



August 28, 2012

ENGINEERING LABORATORY TEST REPORT

Send to: Goslyn LP
1904 University Business Drive
McKinney, TX 75071
Attn: Mr. John C. Sowerby

Plant: Shanghai Solio Stainless Steel Products
938 Nanguo Road Mian Chuang
Shuyuan Town, Nanhui District
Shanghai, China

Client #: 3C870

Plant #: 3C871

NSF Job#: J-00114505

Description of Test Sample: Model GOS 20 Grease Removal Device (4 gpm)

Sample Received: July 26, 2012 – Submitted in good condition by client

Date of Test: August 27, 2012

Location of Test: NSF International, Ann Arbor, MI

Test Protocol: PDI G101-2010 Grease Interceptors, ASME A112.14.3 Grease Interceptors, and ASME A112.14.4 Grease Removal Devices

Results:	PDI G101-2010	PASS
	ASME A112.14.3	PASS
	ASME A112.14.4	PASS

Report Authorization: _____
Senior Engineer, Engineering Laboratory

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PDI G101 Section 5.1 Media Analysis

COMPLETE

pH value	n/a
Lard specific gravity	0.874
Viscosity	6.83 cP

PDI G101 Section 5.4 Flow Rate Verification

COMPLETE

Type of Grease Interceptor	Type A	
Size of Flow Controller	0.365	inches
Flow Time 1 Sink 1+2	109.7	sec
Flow Time 2 Sink 1+2	113.6	sec
Flow Time 3 Sink 1+2	110.3	sec
Flow Time Average Sink 1+2	111.2	sec
Flow Rate Average Sink 1+2	4.1	gpm
Deviation from Req Average Sink 1+2	2.5	%
Flow Time 1 Sink 2+1	111.5	sec
Flow Time 2 Sink 2+ 1	110.1	sec
Flow Time 3 Sink 2+ 1	111.7	sec
Flow Time Average Sink 2+1	111.1	sec
Flow Rate Average Sink 2+1 (gpm)	4.1	gpm
Deviation from Req Average Sink 2+1	2.6	%
Max allowable deviation from average	5	%
Max allowable deviation between runs	5.0	%
Max deviation between runs	3.3	%
Flow rate acceptable?	Yes	

Note: Flow rates verified using NSF's laboratory flow controller.

PDI G101 Section 7 Certification Rating Test (Grease Retention Capacity)

PASS

Model	GOS 20 LP
Flow	4 GPM
Flow Restrictor ID	0.365 inches
Breakdown Increment Number	12
Pounds Grease Retained at Breakdown	9.45 lbs.
Incremental Efficiency	97.5 %
Average Efficiency	98.4 %
Required Total Amount of Grease Retained	9 lbs.
Actual Total Amount of Grease Retained	9.45 lbs.



ASME A112.14.3 Section 2 General Requirements

PASS

Design	PASS
Rating	PASS
Inlet and Outlet Connections	PASS
Flow Controls and Vents	PASS

ASME A112.14.3 Section 3.5 Rating Test (Grease Retention Capacity)

PASS

Model	GOS 20 LP	
Flow	4	GPM
Flow Restrictor Type	A	
Flow Restrictor ID	0.365	inches
Breakdown Increment Number	16	
Pounds Grease Retained	12.59	lbs.
Incremental Efficiency	96.3	%
Average Efficiency	98.4	%
Efficiency A	98.4	%
Efficiency B	na	%
Required Amount of Grease Retained	8	lbs.
Actual Amount of Grease Retained	12.59	lbs.

