



**APPLICATION FOR OSHPD SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)**

OFFICE USE ONLY

APPLICATION #: OSP - 0574 - 10

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Power Technique North America LLC (Beacon Medaes)

Manufacturer's Technical Representative: Tim Conner, Engineering Manager, Medical Gas Products

Mailing Address: 1059 Paragon Way, Rock Hill, SC 29730

Telephone: (803) 817-5600

Email: tim.conner@beaconmedaes.com

Product Information

Product Name: MV Filter Modules

Product Type: Mechanical Equipment

Product Model Number: See attached

(List all unique product identification numbers and/or part numbers)

General Description: Filter packages consisting of bacterial filters, drain flasks, butterfly valves, and manifolds sitting on manufacturer supplied frames

Mounting Description: Units are rigid base mounted

Applicant Information

Applicant Company Name: The VMC Group


Contact Person: John Guiliano

Mailing Address: 113 Main Street, Bloomingdale, NJ 07403

Telephone: (973) 838-1780

Email: john.giuliano@thvmcgroup.com

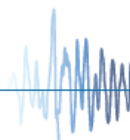
I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.

Signature of Applicant: 

Date: 8/16/18

Title: President

Company Name: The VMC Group





STATE OF CALIFORNIA HEALTH PLANNING AND DEVELOPMENT ACTIVITIES DEVELOPMENT DIVISION

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY
OSH-FD-759 (REV 12/16/15)

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

Company Name: The VMC Group

Name: Kenneth Tarlow California License Number: SE-2851

Mailing Address: 113 Main Street, Bloomingdale, NJ 07403

Telephone: (973) 838-1780 Email: ken.tarlow@thevmcgroup.com

Supports and Attachments Preapproval

- Supports and attachments are preapproved under OPM-
(Separate application for OSHPD Preapproval of Manufacturer's Certification (OPM) of Supports and attachments is required)
- Supports and attachments are not preapproved

Certification Method

- Testing in accordance with: ICC-ES AC156 OSP 0574-10
- Other (Please Specify): _____
BY: Ali Sumer
DATE: 02/21/2019

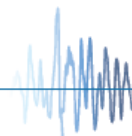
Testing Laboratory

Company Name: Dynamic Certification Labs

Contact Name: Josh Sailer, Laboratory Manager

Mailing Address: 1315 Greg Street, Suite 109, Sparks, NV 89431

Telephone: (775) 358-5085 Email: josh@shaketest.com





OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT ACTIVITIES DEVELOPMENT DIVISION

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY
OSH-FD-759 (REV 12/16/15)

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Seismic Parameters

Design in accordance with ASCE 7-10 Chapter 13: Yes No

Design Basis of Equipment or Components (F_p/W_p) = 3.00

S_{DS} (Design spectral response acceleration at short period, g) = 2.50 g

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

R_p (Equipment or component response modification factor) = 1.5

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height factor ratio) = 1.0

Equipment or Component Natural Frequencies (Hz) = See attachment

Overall dimensions and weight (or range thereof) = See attachment

Equipment or Components @ grade designed in accordance with ASCE 7-10 Chapter 15: Yes No

Design Basis of Equipment or Components (VW) = _____

S_{DS} (Design spectral response acceleration at short period, g) = _____

S_{D1} (Design spectral response acceleration at 1 second period, g) = _____

R (Response modification coefficient) = _____

Ω_0 (System overstrength factor) = _____

C_d (Deflection amplification factor) = _____

I_p (Importance factor) = 1.5

Height to Center of Gravity above base = _____

Equipment or Component Natural Frequencies (Hz) = _____

Overall dimensions and weight (or range thereof) = _____

Tank(s) designed in accordance with ASME BPVC, 2015: Yes No

List of Attachments Supporting Special Seismic Certification

Test Report(s) Drawings Calculations Manufacturer's Catalog

Other(s) (Please Specify): _____

OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2022

Signature: 

Date: February 20, 2019

Print Name: Ali Sumer

Title: DSE

Special Seismic Certification Valid Up to : S_{DS} (g) = 2.5 z/h = 1.0

Condition of Approval (if applicable): _____

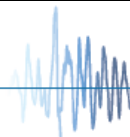


Table 1 - Certified Components



Manufacturer: Power Technique North America LLC (Beacon Medaes)

