



TESTING AND RATING OF TWO GREASE INTERCEPTORS,
BIG-750 / FE750, CONNECTED IN SERIES,
AS PER ASME A112.14.3-2018 (TYPE A)

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Report ID: TR-DZ20190206-01

Test Summary:

PROJECT NUMBER: P0118-032
DEVICE MANUFACTURER: MIFAB
TEST UNITS: BIG-750 / FE750
TEST PROCEDURE: ASME A112.14.3-2018 (TYPE A)
TEST DATE: January 28 - 29, 2019

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Good Harbour Laboratories

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2.5. Testing Procedure

Testing was completed in accordance with the ASME A112.14.3-2018 (Type A) and PDI-G 101 (rev. 2017) protocols, with some notable exceptions:

- There were two units connected in series;
- Solids were loaded into the first interceptor, as described in CSA B481.2; and
- Testing occurred continuously over several normal work days. During stand-by periods, efforts were made to maintain the water temperature within the grease interceptors to prevent the lard from solidifying.

The flow control device at the sink was fitted with an orifice plate, with an opening diameter of 2.125 inches, to achieve the target test flow rate of 75 GPM.

The pH of the test water ranged between 7.3 and 7.7 which is within the specification of 6.0 - 8.0.

3. Results

3.1 Flow Rate Verification

The flow rate was verified and was acceptable. The detailed results are presented in Appendix 1.

3.2 Grease Interceptor Rating

The BIG-750 / FE750 grease interceptor testing continued until run 80, when the breakdown point was achieved due to the incremental run removal efficiency dropping below 75%. The cumulative removal efficiency remained above 90%.

The ASME A112.14.3 rating criteria are presented in Table 3, the performance results are presented in Appendix 2.

Table 3 – ASME A112.14.3 Test Criteria

Criterion	Observation*	Result
Have an average efficiency of (80) percent or more	98.5 %	Pass
Have an incremental efficiency of (80) percent or more	99.5 %	Pass
Have retained not less than 150 lbs of lard	179.14 lbs	Pass

*Determined at Run #12 as per Section 3.4.7.2 Determination of Efficiency at Minimum Grease Capacity

4. Conclusions

Two MIFAB BIG-750 / FE750 75 gpm grease interceptors, connected in series, meet the certification requirements of the 75 gpm rating as defined in the ASME A112.14.3-2018 (Type A) and PDI-G 101 (rev. 2017) protocols, with a total grease capacity of 1320.95 lbs at the test breakdown point.

		INCREMENTAL							ACCUMULATED				
		(drop-skin) / drop x 100 = efficiency							(drop-skin) / drop x 100 = efficiency				
No.	Test	Clear	Second	Rate: GPM	Lb. Added	Lb. Skimmed	Lb. Retained	Efficiency	Lb. Added	Lb. Skimmed	Lb. Retained	Efficiency	
72	2	1	113.22	75.5	15.00	0.21	14.79	98.6	1080.00	9.31	1070.69	99.1	
73	1	2	111.04	77.6	15.00	0.22	14.78	98.5	1095.00	9.53	1085.47	99.1	
74	2	1	113.18	75.5	15.00	0.29	14.71	98.1	1110.00	9.82	1100.18	99.1	
75	1	2	112.28	76.1	15.00	0.24	14.76	98.4	1125.00	10.06	1114.94	99.1	
76	2	1	113.22	75.5	15.00	0.24	14.76	98.4	1140.00	10.30	1129.70	99.1	
77	1	2	110.22	77.6	15.00	0.24	14.76	98.4	1155.00	10.54	1144.46	99.1	
78	2	1	113.40	75.4	15.00	0.24	14.76	98.4	1170.00	10.77	1159.23	99.1	
79	1	2	112.07	76.3	15.00	0.23	14.77	98.5	1185.00	11.00	1174.00	99.1	
80	2	1	113.91	76.1	15.00	0.27	14.73	98.2	1200.00	11.27	1188.73	99.1	
81	2	2	112.03	76.3	15.00	0.24	14.76	98.4	1215.00	11.52	1203.48	99.1	
82	1	2	112.52	75.9	15.00	0.30	14.70	98.0	1230.00	11.82	1218.18	99.0	
83	1	2	109.03	78.4	15.00	0.29	14.71	98.1	1245.00	12.11	1232.89	99.0	
84	2	1	113.54	75.3	15.00	0.33	14.67	97.8	1260.00	12.43	1247.57	99.0	
85	1	2	111.83	76.4	15.00	0.30	14.70	98.0	1275.00	12.73	1262.27	99.0	
86	2	1	113.89	75.2	15.00	0.31	14.69	97.9	1290.00	13.05	1276.95	99.0	
87	1	2	111.89	76.6	15.00	0.32	14.68	97.8	1305.00	13.37	1291.63	99.0	
88	2	1	112.86	75.7	15.00	0.32	14.68	97.8	1320.00	13.70	1306.30	99.0	
89	1	2	111.54	76.7	15.00	0.36	14.64	97.6	1335.00	14.05	1320.95	98.9	

