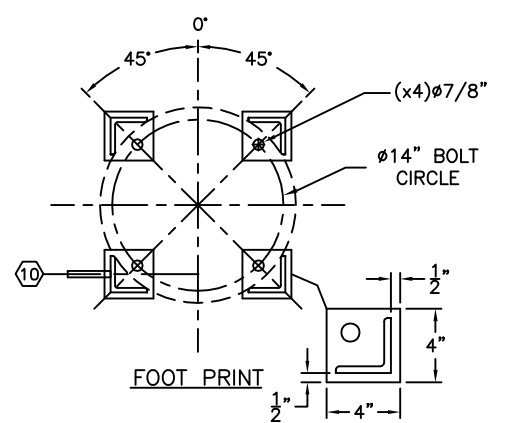
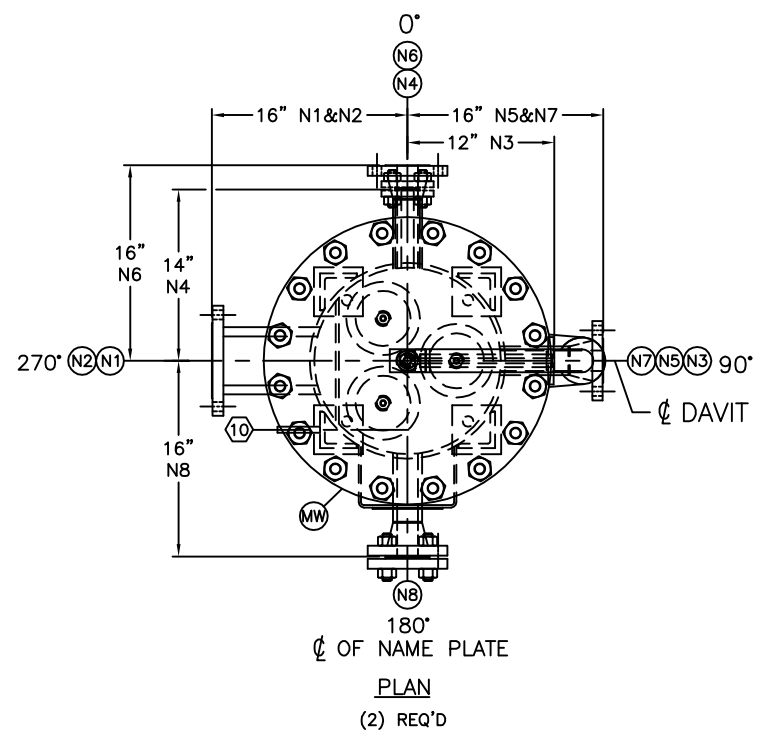


ELEVATION
16" O.D. SHELL
FOR TRUE ORIENTATION
SEE PLAN VIEW



ALLOWABLE NOZZLE LOADS

MARK	Pr lbf	Mc ft-lbs	Vc lbf	MI ft-lbs	VI lbf	Mt ft-lbs
N1-2	1124	885	1124	1180	1124	1475
N5-8	562	221	562	295	562	369

DESIGN CONDITIONS

INTERNAL PRESSURE:	80 PSIG
EXTERNAL PRESSURE:	14.7 PSIG
M.A.W.P.:	212 PSIG @ 350°F
M.A.E.W.P.:	15 PSIG
M.D.M.T.:	-20°F @ 350 PSIG
TEMPERATURE:	350°F
INT. CORROSION ALLOW.:	0.125"
P.W.H.T.:	NONE
X-RAY:	RT-2
D.P.I. OR M.P.I.:	PER CODE
IMPACTS:	EXEMPT PER UG-20(f)
SHELL J.E.:	100%
HEAD J.E.:	85%
FLANGE RATING:	ASME 150#
FABRICATED WEIGHT:	1452 LBS
TEST PRESSURE:	*276 PSIG/HOLD 2HR MIN.
*MINIMUM OF TWO GAUGES REQ. FOR HYRO. TEST	
CODE:	ASME VIII DIV. 1
STAMPED:	YES (U)
N.B. REG.:	YES
WIND CODE:	ASCE 7-05
SEISMIC CODE:	ASCE 7-05
TYPE OF CONSTRUCTION:	WELDED
SHELL MATERIAL:	SA-106-B
SUPPORT MATERIAL:	SA-36
FORGING MATERIAL:	SA-105
NOZZLE MATERIAL:	SA-106-B
ATTACHMENT MATERIAL:	SA-36