ASME A112.14.3 Section 4.1 Labelling

PASS

Manufacturer's name or trademark	Yes
Model number	Yes
Rated Flow (see paragraph 2.2)	Yes
Inlet and Outlet	Yes
ASME A112.14.3	Yes
Product Type by Rating	N/A
Efficiency at the rated capacity	N/A



ASME A112.14.3 Section 4.2 Installation Instructions

PASS

Flow Control and / or vent requirements	Yes
Separate trapping requirements	Yes
Elevation and accessibility requirements	Yes
Safety and health related instructions	Yes
Cleanout Locations	Yes
Instructions that show the clearances required for maintenance, cleaning, and hazard prevention.	Yes
Cautions against installation in any manor except as tested and rated.	Yes*

ASME A112.14.3 Section 4.2 Maintenance Instructions

PASS

Maintenance Instructions	Yes
Safety and Health provisions	Yes
Each grease interceptor shall be provided with service instructions, which include a trouble shooting guide as well as instruction for performing necessary servicing or for obtaining servicing	Yes*

* Drafts of updated instructions have been provided.

ASME A112.14.4 Section 2.1.2 Size

PASS

The flow and grease retention of each GRD shall be tested and rated in accordance with ASME A112.14.3.	PASS
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ASME A112.14.4 Section 2.1.3 Inlet and Outlet Connections

PASS

Tapered threads shall comply with ASME B1.20.1.	Yes
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ASME A112.14.4 Section 2.2 Installation Instructions

PASS

Flow Control and / or vent requirements	Yes
Separate trapping requirements	Yes
Elevation and accessibility requirements	Yes
Safety and health related instructions	Yes
Wiring instructions to reference national or local codes	Yes*
Cleanout Locations	Yes
Instructions that show the clearances required for maintenance, cleaning, and hazard prevention.	Yes

* Drafts of updated instructions have been provided.

ASME A112.14.4 Section 2.3 Maintenance and Operating Instructions

PASS

Maintenance Instructions	Yes
Each grease interceptor shall be provided with service instructions, which include a trouble shooting guide as well as instruction for performing necessary servicing or for obtaining outside servicing.	Yes*

* Drafts of updated instructions have been provided.

ASME A112.14.4 Section 2.4 Electrical Requirements

PASS

All electrical components used in the GRD shall conform to the appropriate standards listed in para. 1.3.	Yes*
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* GOS 60 LP is listed by UL under file KNGT.E300483.



ASME A112.14.4 Section 3.4 Grease Removal Test

PASS

Required conditioning water temperature	60-80	deg F
Actual conditioning water temperature	80	deg F
Required test water temperature	105-115	deg F
Actual test water temperature	115	deg F
Rated service flow	25	gpm
Grease Retention Rating	58.77	lbs
Pounds Grease Added	88.20	lbs
Flow Rate Through Unit	2.20	gpm
Interval Between Grease Introduction	23	min
Test Duration	6:02	hrs
Required Amount of Grease Recovered	29.40	lbs
Actual Amount of Grease Recovered	75.80	lbs
Maximum Grease Water Content	<5	%
Actual Grease Water Content	<1	%

NOTES: The GRD mechanism was tested under job J-00111441 according the manufacturer's updated operating instruction. Using the bottle brush, the ball in oil valve was submerged prior to grease introduction and after the first dose of grease. The thermostat was also adjusted per manufacturer's instructions for use with animal lard. Light illuminated on heater throughout the test. Average temperature = 128 degrees F measured inside breather tube.

ASME A112.14.4 Section 4.1 Marking on the Unit

PASS

Manufacturer's name or trademark	Yes
Model number	Yes
Rated Flow (see paragraph 2.2)	Yes
Inlet and Outlet	Yes
ASME A112.14.3 and ASME A112.14.4	Yes

ASME A112.14.4 Section 4.1 Other Marking

PASS

Electrical requirements	Yes
Daily maintenance procedure	Yes*
Operating Instructions	Yes*

* Drafts of updated instructions have been provided.

