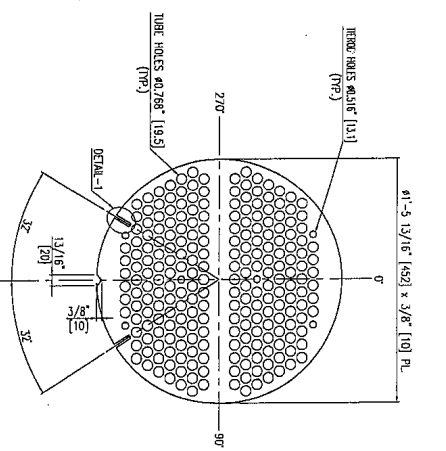
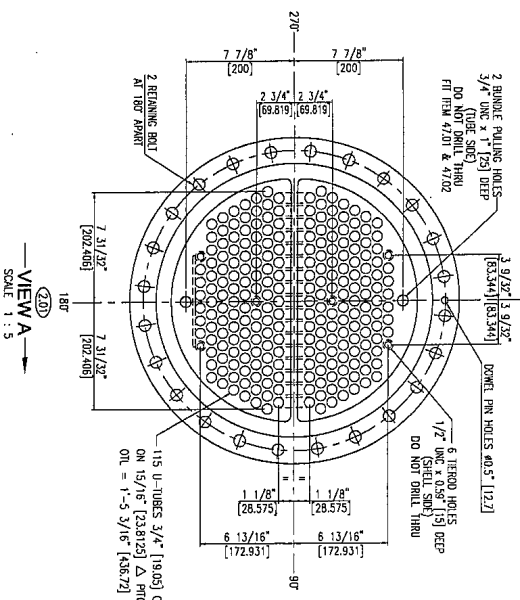
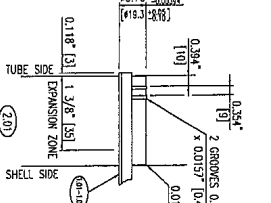




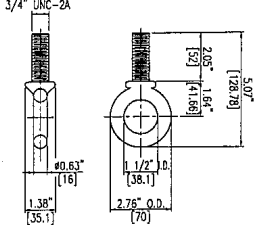
FOR INFORMATION ONLY: THIS DRAWING IS THE PROPERTY OF PT. HEAT EXCHANGERS INDONESIA. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY MENTIONED HEREIN. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF PT. HEAT EXCHANGERS INDONESIA.