OPERATING CONDITIONS

WEIGHT FULL OF WATER:	1,509 LBS
OPERATING WEIGHT:	1498 LBS / F-2101
OPERATING WEIGHT:	1486 LBS / F-2111
OPERATING PRESSURE:	50 PSIG
OPERATING TEMPERATURE:	120°F
FIREPROOFING (IN)(OUT):	*NONE
*TYPE (IN)(OUT) THICKNESS N.A.	
INSULATION:	NONE
PAINTING:	MSP-038 SYS. 1
FINISH COLOR:	FENSTER GRAY RAL 7040
PAINT STENCIL/TAGGING:	PER MSP-001 (7.8)

INSPECTION
MYRIAD FABRICATION, LLC., / ONECIS / VENTECH

NAMEPLATE F-2101 (WELD TO BRACKET)

390	
MYRIAD	
M.A.W.P.	212 PSI @ 350 °F
M.A.E.W.P.	15 PSI @ 350 °F
M.D.M.T.	-20 °F @ 212 PSI
SERIAL No.	140505-1
YEAR BUILT	2015 C.A. 0.125"
TEST PSI	276
CUSTOMER: VENTECH / 4777010-14-03047 TAG NO. F-2101	
EGGELHOF / F50166/621965	
Myriad Fabrication, LLC. 5722 Edward Drive, Houston, TX 77032	

NAMEPLATE F-2111 (WELD TO BRACKET)

397	
MYRIAD	
M.A.W.P.	212 PSI @ 350 °F
M.A.E.W.P.	15 PSI @ 350 °F
M.D.M.T.	-20 °F @ 212 PSI
SERIAL No.	140505-2
YEAR BUILT	2015 C.A. 0.125"
TEST PSI	276
CUSTOMER: VENTECH / 4777010-14-03047 TAG NO. F-2111	
EGGELHOF / F50166/621965	
Myriad Fabrication, LLC. 5722 Edward Drive, Houston, TX 77032	

MARK	QTY	SERVICE	SIZE/RATING
MW	1	ACCESS - MW	16" 150# RFWN W/ BLIND
N8	1	SPARE	2" 150# RFWN W/ BLIND
N7	1	D.P. - HIGH	2" 150# RFWN
N6	1	VENT / P.S.V.	2" 150# RFWN
N5	1	D.P. - LOW	2" 150# RFWN
N4	1	SPARE	1" 150# RFLWN W/ BLIND
N3	1	DRAIN	3/4" 150# RFSW
N2	1	OUTLET	4" 150# RFLWN
N1	1	INLET	4" 150# RFLWN

GENERAL NOTES

- DIMENSIONAL TOLERANCES ARE PER INDUSTRY STANDARD AND TO COMPLY WITH VENTECH MSD-001 REV. 1.
- SEE DRAWING 140505-A2 FOR BILL OF MATERIALS.
- ALL FLANGE BOLT HOLES TO STRADDLE VESSEL NATURAL CENTER LINE. (2 HOLE)

Rev. No.	Revision Description	Drawn	Date	Check	Date
2	FINAL CERTIFIED	JM	03.05.15	MN	03.05.15
1	CUSTOMER COMMENTS/FAB. RELEASE	JM	12.12.14	MN	12.17.14
0	ISSUED FOR APPROVAL	JM	11.17.14	MN	11.17.14

THE INFORMATION PROVIDED HEREIN IS PROPRIETARY AND MUST NOT BE COPIED, DUPLICATED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESSED WRITTEN CONSENT OF MYRIAD FABRICATION LLC.



