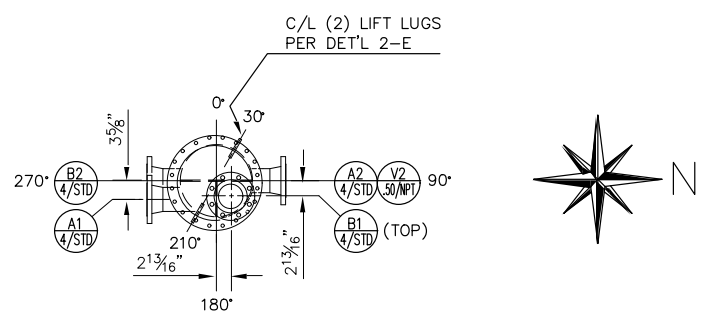


ELEVATION

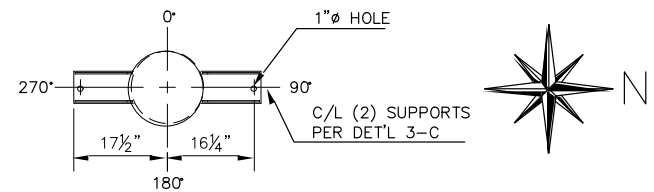
NOZZLE SCHEDULE

MARK	NOZZLE			WELD HT.			FLANGE			REPAD		DETAIL	SERVICE
	SIZE	SCH	THK	A	B	C	PRES	TYPE	FACE	WIDE	Thk		
A1	4"	STD	.237	7/16"			150	WN	RF			3-A	ACH INLET
A2	4"	STD	.237	7/16"			150	WN	RF			3-A	40% GLYCOL INLET
B1	4"	STD	.237	7/16"			150	WN	RF			3-A	ACH OUTLET
B2	4"	STD	.237	7/16"			150	WN	RF			3-A	50% GLYCOL OUTLET
D1	1"	40		.133	3/16"		150	WN	RF			3-A	TUBESIDE DRAIN
D2	1/2"							THRD				2-F	SHELL DRAIN W/PLUG
V2	1/2"							THRD				2-F	SHELL VENT W/PLUG

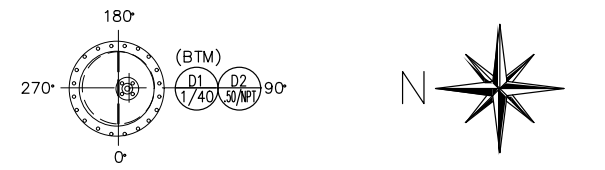
- NOTES**
- ALL BOLT HOLES SHALL STRADDLE VESSEL MAJOR C/L. UNLESS SPECIFIED OTHERWISE.
 - ALL C/S. WELDS PER AHE-100. ALL S/S. WELDS PER AHE-800 & 807. ALL S/S. TO C/S. WELDS PER AHE-803.
 - ALL DIMENSIONS ARE FROM GASKET FACES. UNLESS SPECIFIED OTHERWISE.
 - TUBE TO TUBESHEET JOINT TO BE DOUBLE GROOVED, SEAL WELDED & EXPANDED. WITH 1/16" TUBE PROJECTION. UNLESS SPECIFIED OTHERWISE.
 - ORIENTATION PER PLAN/END VIEW (RESP.) UNLESS SPECIFIED OTHERWISE.
 - ALL C/S SURFACES TO BE SAND BLASTED AND PRIMED WITH INORGANIC ZINC RICH PRIMER (2.0-3.5 MILS DFT).
 - PROTECTIVE COVERS TO BE PROVIDED FOR ALL NOZZLE FLANGES PRIOR TO SHIPPING.



PLAN FROM TOP



PLAN FROM TOP



PLAN FROM BOTTOM

MATERIAL SPECIFICATIONS ASME

	SHELL SIDE	TUBE SIDE
SHELL	SA106-B	SA312-316L
HEADS		SA240-316L
SUPPORTS	SA36	
FLANGES	SA105	SA182F-316L
PIPE	SA106-B	SA312-316L
TUBES		SA213-316L
TUBE SHEETS		SA240-316L
BOLTS/NUTS	SA193-B7/SA194-2H (HDG)	
GASKETS	GARLOCK 3500 1/8" T	
BODY FLG.		SA240-316L
BAFFLE / TUBE SUPP	SA36	SA240-316L
FITTINGS	SA105	

DESIGN DATA

DESCRIPTION	SHELL	TUBE
DESIGN CODE	ASME SEC. VIII, DIV. 1 2004 ED. 2005 AD.	
DESIGN PRESSURE	INTERNAL - PSIG	145
	EXTERNAL - PSIG	15
DESIGN TEMPERATURE	INTERNAL - °F	212
	EXTERNAL - °F	212
MAWP	212F	145/FV 145
CORR. ALLOW.		1/8" 0"
HYDRO. PRESS. PSIG.		188 188
WELD PROCEDURE		SEE NOTE 2
RADIOGRAPHY PER CODE		SEE DET'L 3-B
VESEL WEIGHT - DRY: 1,680 lbs.; FULL OF WATER: 2,634 lbs.		
HEAT TREATMENT		NOT REQUIRED
INSULATION		2.5" FOAMGLASS

FABRICATION DRAWING

CERTIFIED BY
ALABAMA HEAT EXCHANGERS, INC.

RT-3
 SHELL 145/FV PSIG @ 212 °F
 MAWP TUBES 145 PSIG @ 212 °F
 SHELL -20 °F @ 145/FV PSIG
 MDMT TUBES -20 °F @ 145 PSIG

MFG. SERIAL NO. AHE-
 YEAR BUILT 2006
 ITEM NO. 3038
 PROJECT NO. C0150.10002.01

CAUTION: The Code required pressures and temperatures marked on the heat exchanger relate to the basic design conditions. The heat exchanger design has been evaluated for specific operating conditions and shall be re-evaluated before it is operated at different operating conditions.

REVISIONS
 0. INITIAL ISSUE.
 1. REV & REL FOR FAB PER
 CUST DWG DT 4/20/06

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ALABAMA HEAT EXCHANGERS, INC.
 MOBILE, ALABAMA

DEGUSSA CORPORATION
 ACH RECIRCULATION COOLER
 ITEM NO. 3038

CUST. ORDER NO. 45500163851	JOB NO. 8501-B	DRAWING NO. 6501E061
DRAWN BY J.C.LIGHTCAP	DATE 03-12-06	SHT 1 OF 3
APP'VD BY	DATE	SCALE 1/2"=1'-0"

Q.C. M/SHOP FTT'G WELD SERV PURCH