Product Line: MV Filter Modules

Product Construction: Powder-coated carbon steel frame

Mounting Description: Rigid base mount

Model Number	Description	Dimensions (inches)			Weight (lb)	Sds (g)	z/h	Unit
		Depth	Width	Height				
MV80-2	VACUUM FILTER ASM 45 SCFM 2" CONN	31	34	63	220	2.5	1.0	UUT1
MV160-2	VACUUM FILTER ASM 90 SCFM 3" CONN	31	34	65	273			Interpolated
MV160-3	VACUUM FILTER ASM 180 SCFM 3" CONN	45	34	65	402			Interpolated
MV160-4	VACUUM FILTER ASM 270 SCFM 4" CONN	59	34	66	536			Interpolated
MV160-5	VACUUM FILTER ASM 360 SCFM 4" CONN	73	34	66	670			Interpolated
MV160-6	VACUUM FILTER ASM 450 SCFM 4" CONN	87	34	66	787			Interpolated
MV160-7	VACUUM FILTER ASM 540 SCFM 4" CONN	101	34	66	957			Interpolated
MV160-8	VACUUM FILTER ASM 630 SCFM 4" CONN	115	34	66	1,110			UUT2

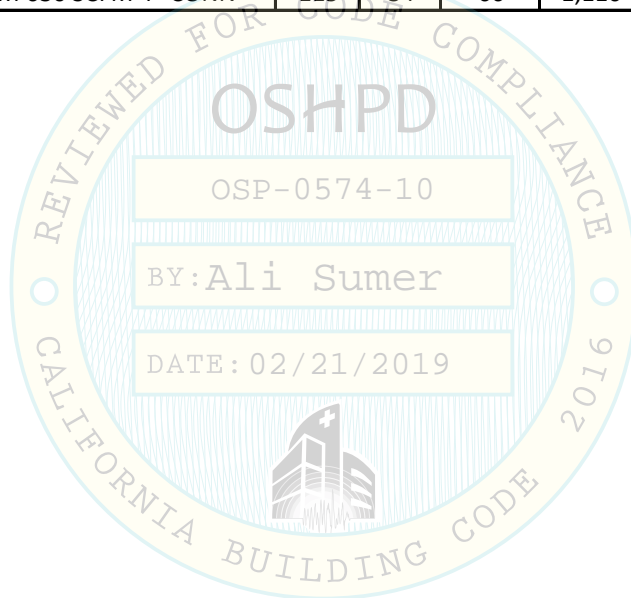
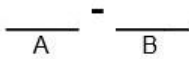


Table 2 - Nomenclature Chart

Manufacturer: Power Technique North America LLC (Beacon Medaes)

Product Line: MV Filter Modules



Variable	Definition	Allowable Value	Definition
A	Filter Size	MV80	Medical Vacuum (MV) Size 80 Filter
		MV160	Medical Vacuum (MV) Size 160 Filter
B	Filter Quantity	2	2 filter assembly
		3	3 filter assembly
		4	4 filter assembly
		5	5 filter assembly
		6	6 filter assembly
		7	7 filter assembly
		9	8 filter assembly

Example System: Medical Vacuum Filter Module, MV80, 2 filter assembly

Example Model Number: MV80-2

Example Description in BPCS:

Line 1: MV80-2 Vacuum Filter ASM

Line 2: 45 SCFM 2" Conn

Example System: Medical Vacuum Filter Module, MV160, 2 filter assembly

Example Model Number: MV160-2

Example Description in BPCS:

Line 1: MV160-2 Vacuum Filter ASM

Line 2: 90 SCFM 3" Conn

Example System: Medical Vacuum Filter Module, MV160, 5 filter assembly

Example Model Number: MV160-5

Example Description in BPCS:

Line 1: MV160-5 Vacuum Filter ASM

Line 2: 360 SCFM 4" Conn

Table 3 - Certified Subcomponents



Manufacturer: Power Technique North America LLC (Beacon Medaes)

