TESTING AND RATING OF TWO GREASE INTERCEPTORS, BIG-1150 / FE1150, CONNECTED IN SERIES, AS PER ASME A112.14.3-2018 (TYPE A)

Prepared by:

Da Wu Zhang

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Prepared for:

Jason Gramchuk

MIFAB

1321 W 119th Street

Chicago, IL 60643

Report ID: TR-DZ20181217-03

Test Summary:

PROJECT NUMBER:	PN 18-013
DEVICE MANUFACTURER:	MIFAB
TEST UNITS:	BIG-1150 / FE1150
TEST PROCEDURE:	ASME A112.14.3-2018 (TYPE A)
TEST DATE:	December 03 - 13, 2018

3. 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 2.45 inches, to achieve the target test flow rate of 100 GPM.

The pH of the test water ranged between 7.1 and 8.0 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-1150 / FE1150 grease interceptor testing continued until run125, 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 (90) percent or more	99.58%	Pass
Have an incremental efficiency of (80) percent or more	99.6%	Pass
Have retained not less than 200 lbs of lard	239.40 lbs	Pass

*Determined at Run 012 as per Section 3.4.7.2 Determination of Efficiency at Minimum Grease Capacity

4. Conclusions

Two MIFAB BIG-1150 / FE1150 100 gpm grease interceptors, connected in series, meet the certification requirements of the 100 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 2447.60 lbs at the test breakdown point.

5. Attachments

Appendix 1 – Flow Rate Verification Data

Appendix 2 – Grease Interceptor Rating Test Data

Location:

MIFAB **BIG-S** Big Max® – HDPE Solids Interceptors

Specification: MIFAB® Series BIG-___-S HDPE rotational molded solids interceptor with solids holding capacity of ____(indicate). Unit shall include: 3/8" uniform wall thickness, solids retention baffle with elevated 3" diameter passageway; adjustable lid system; sample port access and 4" cin hub inlet and outlet connections. Steel enclosed composite lid provides a water / gas tight seal and has a minimum of 20,000 lbs. load capacity. The lid is designed in accordance with the loading requirements of AASHTO H20.

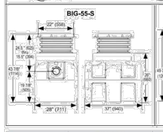
Function: Solids interceptors are required anywhere that solids may be introduced into the public sewer system in applications such as: barber shops, dentist offices, salons, artist studios, laundry facilities, machine shops, food waste, parking lots, car washes, food processing, livestock and agricultural drainage. These wastes must be separated before entering the sewer system. Ideally installed between the fixtures and the grease interceptor in restaurants, kitchens, institution industrial facilities such as food processing and packaging plants and other types of food processing areas where fat, oil and grease (FOG) drains with the waste water. Sediment and debris are collected inside of the internal sediment bucket to ensure that this matter does not clog the grease interceptor. Typically installed either on or into the floor. Narrow width permits access through doorways and down stairwells. High Density Polyethylene construction ensures a lightweight installation process (two people can move and install it). Regular maintenance is required to keep the interceptor functioning. All Big Max interceptors can withstand a temperature of up to and including 160 degrees Fahrenheit.

BIG-MAX Solid Waste Large H.D.P.E. Interceptors

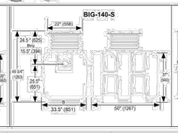
Illustrated with Direct Connect lid (Standard)

U.S. Patent # 9,551,142

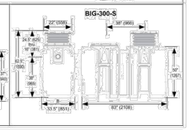
BIG-55-S



BIG-140-S



BIG-300-S



NOTE: The BIG-55-S is not available until June, 2020	Model No.	LIQUID CAP. (Gallons / Cu. Ft.)	SOLIDS CAP. (Gallons / Cu. Ft.)	B Width	Shipping Weight (Lbs.)
	BIG-55-S	55 / 7.19	28 / 4	28.00"	92
	BIG-140-S	140 / 18.30	70 / 9	33.50"	165
	BIG-300-S	300 / 39.21	150 / 20	33.50"	290