EGGELHOF INC.
4801 Gulf Freeway, Houston, TX 77023
Tel: (713) 923-2101 Fax: (713) 923-6521

Customer:	VENTECH / PO# 4777010-14-03047	Project Name	250 BPSD GTL Plant Project
Equip. Name	DIESEL Product Filter / NAPHTHA Product Filter	Model No.:	F-150-4-16 (3)
Tag Number:	F-2101 / F-2111	Quantity:	Two
Dwg. Type	General Arrangement	Scale:	NTS
Drawing No.:	140505-A1		

ITEM	NAME OR MARK	QTY	SIZE & DESCRIPTION	MATERIAL SPECIFICATIONS	REMARKS	MTR'S REQ'D	UCS-79 & UG-81	
1	ACCESS BLIND FLANGE - MW	△	1	16" 150# RF BLIND ANSI B16.5	SA-105N	----	YES	----
2	ACCESS GASKET - MW	△	1	16" 150# GASKET, 1/8" THK FLEXATALLIC STYLE CG	SS304/GRAPHITE	----	----	----
3	ACCESS STUD - MW		16	1" 8UN x 6" LG., B7 STUD, FLUROKOTE #1	SA-193-B7	----	----	----
4	ACCESS NUT/WASHER - MW	△	32	1" 8UN 2H HEAVY HEX NUT & WASHER, FLUROKOTE #1	SA-194-2H	----	----	----
5	DAVIT ARM ASSEMBLY - MW		1	16" 150# STD DAVIT ARM ASSEMBLY W/ 3/4" GALVANIZED EYE BOLT	SA-36	----	----	----
6	SHELL FLANGE		1	16" 150# RFWN SCH. STD (0.375") ANSI B16.5	SA-105	----	YES	----
7	SHELL		1	16" PIPE SCH. STD (0.375") SMLS B36.1	SA-106-C	----	YES	----
8	BOTTOM HEAD		1	16" O.D. 2:1 SEMI ELLIP HEAD 0.375" NOM. (0.313" MIN.)	SA-516-70N	----	YES	----
9	LEG		4	3" x 3" x 3/8" EQUAL ANGLE	SA-36	----	YES	----
10	FOOT		4	4" x 4" x 1/2" THK. W/ 7/8" DIA. HOLE	SA-36	----	YES	----
11	GROUND LUG		1	4 1/2" x 2" x 1/2" THK. W/ 1/2-13 UNC TAPPED HOLE	SA-36	PER VENTECH STD MSD-009 REV.2	YES	----
12	FLANGE N1-2	△	2	4" 150# RFLWN 4" BORE B16.5	SA-105	----	YES	----
13	DELETED	△	-	----	----	----	----	----
14	NOZZLE N1 BAFFLE		1	8" x 1/4" THK. PLATE	SA-240-304/304L	----	YES	----
15	FLANGE N3		1	3/4" 150# RFSW SCH. XXS B16.5	SA-105	----	YES	----
16	NOZZLE N3		1	3/4" PIPE SCH. XXS (0.308") SMLS B36.1	SA-106-B	----	YES	----
17	ELBOW N3		1	3/4" 6000# SW 90 B6.11	SA-105	----	YES	----
18	VORTEX BREAKER N3		1	4" x 2" W/ 3/4" RAD. MOUSE HOLE	SA-36	----	YES	----
19	FLANGE N4		1	1" 150# RFLWN B16.5	SA-105	----	YES	----
20	FLANGE N5-7		4	2" 150# RFWN SCH. 160 (0.344") B16.5	SA-105	----	YES	----
21	NOZZLE N5-7		4	2" PIPE SCH. 160 (0.344") SMLS B36.1	SA-106-B	----	YES	----
22	NAMEPLATE BRACKET		1	'U' TYPE BRACKET 8" x 6 1/2" x 4" PROJ.	SA-36	PER VENTECH STD MSD-029 REV. 1	YES	----
23	NAMEPLATE		1	MANUFACTURERS STD - SEE DWG NO. 140505-A1 FOR DETAILS	SS304	----	----	----
24	ELEMENT		3	6" DIA x 36" LG, PT# PLH-736-1FPB	MFG. STD.	----	----	----
25	ELEMENT SUPPORT ASSEMBLY		1	3/8" THK. TUBE SHEET WITH STD FILTER RISER	SS304/304L	----	----	----
26	BLIND - N4	△	1	1" 150# RF BLIND ANSI B16.5	SA-105N	----	YES	----
27	GASKET - N4	△	1	1" 150# GASKET, 1/8" THK FLEXATALLIC STYLE CG	SS304/GRAPHITE	----	----	----
28	STUD - N4	△	4	1/2" UNC x 3 1/8" LG., B7 STUD, FLUROKOTE #1	SA-193-B7	----	----	----
29	NUT/WASHER - N4	△	8	1/2" UNC 2H HEAVY HEX NUT & WASHER, FLUROKOTE #1	SA-194-2H	----	----	----
30	BLIND - N8	△	1	1" 150# RF BLIND ANSI B16.5	SA-105N	----	YES	----
31	GASKET - N8	△	1	1" 150# GASKET, 1/8" THK FLEXATALLIC STYLE CG	SS304/GRAPHITE	----	----	----
32	STUD - N8	△	4	5/8" UNC x 3 5/8" LG., B7 STUD, FLUROKOTE #1	SA-193-B7	----	----	----
32	NUT/WASHER - N8	△	8	5/8" UNC 2H HEAVY HEX NUT & WASHER, FLUROKOTE #1	SA-194-2H	----	----	----