Product Line: MV Filter Modules

Product Construction: Powder-coated carbon steel frame

Mounting Description: Rigid base mount

Subcomponent	Model Number	Manufacturer	Notes	Approximate Weight	Unit
Bacterial filter	8102297952	Walker Filtration Ltd.	MV80	20.7	UUT1
	8102297978	Walker Filtration Ltd.	MV160	30.7	UUT2
Drain flask	4107655895	Walker Filtration Ltd.	100ML	0.5	UUT1/UUT2
Frame	4107655786	Alloy Fabricators	Welded, single filter	43.1	UUT1/UUT2
Manifold	4107655746	Marson International LLC	2X2"-2"	10.8	UUT1
	4107655747	Marson International LLC	2X3"-3"	16.4	Interpolated
	4107655854	Marson International LLC	2X3"-4"	18.8	Interpolated
	4107655748	Marson International LLC	3X3"-3"	23.0	Interpolated
	4107655852	Marson International LLC	3X3"-4"	26.2	Interpolated
	4107655750	Marson International LLC	4X3"-4"	33.5	UUT2
	4107655751	Marson International LLC	5X3"-4"	40.9	Extrapolated
Split manifold	4107655855	Marson International LLC	4X3"-4"	39.4	UUT2 ¹
90 deg elbow	4107655737	Marson International LLC	2" FLG	4.8	UUT1
	4107655739	Marson International LLC	3" FLG	6.5	UUT2
Butterfly valve	4107655784	Hajoca Corp.	2" threaded	8.8	UUT1
	4107655785	Hajoca Corp.	3" threaded	12.6	UUT2

Note:

1. Manufacturing process is ISO 9001 certified.

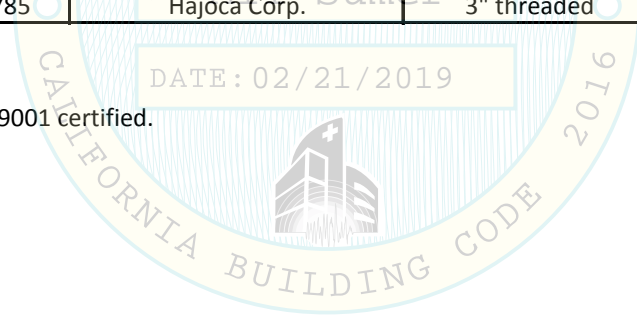


Table 4 - Tested Components

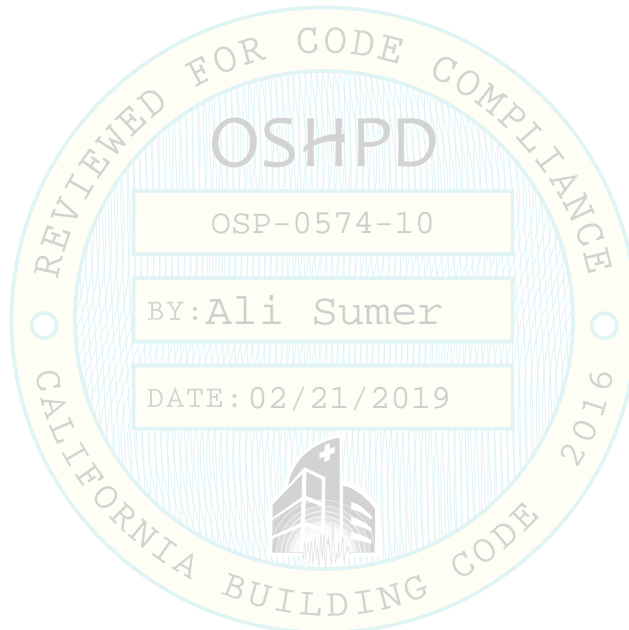
Manufacturer: Power Technique North America LLC (Beacon Medaes)


Product Line: MV Filter Modules

Product Construction: Powder-coated carbon steel frame

Mounting Description: Rigid base mount

Model Number	Description	Dimensions (inches)			Weight (lb)	Sds (g)	z/h	Unit
		Depth	Width	Height				
MV80-2	VACUUM FILTER ASM 45 SCFM 2" CONN	31	34	63	220	2.5	1.0	UUT1
MV160-8	VACUUM FILTER ASM 630 SCFM 4" CONN	115	34	66	1,110			UUT2



UUT1	
UNIT UNDER TEST (UUT) Summary Sheet	

Manufacturer: Power Technique North America LLC (Beacon Medaes)

Product Line: MV Filter Modules

Model Number: MV80-2

Product Construction Summary: Powder-coated carbon steel frame

Options / Component Summary: Bacterial Filter, Drain Flask, Butterfly Valve, 2" Manifold

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component and attachment system and force-resisting systems was maintained.

