



May 3, 2012

ENGINEERING LABORATORY TEST REPORT

Send to:	Goslyn LP 2710 Sylvan Way Mc Kinney TX 75070 Attn: Mr. John C. Sowerby	Plant:	Shanghai Solio Stainless Steel Products 3758 Jiahang Road Jiading District, Shanghai 201816 Shanghai China Attn: Ms. Shirley Zhang
Client #:	3C870	Plant #:	3C871

NSF Job#: J-00092166

Description of Test Sample: Model GOS40LP Grease Interceptor (10 gpm)

Sample Received: October 14, 2010 – Submitted in good condition by client

Date of Test: October 14 - November 15, 2010

Location of Test: NSF International, Ann Arbor, MI

Test Protocol: PDI G101-2007 / ASME A112.14.3-2000 / CSA B481-2007
Grease Interceptors

Results:	PDI G101-2010	PASS
	ASME A112.14.3-2000	PASS
	CSA B481-2007	PASS

Note: This report is a re-issued version of report serial # FI20101116000010. It is being re-issued as a PASS after the client provided artwork for markings that comply with the respective standards.

Technical responsibility

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	0.75	inches
Flow Time 1 Sink 1+2	111.0	sec
Flow Time 2 Sink 1+2	111.4	sec
Flow Time 3 Sink 1+2	111.2	sec
Flow Time Average Sink 1+2	111.2	sec
Flow Rate Average Sink 1+2	10.3	gpm
Deviation from Req Average Sink 1+2	2.5	%
Flow Time 1 Sink 2+1	110.1	sec
Flow Time 2 Sink 2+ 1	112.6	sec
Flow Time 3 Sink 2+ 1	110.3	sec
Flow Time Average Sink 2+1	111.0	sec
Flow Rate Average Sink 2+1 (gpm)	10.3	gpm
Deviation from Req Average Sink 2+1	2.7	%
Max allowable deviation from average	5	%
Max allowable deviation between runs	5	%
Max deviation between runs	2.2	%
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 40	
Flow	10	GPM
Flow Restrictor ID	0.750	inches
Breakdown Increment Number	12	
Pounds Grease Retained at Breakdown	23.27	lbs.
Incremental Efficiency	96.0	%
Average Efficiency	97.0	%
Required Total Amount of Grease Retained	22.5	lbs.
Actual Total Amount of Grease Retained	23.27	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 40	
Flow	10	GPM
Flow Restrictor Type	A	
Flow Restrictor ID	0.750	inches
Breakdown Increment Number	14	
Pounds Grease Retained	26.75	lbs.
Incremental Efficiency	83.0	%
Average Efficiency	95.5	%
Efficiency A	95.5	%
Efficiency B	na	%
Required Amount of Grease Retained	20	lbs.
Actual Amount of Grease Retained	26.75	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	Yes*
Efficiency at the rated capacity	Yes*

* Artwork has been provided that complies with the standard



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



CSA B481.0 Section 4 Material Requirements

PASS

4.1	Mild Steel shall have a minimum thickness of 11 ga (3.04 mm [0.119 in]).	N/A
4.2	Stainless steel alloys shall be Series 300 and shall have a minimum thickness of 14 ga (1.98 mm [0.078 in]) for external shells and 16 ga (1.58 mm [0.062 in]) for internal components.	304 SS (2.5 mm)
4.3	Thermoplastics shall comply with the material requirements specified in CSA B181.3 and shall have a minimum wall thickness of 3.96 mm (0.156 in).	N/A
4.4	Fiberglass-reinforced plastic (FRP)	N/A
4.5	Concrete	N/A
4.6	Covers	Not Rated
4.7	Galvanic corrosion	PASS
4.8	Fasteners	PASS

CSA B481.0 Section 5.1 General Construction Requirements

PASS

a	Constructed to perform at the maximum flow rate for which they are designed;	Yes
b	Has a minimum FOG containment volume capacity of 25% of the flow rating of the interceptor;	Yes
	Required volumetric capacity = 25% x 37.85 L =	9.46 L
	Actual volumetric capacity = 26.8 lbs x 0.45 kg/lb x 1.1 L/kg =	13.24 L
c	Has a minimum solids containment capacity of 25% of the flow rating	N/A
d	Constructed to withstand, without leaking, a hydrostatic pressure of 0.35 kPa (0.05 psi) applied for 15 min;	N/A*
e	Has inlet and outlet connections as follows:	
	(i) threaded connections shall comply with ASME B1.20.1;	Yes
	(ii) hub or hubless connections shall comply with the dimensional requirements of an applicable Standard for the material used; or	N/A
	(iii) other connections shall comply with the National Plumbing Code of Canada or applicable provincial plumbing code requirements;	N/A
f	Has a means to prevent siphoning;	Yes
g	Protected against galvanic corrosion if dissimilar metallic materials	Yes
h	Has a removable cover;	Yes
i	Has adequate access	Yes
	(i) for proper cleaning and removal of FOG and sediments, allowing,	Yes
	(ii) for personnel to reach removable internal components; and	Yes
j	Free of defects that could affect appearance, serviceability, containment, and performance.	Yes

* Grease removal device is open to atmosphere. Therefore this test is not applicable.

