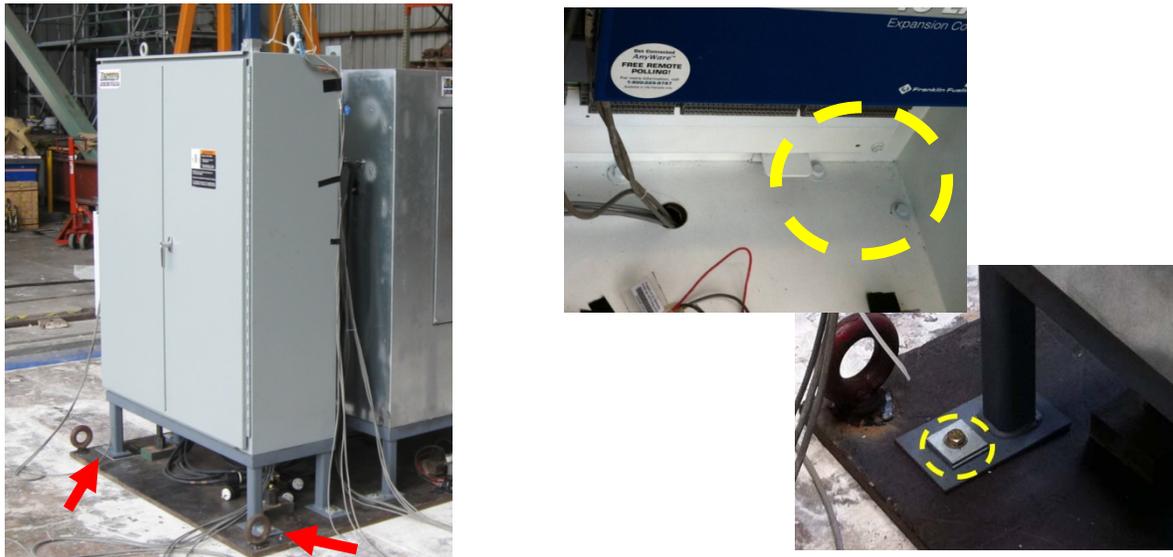
Construction
Dripshield F/NEMA12 Enclosure; (manufacturer Huffman)

Product Subcomponents (see attached Cut Sheet and Bill of Materials)	
Hoffman	AC SIDE MTG 115V 50/60HZ TYPE 4
Incon	Fuel Management System Console; FMS Expansion Module Console; Smart Controller
Square D	CONTACTOR NEMA Thermal Unit; Relay
Cutler Hammer,	Time Delay Relay

Properties of UUT						
Weight and dimensions				Lowest natural frequencies		
Weigh, lbs	Width, in.	Depth, in.	Height, in.	X-	Y-	Z-
650	48	16	72	15.4	12.7	10.1

Highest Passed Seismic Certification Level for UUT										
Building Code	Test criteria	S_{DS} g	z/h	I_p	Horizontal			Vertical		
					A_{FLX} g	A_{RIG} g	A_{FLX} / A_{RIG}	A_{FLX} g	A_{RIG} g	A_{FLX} / A_{RIG}
IBC 2009/ CBC 2010	ICC-ES AC 156	2.50	1.0	1.5	4.00	3.00	1.33	1.67	0.67	2.5

Test mounting detail



Overall and typical connection to support platform and shake table.

UUT cabinet was bolted to its support platform using ten (10) ½-in A307 bolts. The platform was bolted to the shake table with four (4) with ½-in A307 bolts, one at each leg.

Summary Sheet for Unit Under Test (UUT) 2

Product Description	
Manufacturer:	Lescure Fuel Oil Equipment, LLC.
Product Name:	Return Pump Cabinet (RPC)
Model Number:	248204-RPC001

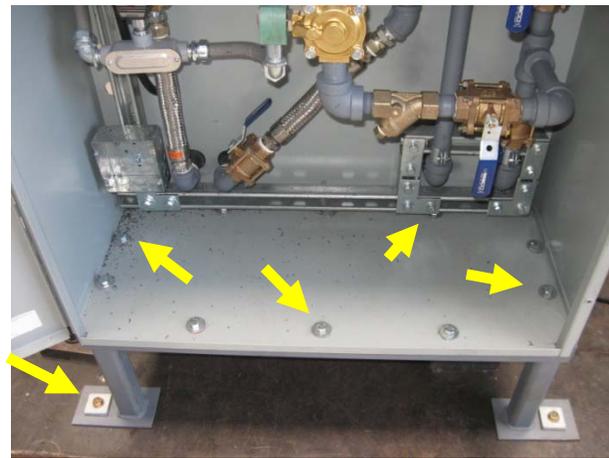
Construction
A48R3616HCR: NEMA3R HNG CVR BO Enclosure (manufacturer Huffman)

Product Subcomponents (see attached Cut Sheet and Bill of Materials)	
Square D	Manual Starter; Thermal Unit
Haight	Universal Pump
Leeson	Electric Motor
Versa-Mount	Flowmeter
AZCO	Solenoid Valve N/C

Properties of UUT						
Weight and dimensions				Lowest natural frequencies		
Weigh, lbs	Width, in.	Depth, in.	Height, in.	X-	Y-	Z-
455	34	16	60	15.4	13.7	10.1

Highest Passed Seismic Certification Level for UUT										
Building Code	Test criteria	S_{DS} g	z/h	I_p	Horizontal			Vertical		
					A_{FLX} g	A_{RIG} g	A_{FLX} / A_{RIG}	A_{FLX} g	A_{RIG} g	A_{FLX} / A_{RIG}
IBC 2009/ CBC 2010	ICC-ES AC 156	2.50	1.0	1.5	4.00	3.00	1.33	1.67	0.67	2.5

Test mounting detail



Overall and typical connection to support platform and shake table.