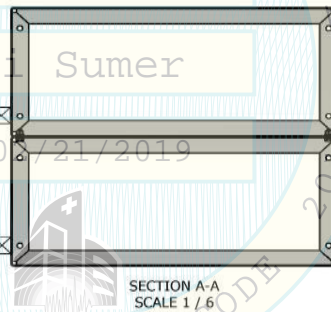
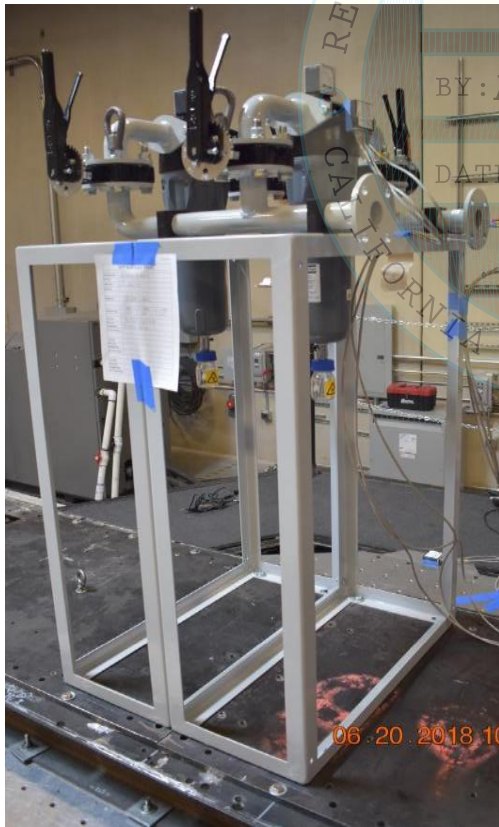
UUT Properties

Operating Weight (lb)	Dimensions (in)				Lowest Natural Frequency (Hz)		
		Length	Width	Height	Front-Back	Side-Side	Vertical
220	UUT1	31.0	34.0	63.0	10.5	10.5	>33.3

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2016	ICC-ES AC156	2.50	1.0	1.5	4.00	3.00	1.67	0.67
		2.50	0.0					

Unit Mounting Description:



RECOMMENDED ANCHOR BOLT LOCATION SHOWN WITH 'X' (4 PLACES) 12MM X 1.50

UUT 1 was rigid base mounted to the DCL interface fixture with (4) 1/2" diameter, Grade 5, bolts
Bolts were spaced lengthwise at 14" and widthwise at 30.25" on center

UUT2



UNIT UNDER TEST (UUT) Summary Sheet

Manufacturer: Power Technique North America LLC (Beacon Medaes)

Product Line: MV Filter Modules

Model Number: MV160-8

Product Construction Summary: Powder-coated carbon steel frame

Options / Component Summary: Bacterial Filter, Drain Flask, Butterfly Valve, 4" Manifold

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component and attachment system and force-resisting systems was maintained.

UUT Properties

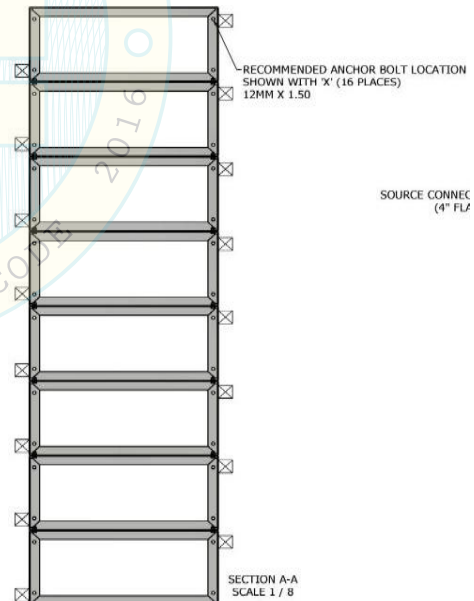
Operating Weight (lb)	Dimensions (in)				Lowest Natural Frequency (Hz)		
		Length	Width	Height	Front-Back	Side-Side	Vertical
1,110	UUT2	115.0	34.0	66.0	9.0	10.0	>33.3

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2016	ICC-ES AC156	2.50	1.0	1.5	4.00	3.00	1.67	0.67
		2.50	0.0					

Unit Mounting Description:

OSP-0574-10



UUT 2 was rigid base mounted to the DCL interface fixture with (16) 1/2" diameter, Grade 5, bolts
Bolts were spaced lengthwise at 14" and widthwise at 30.25" on center