STANDARD PDI-G101 / ASME A112.14.3 GREASE INTERCEPTOR RATING TEST FORM #1

Interceptor ID : Gosyln 4 gpm Grease Interceptor Model GOS-20

Report No.: J-00114505

Capacity No. 1	4	Test Vehicle:	***** Flow Control Data *****			
Capacity No. 2	4	Spec. Gravity: 0.874	Observers:		Jon McGaugh	
Separate No. 1	na	Viscosity: 6.83 cP	Andrew Ross			
Separate No. 2	na	Test Temperature: 150-160 ° F				
Simultaneous	4.1	Water :	Orifice Size: 0.365"			
Simultaneous	4.1	Test Temperature: 150-160 ° F	Air Intake: 1" Max: Height 28.125"			

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Test Date: 8/27/12

Notes: Drainage gauged on clear compartment.
Tabulated "amounts retained" is a calculation of Added minus "Skimmed."

Tabulated "skim amounts" includes pro-rata addition for reclaimed from skim tank after chilling.

All weights taken after de-watering by Separatory funnel chilling.

Summary & Adjusted Results based on the totals at the increment when Grease retained equals 2 ¼ times rated capacity

					***** INCREMENTAL *****				***** ACCUMULATED *****			
					(drop-skim)/ drop x 100 = efficiency				(drop-skim) / drop x 100 = efficiency			
No.	Test	Clear	Sec.	Rate:GPM	lb. Added	lb. Skimmed	lb. Retained	Efficiency	lb. Added	lb. Skimmed	lb. Retained	Efficiency
1	1	2	109.18	04.2	0.8	0.00	0.80	100.0	0.80	0.00	0.80	100
2	2	1	109.52	04.2	0.8	0.00	0.80	100.0	1.60	0.00	1.60	100
3	1	2	111.05	04.1	0.8	0.00	0.80	100.0	2.40	0.00	2.40	100
4	2	1	109.14	04.2	0.8	0.01	0.79	98.8	3.20	0.01	3.19	100
5	1	2	110.12	04.1	0.8	0.02	0.78	97.5	4.00	0.03	3.97	99
6	2	1	109.33	04.2	0.8	0.01	0.79	98.8	4.80	0.04	4.76	99
7	1	2	113.01	04.0	0.8	0.02	0.78	97.5	5.60	0.06	5.54	99
8	2	1	109.56	04.2	0.8	0.01	0.79	98.8	6.40	0.07	6.33	99
9	1	2	112.68	04.0	0.8	0.02	0.78	97.5	7.20	0.09	7.11	99
10	2	1	111.29	04.1	0.8	0.02	0.78	97.5	8.00	0.11	7.89	99
11	1	2	111.46	04.1	0.8	0.02	0.78	97.5	8.80	0.13	8.67	99
12	2	1	111.19	04.1	0.8	0.02	0.78	97.5	9.60	0.15	9.45	98
13	1	2	110.26	04.1	0.8	0.01	0.79	98.8	10.40	0.16	10.24	98
14	2	1	110.02	04.1	0.8	0.01	0.79	98.8	11.20	0.17	11.03	98
15	1	2	109.49	04.2	0.8	0.01	0.79	98.8	12.00	0.18	11.82	99
16	2	1	109.81	04.2	0.8	0.03	0.77	96.3	12.80	0.21	12.59	98
17	1	2	109.25	04.2	0.8	0.28	0.52	65.0	13.60	0.49	13.11	96
18	2	1	112.26	04.1	0.8	0.79	0.01	1.3	14.40	1.28	13.12	91
19	1	2	112.57	04.1	0.8	0.79	0.01	1.3	15.20	2.07	13.13	86
20	2	1										
21	1	2										
22	2	1										
23	1	2										
24	2	1										
25	1	2										
26	2	1										
27	1	2										
28	2	1										
29	1	2										
30	2	1										
31	1	2										

= 9

Increment No. 12

1) Total Skimmed: 0.15

2) Total Retained : 9.45

3) Total Added: 9.60

Eff. = (line 3 - line1) / line 3

Efficiency % = 98.4

Summary and Adjusted Results based on the totals at Break down point.