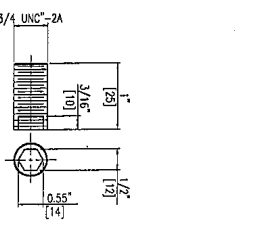
**TUBEHOLE DETAIL**  
NOT TO SCALE



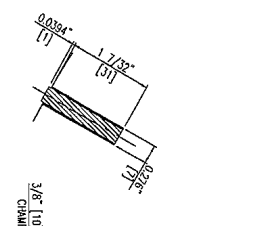
**EYE BOLT DETAILS**



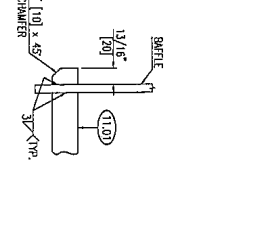
**PLUG DETAILS**



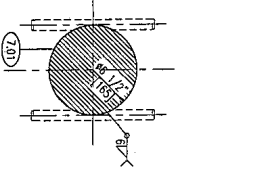
**DETAIL-1**



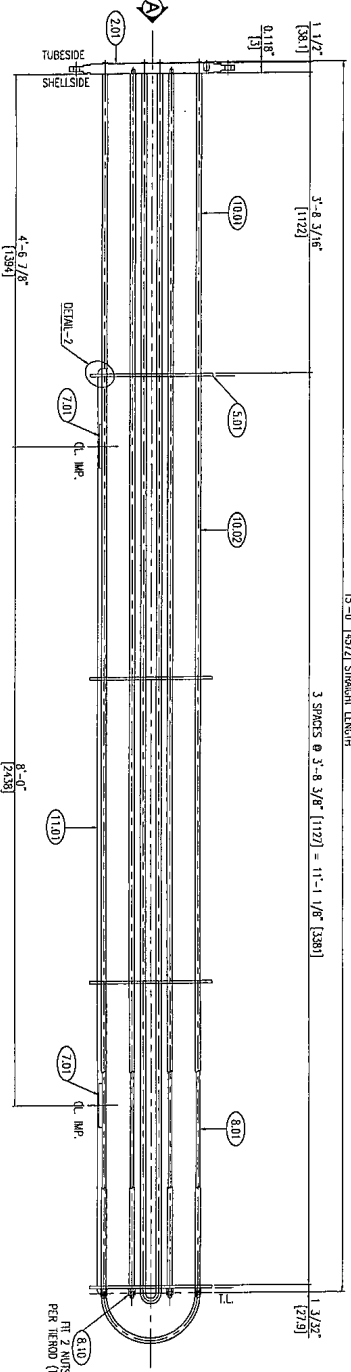
**DETAIL-2**



**IMPINGEMENT DETAILS**  
SCALE 1:1.5



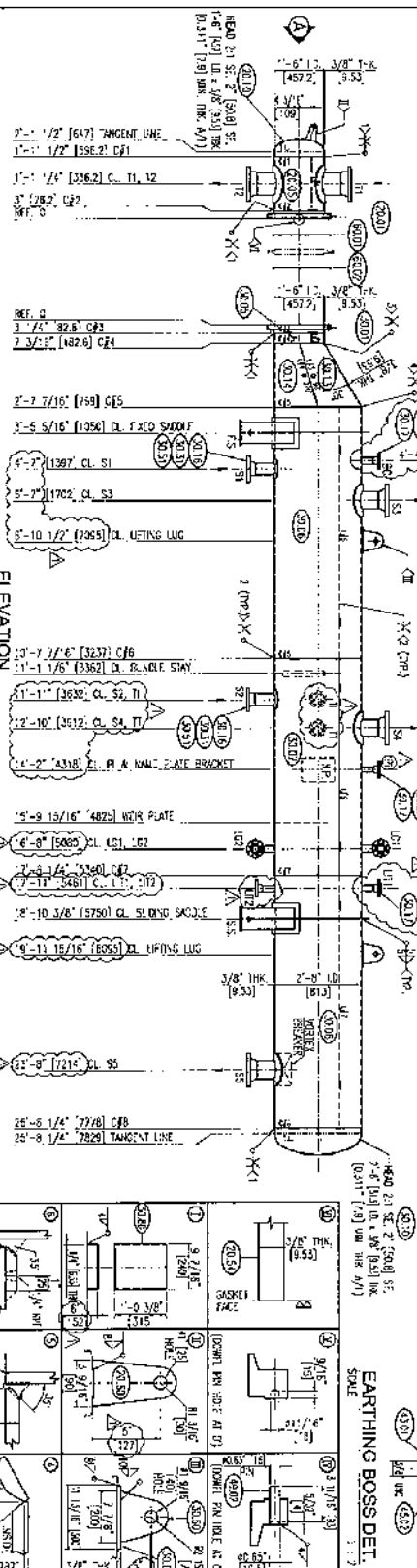
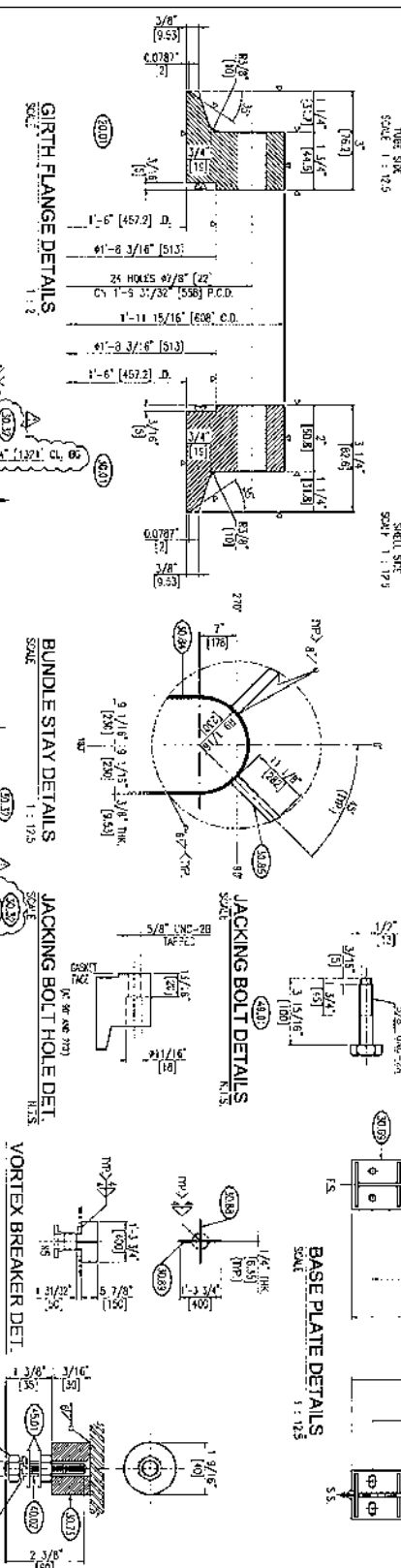
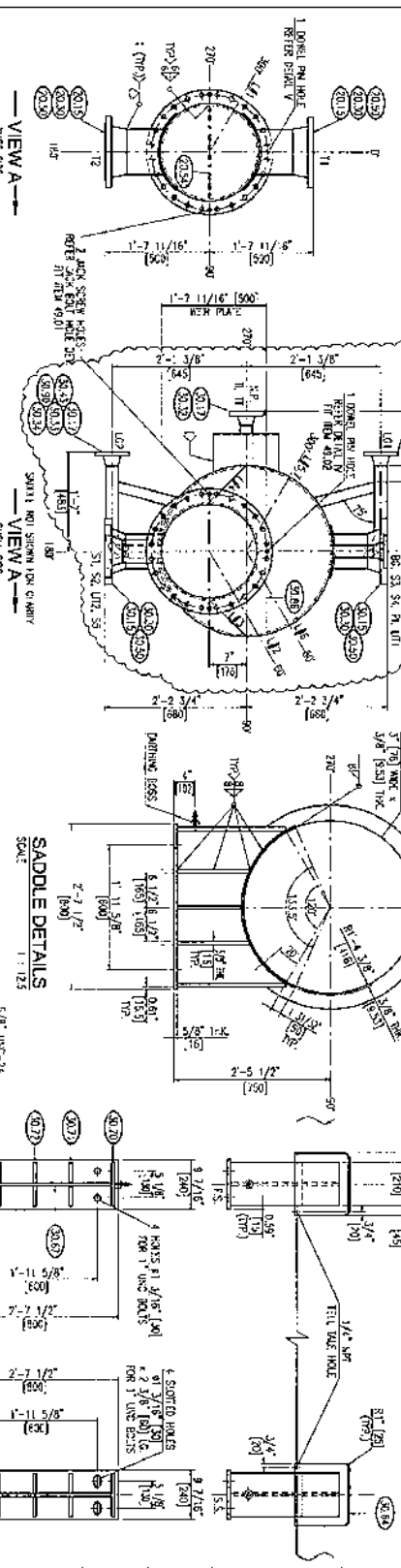
ITEM	NO.	DESCRIPTION	QTY. (REQUIRED LENGTH)
101	1	U-TUBES	17
102	1	PLATE	1
103	1	PLATE	1
104	1	PLATE	1
105	1	PLATE	1
106	1	PLATE	1
107	1	PLATE	1
108	1	PLATE	1
109	1	PLATE	1
110	1	PLATE	1
111	1	PLATE	1
112	1	PLATE	1
113	1	PLATE	1
114	1	PLATE	1
115	1	PLATE	1
116	1	PLATE	1
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121	1	PLATE	1
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242	1	PLATE	1
243	1	PLATE	1
244	1	PLATE	1
245	1	PLATE	1
246	1	PLATE	1
247	1	PLATE	1
248	1	PLATE	1
249	1	PLATE	1
250	1	PLATE	1



