

Item Qty	Description	Mat'l	Specification	Size	Dwg No	Port No
12	0 PAINT: KEM HI-TEMP 850 (STEEL GRAY)					4051-02-0199-02
11	0 PAINT: KEM HI-TEMP 850 (LIGHT GRAY)					4051-99-0299-04
10	1 NAMEPLATE		STN. STL.			4072-01-0106-01
9	2 SHIP COVER: 3"-150#		PLASTIC			4075-03-1512-00
8	2 SHIP COVER: 1 1/2"-2500#		PLASTIC			4075-15-2512-00
7	2 PIPE PLUG: 3/4" NPT		SA-105			4020-95-0309-00
6	2 PIPE PLUG: 3/4" NPT		SA-182 316			4020-95-0311-00
5	64 HEX NUT: 1 7/8"-8 UN		ZINC PLTD			4026-58-0279-01
4	32 STUD: 1 7/8"-8 UN x 17.50" LG		SA-193 B7			4022-58-9919-01
3	2 CHANNEL COVER GASKET		ZINC PLTD			4012-09-1115-35
2	2 CHANNEL COVER		316SS SPWMD			4012-09-1115-35
1	1 CORE ASSEMBLY		STEEL/316SS	A		3018-09-901-006
			STEEL/316SS	C		2070-10-300-000



**Basco**  
An API Heat Transfer Company

1470-10-300-000

REV 0

SIZE DWG NO

HYDROLYSIS - PREHEATER

10 X 300 AW HAIRPIN

SCALE CONTRACT NO CHECK WH

1:22 E140279-101

DRAWN/07/15/2014 BY: JCS

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NOZZLE SCHEDULE			
TAG	SIZE	TYPE	SERVICE
A	3"	150# ANSI RNWN	SHELL SIDE INLET
B	3"	150# ANSI RNWN	SHELL SIDE OUTLET
C	1-1/2"	2500# ANSI RNWN	TUBE SIDE INLET
D	1-1/2"	2500# ANSI RNWN	TUBE SIDE OUTLET
E	3/4"	6000# NPT CRG	SHELL SIDE INLET
F	3/4"	6000# NPT CRG	SHELL SIDE DRAIN
G	3/4"	6000# NPT CRG	TUBE SIDE INLET
H	3/4"	6000# NPT CRG	TUBE SIDE DRAIN
J			
K			
L			
M			
N			

DESIGN DATA

DESIGN PRESSURE	110 PSIG / 1.6 Bar	3360 PSIG / 231.7 Bar	100E Side
TEST PRESSURE	158 PSIG / 9.9 Bar	5460 PSIG / 377 Bar	
DESIGN TEMP	-20/600F -29.565C	-20/775F -29.433C	
CORR. ALLOWANCE	.125 [3]	NONE	
RADIOGRAPHY	NONE	FULL PER CODE	
PMWT	NONE	NONE	

MATERIALS OF CONSTRUCTION		
PART	SHELL SIDE	TUBE SIDE
TUBES	SA 240 316	

TUBESHEETS	SA-240 316	
BARFLE /TINS	STEEL	
HEADS	SA-516 70	SA-516 70N w/316 OVERL
SHELL	SA-515 B / SA-516 70	SA-182 F316
NOZZ FLGS	SA-105	SA-182 F316
CRCLGS	SA-105	SA-182 F316
BOLTS/NUTS	SA-193 B7 / SA-194 2H ZINC PLATED	
GASKETS	316SS SPIRAL WOUND CGI	
O-RINGS		
BODY FLGS	SA-516 70	SA-182 F316
<b>DIMENSIONS &amp; DATA CERTIFIED FOR</b>		
CUST. ORDER:	008317 PATMOT FUELS BIOFUEL, LLC	
BASCO ORDER:	EH0279-101	
BY: JCS	DATE: 07/03/2014	
CODS:		
TIME: Will, Dec. 1 2013 ED	TEMA R	

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SER. NO.

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SER. NO.

<p>purpose or use for manufacturing purpose without written permission from Ad Basco</p>			
DRAMA 07/2014 BY: JCS	CHECK	WH	
SCALE	CONTRACT NO		
1:22	ET4029-101		
<p><b>Basco</b>    <b>Art &amp; Design Timber Company</b></p>			
<p>HYDROLYSIS – PREHEATER</p>			
<p>10 X 300 AW HAIRPIN</p>			
SIZE	DWG NO		REV
C	1470-10-300-000		0