* MATERIAL QUANTITIES SHOWN ARE FOR ONE (1) ASSEMBLY, (2) ASSEMBLIES REQUIRED.

NOTES:

- VENDOR MUST BE ADVISED THAT MILL MARKINGS MUST BE TRANSFERRED AS REQUIRED BY SECTION II OF THE CODE. THESE MARKINGS MUST BE VERIFIED UPON RECEIPT.
- MATERIALS ARE TO BE FROM THE FOLLOWING COUNTRIES: AUSTRIA, BELGIUM, CANADA, DENMARK, FINLAND, FRANCE, GERMANY, GREECE, IRELAND, ISRAEL, ITALY, JAPAN, LUXEMBURG, MEXICO, NETHERLANDS, NORWAY, PORTUGAL, SOUTH AFRICA, SOUTH KOREA, SPAIN, SWEDEN, SWITZERLAND, TAIWAN, TURKEY, UNITED KINGDOM AND USA.

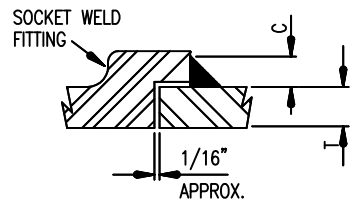
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EGGELHOF INC.

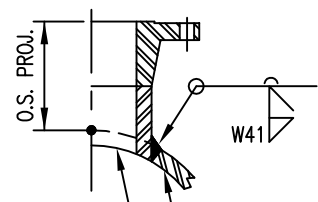
4801 Gulf Freeway, Houston, TX 77023
Tel: (713) 923-2101 Fax: (713) 923-6521

2	FINAL CERTIFIED	JM	03.05.15	MN	03.05.15	Customer:	VENTECH / PO# 4777010-14-03047	Project Name	250 BPSD GTL Plant Project
1	CUSTOMER COMMENTS/FAB. RELEASE	JM	12.12.14	MN	12.17.14	Equip. Name	DIESEL Product Filter / NAPHTHA Product Filter	Model No.:	F-150-4-16 (3)
0	ISSUED FOR APPROVAL	JM	11.17.14	MN	11.17.14	Tag Number:	F-2101 / F-2111	Quantity:	Two Scale: NTS
Rev. No.	Revision Description	Drawn	Date	Check	Date	Dwg. Type	Bill of Materials	Drawing No.:	140505-A2