CSA B481.0 Section 5.2 Mild Steel Construction Requirements

N/A



CSA B481.0 Section 6.1 Loading Test for Covers

Not Rated

Load classification	N/A	
Load rating	N/A	
Test load	N/A	

CSA B481.0 Section 6.2 Corrosion Test

N/A

CSA B481.0 Section 7.1 Required Markings

PASS

a	Name, trademark, or other known mark of the manufacturer	Yes	
b	Applicable CSA Standard designation (i.e., "CSA B481.1" or "CSA B481.2")	Yes*	Yes*
c	Flow rating	Yes*	Yes*
d	Removal efficiency, expressed as a percentage	Yes*	Yes*
e	Effluent grease concentration, expressed in mg/L, when tested in accordance with CSA B481.2	NA	
f	Grease containment capacity	Yes*	
g	Access cover load classification, determined in accordance with Clause 6.1.1 (i.e., L, M, H, X, or S)	Not rated	
h	Nominal inlet size	Yes*	
i	A mark indicating whether an external flow control device is required (i.e., "Required (part number)" or "Not required").	Yes*	
j	Inlets and outlets of the grease interceptors shall be clearly identified to indicate the direction of flow.	Yes	

* Artwork has been provided that complies with the standard

CSA B481.0 Section 7.2 Marking Quality

PASS

Markings shall be:

a	Permanent or indelible; and	Yes*
b	Legible	Yes*

* Artwork has been provided that complies with the standard

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

Interceptor ID **J-00092166** Goslyn GOS 40 LP

Report No.: **J-00092166**

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Capacity No. 1	10	Test Vehicle:	***** Flow Control Data *****	
Capacity No. 2	10	Spec. Gravity: 0.874	Observers:	Jon McGaugh
Separate No. 1	na	Viscosity: 6.83 cP	Trey Allen	
Separate No. 2	na	Test Temperature: 150-160 ° F	Tested with the manufacturer's restrictor plate remove.	
Simultaneous	10.3	Water :	Orifice Size: 0.75 "	
Simultaneous	10.3	Test Temperature: 150-160 ° F	Air Intake: 1" Max: Height 30.0"	

Test Date: **11/9/10**

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.

					***** 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	112.69	10.1	2	0.00	2.00	100.0	2.00	0.00	2.00	100
2	2	1	111.87	10.2	2	0.00	2.00	100.0	4.00	0.00	4.00	100.0
3	1	2	112.07	10.2	2	0.08	1.92	96.0	6.00	0.08	5.92	98.7
4	2	1	113.36	10.1	2	0.09	1.91	95.5	8.00	0.17	7.83	97.9
5	1	2	113.67	10.0	2	0.06	1.94	97.0	10.00	0.23	9.77	97.7
6	2	1	111.97	10.2	2	0.06	1.94	97.0	12.00	0.29	11.71	97.6
7	1	2	112.83	10.1	2	0.06	1.94	97.0	14.00	0.35	13.65	97.5
8	2	1	113.41	10.1	2	0.07	1.93	96.5	16.00	0.42	15.58	97.4
9	1	2	113.41	10.1	2	0.06	1.94	97.0	18.00	0.48	17.52	97.3
10	2	1	113.20	10.1	2	0.09	1.91	95.5	20.00	0.57	19.43	97.2
11	1	2	112.33	10.1	2	0.08	1.92	96.0	22.00	0.65	21.35	97.0
12	2	1	113.64	10.0	2	0.08	1.92	96.0	24.00	0.73	23.27	97.0
13	1	2	113.06	10.1	2	0.18	1.82	91.0	26.00	0.91	25.09	96.5
14	2	1	113.11	10.1	2	0.34	1.66	83.0	28.00	1.25	26.75	95.5
15	1	2	112.70	10.1	2	0.67	1.33	66.5	30.00	1.92	28.08	93.6
16	2	1	113.66	10.0	2	0.69	1.31	65.5	32.00	2.61	29.39	91.8
17	1	2										
18	2	1										
19	1	2										
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										
Average Or Total			112.94	10.1	32	2.61	29.39					

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

= **22.5**

Increment No. **12**

1) Total Skimmed: **0.73**

2) Total Retained : **23.27**

3) Total Added: **24.00**

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

Efficiency % = **97.0**

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

Break down

Increment No. **14**

Pounds Retained : **26.75**

1) Total Skimmed : **1.25**

2) Total Retained : **26.75**

3) Total Added : **28.00**

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

Efficiency % = **95.5**

GPM: **10**

Pass