Break down

Increment No. 16

Pounds Retained : 12.59

1) Total Skimmed : 0.21

2) Total Retained : 12.59

3) Total Added : 12.80

Eff. = (line 3 - line1) / line 3

Efficiency % = 98.4

GPM: 15

Average Or Total

110.59	04.1	15.2	2.07	13.13
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PASS

STANDARD PDI-G101 GREASE INTERCEPTOR RATING TEST FORM #1

Interceptor ID Manufacturer: Goslyn		Model Number: GOS 20		GPM Size: 4		Report No.: J-00114505						
Sink Capacity and Flow Rate		****Lard Data****		*****Flow Control Data*****		***Testing Lab Information***						
Capacity No. 1	4 gal	Spec. Gravity:	0.874	Orifice Size:	0.635	Test Lab:	NSF International					
Capacity No. 2	4 gal	Viscosity:	6.83 cP									
Separate No. 1	na GPM					Test Technician:						
Separate No. 2	na GPM					Jon McGaugh						
Simultaneous 1	4.1 GPM					Andrew Ross						
Simultaneous 2	4.1 GPM											
				***** INCREMENTAL *****								
				***** ACCUMULATED *****								
				(drop-skim / drop) x 100 = efficiency								
				(drop-skim / drop) x 100 = efficiency								
No.	Test	Clear	Min./Sec.	Rate: GPM	lb. Added	lb. Skimmed	lb. Retained	Efficiency	lb. Added	lb. Skimmed	lb. Retained	Efficiency
1	1	2	109.18	4.2	0.8	0	0.8	100	0.8	0	0.8	100
2	2	1	109.52	4.2	0.8	0	0.8	100	1.6	0	1.6	100
3	1	2	111.05	4.1	0.8	0	0.8	100	2.4	0	2.4	100
4	2	1	109.14	4.2	0.8	0.01	0.79	99	3.2	0.01	3.19	100
5	1	2	110.12	4.1	0.8	0.02	0.78	98	4	0.03	3.97	99
6	2	1	109.33	4.2	0.8	0.01	0.79	99	4.8	0.04	4.76	99
7	1	2	113.01	4	0.8	0.02	0.78	98	5.6	0.06	5.54	99
8	2	1	109.56	4.2	0.8	0.01	0.79	99	6.4	0.07	6.33	99
9	1	2	112.68	4	0.8	0.02	0.78	98	7.2	0.09	7.11	99
10	2	1	111.29	4.1	0.8	0.02	0.78	98	8	0.11	7.89	99
11	1	2	111.46	4.1	0.8	0.02	0.78	98	8.8	0.13	8.67	99
12	2	1	111.19	4.1	0.8	0.02	0.78	98	9.6	0.15	9.45	98
13	1	2	110.26	4.1	0.8	0.01	0.79	99	10.4	0.16	10.24	98
14	2	1	110.02	4.1	0.8	0.01	0.79	99	11.2	0.17	11.03	98
15	1	2	109.49	4.2	0.8	0.01	0.79	99	12	0.18	11.82	99
16	2	1	109.81	4.2	0.8	0.03	0.77	96	12.8	0.21	12.59	98
17	1	2	109.25	4.2	0.8	0.28	0.52	65	13.6	0.49	13.11	96
18	2	1	112.26	4.1	0.8	0.79	0.01	1	14.4	1.28	13.12	91
19	1	2	112.57	4.1	0.8	0.79	0.01	1	15.2	2.07	13.13	86
20	2	1										
21	1	2										
22	2	1										
23	1	2										
24	2	1										
25	1	2										
26	2	1										
27	1	2										
28	2	1										
29	1	2										
30	2	1										
Average Or Total		110.59	4.131579		15.2	2.07	13.13					

Test Date: 8/27/2012

Notes:

1. Drainage gauged on clear compartment

2. The "amount retained" is a is a calculation of "Added" minus "Skimmed"

3. All Skimmed weights taken after de-watering by Seperatory funnel and chilling.

Summary and results based on testing per Section 7.7 "rated capacity." The total grease skimmed was taken at the thirteenth increment.

1) Total Skimmed:	0.15
2) Total Retained :	9.45
3) Total Added:	9.6
Eff. = (line 3 - line1) / line 3 X100	
Efficiency % =	98.4

Summary and Results based on the testing per Section 7.6 "maximum grease capacity."