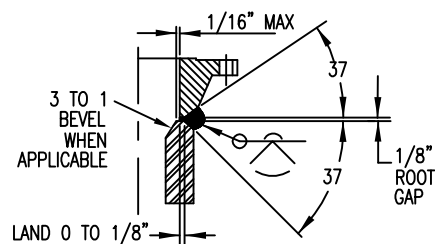


C = LESSOR OF 1.4T HUB THICKNESS
 MINIMUM OF TWO PASSES SHOWING
 A4 - SOCKET WELD DETAILS

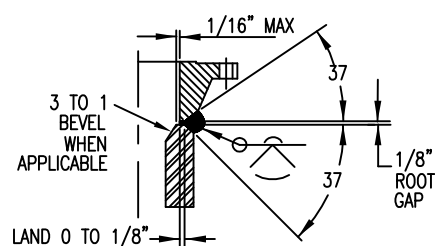
WPS 1-3-1
 A4 - SOCKET WELDS



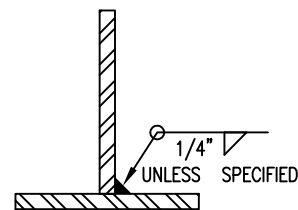
CONTOUR TO SHELL I.D.
 INSIDE EDGES OF NOZZLE TO BE GROUND TO 1/8" RAD.
 WPS 1-57-1
 A3 - NOZZLE/SHELL-HEAD



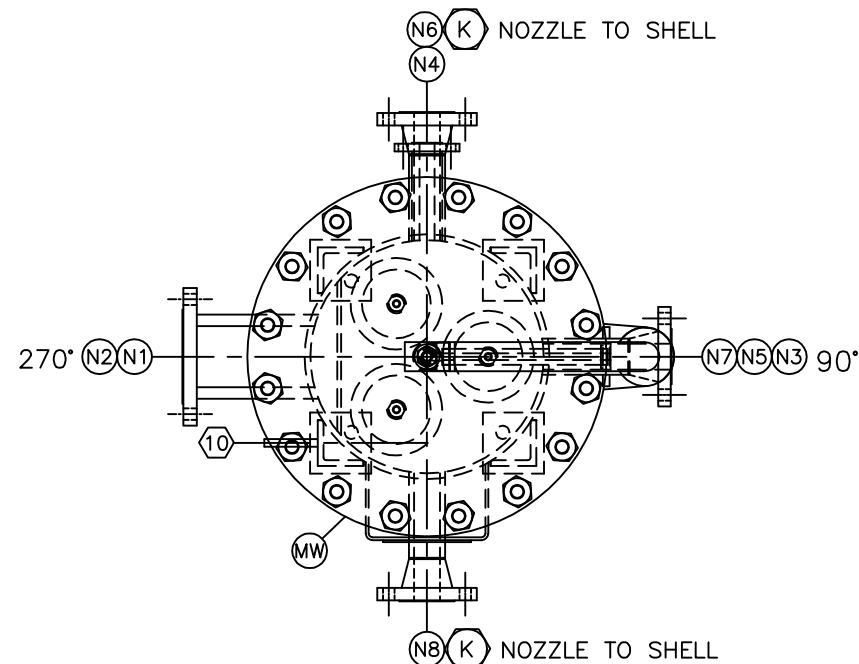
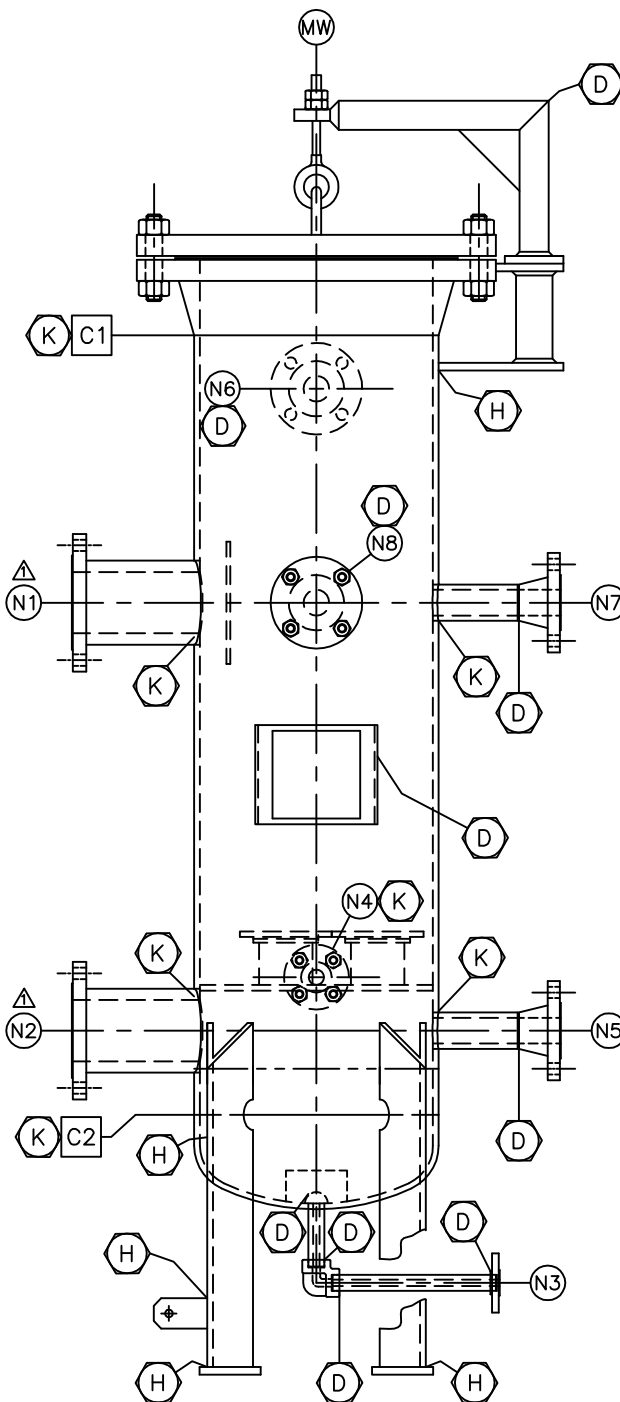
WPS 1-58-1 => 10" DIA.
 A2 - TYPE 1 WELDS