NO.	REVISION	DATE	BY	CHKD.
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

ITEM	NO.	DESCRIPTION	QTY.	UNIT
101	1	U-TUBES	17	
102	1	PLATE	1	
103	1	PLATE	1	
104	1	PLATE	1	
105	1	PLATE	1	
106	1	PLATE	1	
107	1	PLATE	1	
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212	1	PLATE	1	
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214	1	PLATE	1	
215	1	PLATE	1	
216	1	PLATE	1	
217	1	PLATE		

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**NOZZLE SCHEDULE**

NOZZLE NO.	SIZE	TYPE	LOCATION	REF. TAG	AT	BT	RT	LT
1	2"	ST	STEAM INLET	101	101	101	101	101
2	2"	ST	STEAM OUTLET	102	102	102	102	102
3	2"	ST	STEAM INLET	103	103	103	103	103
4	2"	ST	STEAM OUTLET	104	104	104	104	104
5	2"	ST	STEAM INLET	105	105	105	105	105
6	2"	ST	STEAM OUTLET	106	106	106	106	106
7	2"	ST	STEAM INLET	107	107	107	107	107
8	2"	ST	STEAM OUTLET	108	108	108	108	108
9	2"	ST	STEAM INLET	109	109	109	109	109
10	2"	ST	STEAM OUTLET	110	110	110	110	110

**ITEMS DESCRIPTION MATERIAL QTY. REQUIRED**

ITEM NO.	DESCRIPTION	MATERIAL	QTY. REQUIRED
20001	DRUM	SA193	1
20002	HEAD	SA193	2
20003	HEAD	SA193	2
20004	HEAD	SA193	2
20005	HEAD	SA193	2
20006	HEAD	SA193	2
20007	HEAD	SA193	2
20008	HEAD	SA193	2
20009	HEAD	SA193	2
20010	HEAD	SA193	2
20011	HEAD	SA193	2
20012	HEAD	SA193	2
20013	HEAD	SA193	2
20014	HEAD	SA193	2
20015	HEAD	SA193	2
20016	HEAD	SA193	2
20017	HEAD	SA193	2
20018	HEAD	SA193	2
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20029	HEAD	SA193	2
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20092	HEAD	SA193	2
20093	HEAD	SA193	2
20094	HEAD	SA193	2
20095	HEAD	SA193	2
20096	HEAD	SA193	2
20097	HEAD	SA193	2
20098	HEAD	SA193	2
20099	HEAD	SA193	2
20100	HEAD	SA193	2

**NOTES:**

1. ALL DIMENSIONS ARE IN MM, UNLESS OTHERWISE SPECIFIED.
2. ALL DIMENSIONS MUST BE TAKEN TO THE PRINCIPAL CENTER LINE ON THE EXCHANGER UNLESS OTHERWISE SPECIFIED.
3. THE FIRST DIMENSION (2 AND) OF PATTERN PLATE FROM THE CENTER LINE SHALL BE FULL PATTERNING MARGIN.
4. W: UP TO 500 MM
5. W: 125 MM TO 250 MM