BIG-750(75 gpm) PERFORMANCE REQUIREMENT RATING

NOTE:

SAMPLING PORT SHALL BE ACCESSIBLE AT ALL TIMES WITHOUT HAVING TO REMOVE MERCHANDISE AND WITHOUT STANDING WATER ON GROUND SURFACE WITH A MINIMUM 36 INCHES HORIZONTAL CLEARANCE FROM ANY WALL, FIXED EQUIPMENT OR STORED MATERIALS AND A MINIMUM 48 INCHES VERTICAL CLEARANCE FROM ANY FIXED EQUIPMENT OR STORED MATERIALS. GREASE INTERCEPTOR SHALL BE ACCESSIBLE AT ALL TIMES SO AS TO ALLOW FOR MAINTENANCE AND CLEANING WITHOUT IMPEDIMENTS.

NOTE:

- ALL GREASE TRAPS AND SOLID INTERCEPTORS CAN BE CLEANED AT ANY TIME
- AREA FOR INTERCEPTORS ONLY
- NO CARS CAN PARK ON TOP OF THEM

MIFAB INTERCEPTORS WILL HAVE ACCESS FOR CLEANING ALL THE TANK FROM 72" ABOVE.

NOTE:

ADJUST PIPE TO MEET EXISTING ELEVATION OF MAIN SANITARY LINE.

FOG 2.0 RER-DERM
Hydromechanical FOG Control Device (H-FCD)

Required Information	Tank No.1	Tank No.2	Total Tanks (2)
Capacity (gpm)	75	75	
FOG Load Capacity (lbs) at 99% Efficiency	1306 LBS		1306 LBS
Manufacturer	Mifab	Mifab	Mifab
Model No.	BIG-750	BIG-750	(2) BIG-750
3rd Party Certifier (i.e., PDI, CSA, ASME)	ASME	ASME	ASME
Interceptor Monitoring Alarm Model No.	N/A	N/A	N/A
Interceptor Monitoring Device Model No.	N/A	N/A	N/A
Solid Separator Make and Model	Mifab BIG-750-S		

FOG 2.0 RER-DERM
FOG Control Device (FCD)
Installation Inspection

Approval Date:	
Inspector:	

DERM's FCD Installation Inspection Required Prior to Plumbing Final for all Municipal projects. Failure to secure DERM's FCD Installation Inspection will result in disapproval of Final Inspection by the Municipal Building Official, pursuant to Section 24.42-6, MDC Code.

To schedule DERM's FCD Installation inspection for Municipal projects please send an e-mail to FOG2@miamidade.gov, 24 hours prior to desired date. Provide DERM plans process M-number, complete address of the site, folio number, and contact person name and phone number.



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GREASE TRAP SCOPE OF WORK

CONNECT NEW FIXTURES AND NEW GREASE LINES TO

- MODEL "BIG-750" 75 GPM
- POLYETHYLENE WASTEWATER SAMPLING PORT.
- (2)BIGMAX SERIES, EACH 140 GALLON LIQUID STORAGE CAPACITY POLYETHYLENE GREASE INTERCEPTOR WITH H-20 LOAD RATED COVER
- TO COMPLY FOG 2.0 RER-DERM REQUIRMENTS



TITLE: 75GPM HDPE GREASE INTERCEPTOR

SIZE	DWG. NO.	REV
C	BIG-750	
SCALE: 1:11	WEIGHT:	SHEET 1 OF 1

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