Break down	16
Increment No.	
1) Total Skimmed :	0.21
2) Total Retained :	12.59
3) Total Added :	12.8
Eff. = (line 3 - line1) / line 3 X100	
Efficiency % =	98.4

Manufacturer Goslyn

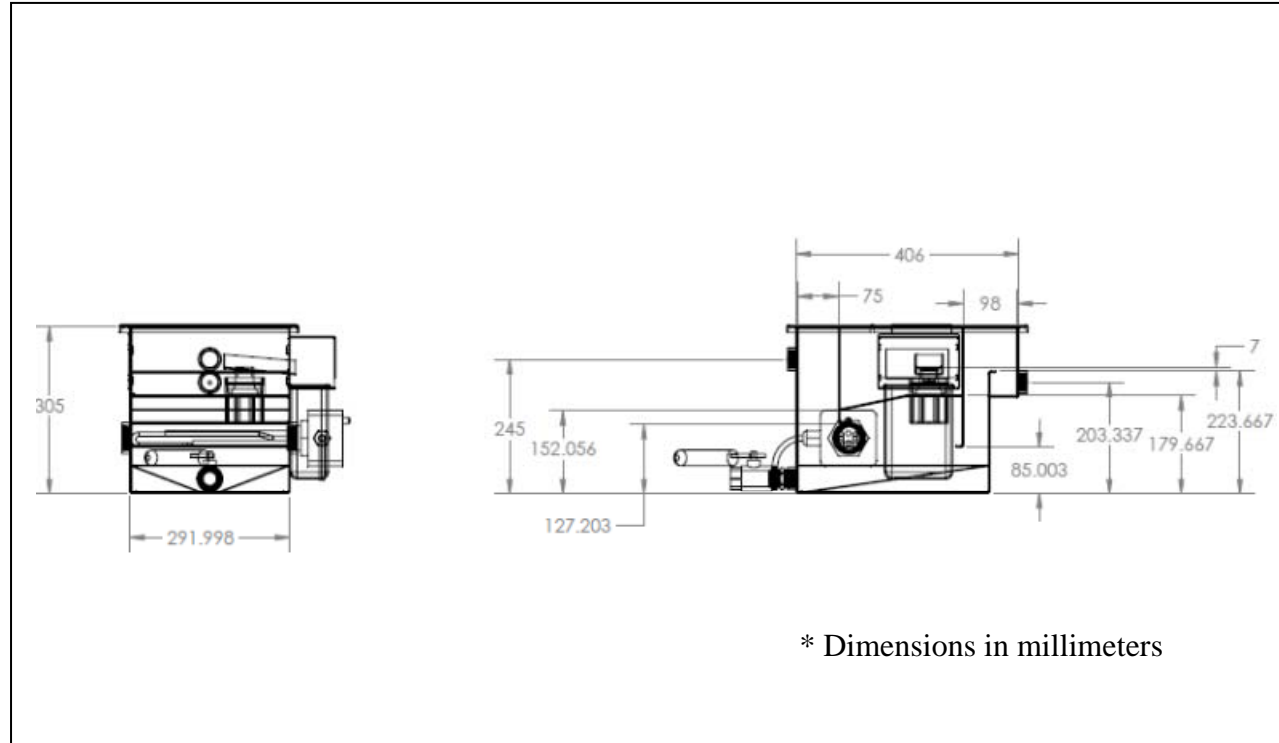
Model Number GOS 20

GPM Size 4

Test Number J-00114505

Drawing and Dimensions of unit tested

Drawing is a cross-section in a plane perpendicular to the cover passing through the inlet and outlet ports with all internal components in place.
Length, width, and height are noted



* Dimensions in millimeters

The unit as described above was tested in accordance to PDI Standard G-101 and has conformed with or exceeded all requirements for certification.

Test Technician David Orton

(print name)

(signature/electronic signature)

this 28 day of August, 20 12