UUT cabinet was bolted to its support platform using ten (10) ½-in A307 bolts. The platform was bolted to the shake table with four (4) with ½-in A307 bolts, one at each leg.

Summary Sheet for Unit Under Test (UUT) 3

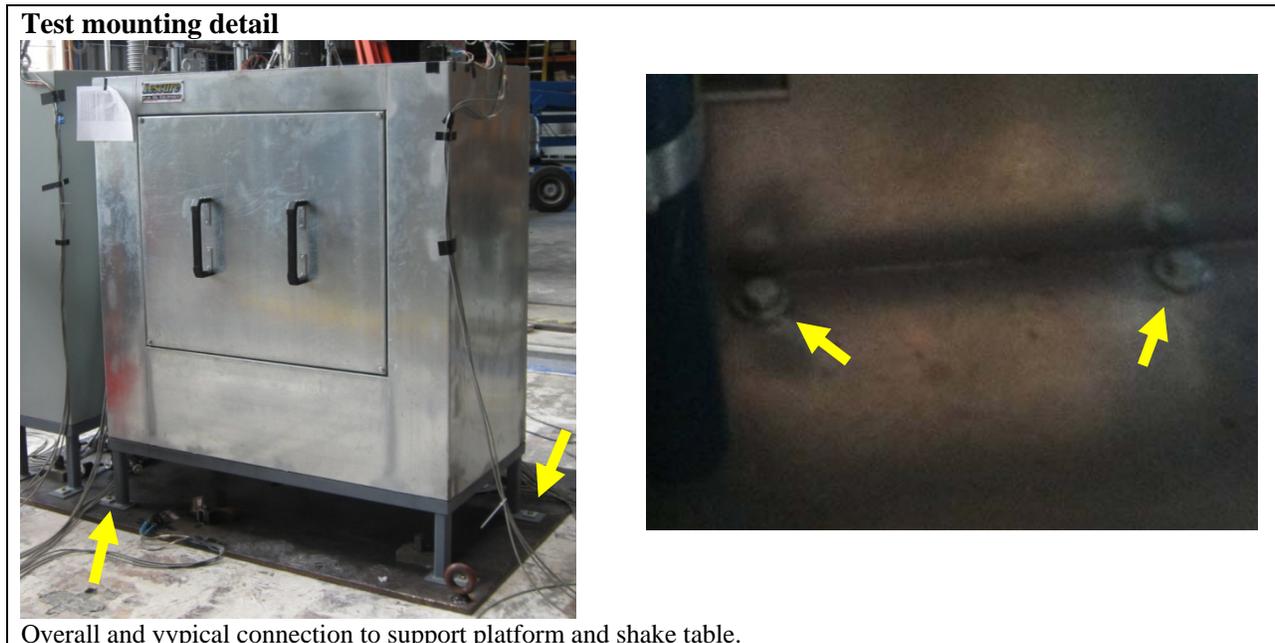
Product Description	
Manufacturer:	Lescure Fuel Oil Equipment, LLC.
Product Name:	Filtration Pump Cabinet (FPC)
Model Number:	248204-FPC001

Construction
BOX607130: 60"x71"x30" GA12 Galv Enclosure (manufacturer Lescure Company, Inc.)

Product Subcomponents (see attached Cut Sheet and Bill of Materials)	
Square D	Manual Switch
Haight	Universal Relief Valve Pump
Leeson	Electric Pump Motor
RCI Technologies	Fuel Purifier
AZCO	N/C Solenoid Valve
Franklyn Fueling	Leak Sensor

Properties of UUT						
Weight and dimensions				Lowest natural frequencies		
Weigh, lbs	Width, in.	Depth, in.	Height, in.	X-	Y-	Z-
1,085	60	30	71	14.3	13.1	10.1

Highest Passed Seismic Certification Level for UUT										
Building Code	Test criteria	S_{DS} g	z/h	I_p	Horizontal			Vertical		
					A_{FLX} g	A_{RIG} g	A_{FLX} / A_{RIG}	A_{FLX} g	A_{RIG} g	A_{FLX} / A_{RIG}
IBC 2009/ CBC 2010	ICC-ES AC 156	2.50	1.0	1.5	4.00	3.00	1.33	1.67	0.67	2.5



UUT cabinet was bolted to its support platform using ten (10) ½-in A307 bolts. The platform was bolted to the shake table with four (4) with ½-in A307 bolts, one at each leg.