WPS 1-57-1 < 10" DIA.
 A1 - TYPE 1 WELDS



WPS 1-57-1
 A5 - ATTACHMENT WELDS



*** = WELDERS STAMP
 ** = RT IDENTIFICATION

MARK	QTY	SERVICE	SIZE/RATING	WELD DETAIL	WELD SIZE
MW	1	ACCESS - MW	16" 150# RFWN W/ BLIND	A1	-
N8	1	SPARE	2" 150# RFWN W/ BLIND	A2, A3	1/4"
N7	1	D.P. - HIGH	2" 150# RFWN	A2, A3	1/4"
N6	1	VENT / P.S.V.	2" 150# RFWN	A2, A3	1/4"
N5	1	D.P. - LOW	2" 150# RFWN	A2, A3	1/4"
N4	1	SPARE	1" 150# RFLWN W/ BLIND	A3	1/4"
N3	1	DRAIN - LOWER	3/4" 150# RFSW	A4, A3	1/4"
N2	1	OUTLET	4" 150# RFLWN	A3	1/4"
N1	1	INLET	4" 150# RFLWN	A3	1/4"
				W41	W42
				W43	
NOZZLE SCHEDULE					

Rev. No.	Revision Description	Drawn	Date	Check	Date
2	FINAL CERTIFIED	JM	03.05.15	MN	03.05.15
1	CUSTOMER COMMENTS/FAB. RELEASE	JM	12.12.14	MN	12.17.14
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Myriad
Fabrication, LLC

EGGELHOF INC.

4801 Gulf Freeway, Houston, TX 77023
 Tel: (713) 923-2101 Fax: (713) 923-6521

Customer:	VENTECH / PO# 4777010-14-03047	Project Name:	250 BPSD GTL Plant Project
Equip. Name:	DIESEL Product Filter / NAPHTHA Product Filter	Model No.:	F-150-4-16 (3)
Tag Number:	F-2101 / F-2111	Quantity:	Two
Dwg. Type:	WELD MAP & NDE DETAILS	Scale:	NTS
Drawing No.:	140505-A3		