SUFFIX	OPTIONAL VARIATIONS	PART NO.
-AK	Anchor kit (set of two) for BIG-55-S	BIG-500-AK-SET
-AK	Anchor kit (set of two) for BIG-140-S	BIG-750-AK-SET
-AK	Anchor kit (set of two) for BIG-300-S	BIG-1150-AK-SET
-C	Lid Extension - up to 44" high - for BIG-55-S	BIG-EXT-44
-C	Lid Extension - up to 72" high - for BIG-55-S	BIG-EXT-72
-C	Lid Extension - up to 44" high - for BIG-140-S	BIG-EXT-44
-C	Lid Extension - up to 72" high - for BIG-140-S	BIG-EXT-72
-C	Lid Extension - up to 44" high - for BIG-300-S	BIG-EXT-44 (2 pcs. Req.)
-C	Lid Extension - up to 72" high - for BIG-300-S	BIG-EXT-72 (2 pcs. Req.)
-DI	Ductile iron lid and collar - for BIG-55-S	XL-MI-G-G-PL4
-DI	Ductile iron lid and collar - for BIG-140-S	XL-MI-G-G-PL4
-DI	Ductile iron lid and collar - for BIG-300-S (Two pieces required)	XL-MI-G-G-PL4 (2 pcs. Req.)
-FE	6" no hub inlet and outlet - for each piece (Two pieces required)	MI-G-PL-PF6
-FLC	Membrane clamp kit for BIG-55-S and BIG-140-S	XL-MI-G-PL-FLM (2 pcs. Req.)
-FLC	Membrane clamp kit for BIG-300-S	XL-MI-G-PL-FLM (2 pcs. Req.)
-LHSI	No hub inlet on left hand side (not available with sediment bucket) (for Lil Max, Big Max, SuperMax)	MI-G-PL-PF4
-LHSO	No hub outlet on left hand side (not available with sediment bucket) (for Lil Max, Big Max, SuperMax)	MI-G-PL-PF4
-POK	Remote pump out kit (also includes Remote Pump Out (-RPO))	Contact MIFAB
-RHSI	No hub inlet on right hand side (not available with sediment bucket) (for Lil Max, Big Max, SuperMax)	MI-G-PL-PF4
-RHSO	No hub outlet on right hand side (not available with sediment bucket) (for Lil Max, Big Max, SuperMax)	MI-G-PL-PF4
-RPO	3" Remote pump outlet connections on top of interceptor - specify location and number required.	Contact MIFAB
-SP	External sampling port - inline, high connections	BIG-SP
-SP-L	External sampling port - inline, low connections	BIG-SP-L
-SP-OF	External sampling port - offset	BIG-SP-OF
-T	Female threaded connections (for each piece - Two pieces required)	MI-G-PL-PF4T

CALIFORNIA PROPOSITION 65 WARNING. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Job Name: _____ Page No: _____

Section No: _____ Contractor: _____

Schedule No: _____ Purchase Order No: _____

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USA: 1-800-465-2736 www.mifab.com CAN: 1-800-387-3880

2020-01-30

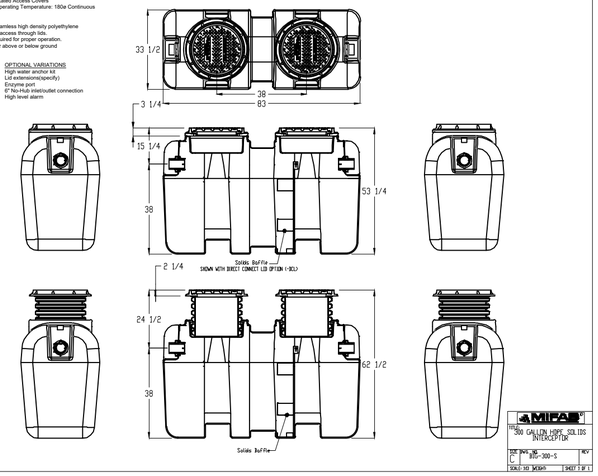
BIG-300-S - DERM Requirement is to have a Solids Interceptor in front of the Grease Interceptors

1. 4" Inlet and Outlet No-Hub Connections.
2. Solids Holding Capacity: 300 Gallons
3. H-20 Load Rated Access Covers
4. Maximum Operating Temperature: 180ø Continuous

DETAILS

- 3/8" thick seamless high density polyethylene
- Full internal access through lids.
- Vent not required for proper operation.
- Designed for above or below ground installation.

Suffix	OPTIONAL VARIATIONS
-AK	High water anchor kit
-C	Lid extensions(specify)
-EP	Enzyme port
-F6	6" No-Hub inlet/outlet connection
-HLA	High level alarm



MIFAB
TITLE: 300 GALLON HDPE SOLIDS INTERCEPTOR
SIZE C | DWG. NO. BIG-300-S | REV
SCALE: NTS | WEIGHT: | SHEET 1 OF 1

MIFAB®

TITLE: 100GPM HDPE GREASE INTERCEPTOR

SIZE C | DWG. NO. BIG-1150 | REV

SCALE: 1:11 | WEIGHT: | SHEET 1 OF 1

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