**QTY. FOR 1 UNIT, 1 UNIT REQUIRED.**

**APPROVED FOR CONSTRUCTION**  
24 OCT 2005  
PT. HEAT EXCHANGERS INDONESIA

**ASSEMBLY**

**CONSTRUCTION DETAILS**  
STABILIZER BOILER  
ITEM NO.: TBA

**PT. HEAT EXCHANGERS INDONESIA**  
A MEMBER OF THE HUBSON HEI GROUP OF COMPANIES

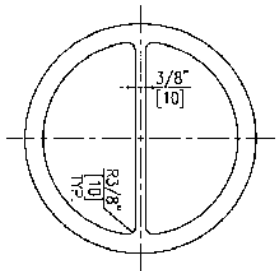
**B0811/3-C**  
A1

**CONSTRUCTION**  
SCALE: 1/25

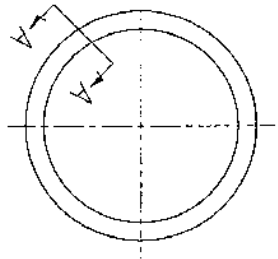
REV: 1



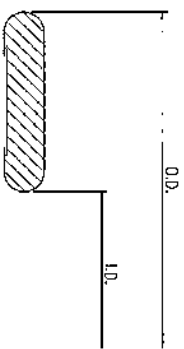
THE SPECIFIC GASKET PARAMETERS FOR ANY COVERS AND/OR REASSEMBLES OF THE DESIGN IT COVERS ARE THE PROPERTY OF HEAT EXCHANGERS INDONESIA. THE DESIGN AND/OR REASSEMBLES OF THE DESIGN IT COVERS ARE THE PROPERTY OF HEAT EXCHANGERS INDONESIA. THE DESIGN AND/OR REASSEMBLES OF THE DESIGN IT COVERS ARE THE PROPERTY OF HEAT EXCHANGERS INDONESIA. THE DESIGN AND/OR REASSEMBLES OF THE DESIGN IT COVERS ARE THE PROPERTY OF HEAT EXCHANGERS INDONESIA.



TYPE A



TYPE B



GASKET CROSS SECTION

REV	DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED
0	05.09.05	BASED ON PER CLIENT COMMENTS AND ISSUED FOR APPROVAL	US	US	US
A	09.08.05	ISSUED FOR APPROVAL	US	US	US

**NOTES:**

- QUANTITIES ARE FOR ONE UNIT. ONE UNIT REQUIRED. SPARES INCLUDED.
- ALL RADI ARE 9mm UNLESS NOTED OTHERWISE.
- ONE PIECE CONSTRUCTION (PARTITION BARS MAY BE WELDED TO PERIPHERY, THE WELD MUST BE SMALLER THAN THE GASKETS COMPRESSED THICKNESS)
- STANDARD FLANGE GASKETS : NON METALLIC PER ANSI B16.21  
DOUBLE JACKETED & SPIRAL WOUND PER ANSI B16.20
- REFER TOLERANCE TABLE FOR SPIRAL WOUND GASKETS LESS THAN 3'-11 1/4" [1200] I.D. SPECIAL NON METALLIC & DOUBLE JACKETED GASKETS, REFER SPECIFICATION WES-SWG REV. 4 FOR TOLERANCES FOR SPIRAL WOUND GASKETS GREATER THAN 3'-11 1/4" [1200] I.D.

**LEGEND - CONSTRUCTION DESIGNATION/ TOLERANCES**

S.W.S.S.F.F. = SPIRAL WOUND STAINLESS STEEL FLEXICARB FILLED  
S.W.S.S.T.G.F. = SPIRAL WOUND STAINLESS STEEL GRAPHITE FILLED  
S.W.S.S.M.A.F. = SPIRAL WOUND STAINLESS STEEL & NON ASBESTOS FILLED  
I.C.N.A. = IRON CLAD NON ASBESTOS  
I.C.A. = IRON CLAD ASBESTOS  
C.N.A.F. = COMPRESSED NON ASBESTOS FIBRE  
C.A.F. = COMPRESSED ASBESTOS FIBRE  
S.S.C.N.A. = STAINLESS STEEL CLAD NON ASBESTOS  
S.S.C.A. = STAINLESS STEEL CLAD ASBESTOS  
F.R.G. = FLEXICARB REINFORCED GRAPHITE  
S.S.D.J.M.A. = STAINLESS STEEL DOUBLE JACKETED NON ASBESTOS  
S.S.D.J.A. = STAINLESS STEEL DOUBLE JACKETED ASBESTOS  
I.D.U.F.F. = IRON DOUBLE JACKETED FIBER FILLED

UNLESS NOTED:  
DIAMETER ± 0.039"  
WIDTHS ± 0.0197"  
CIRCULARITY ± 0.089"  
FLATNESS ± 0.118"  
THICKNESS ± 0.0197"-0

ITEM No.	60.01	60.02
TYPE	A	B
OUTSIDE DIAMETER (O.D.)	1'-7 15/16" [466]	1'-7 15/16" [466]
INSIDE DIAMETER (I.D.)	1'-7 1/8" [446]	1'-7 1/8" [446]
CONSTRUCTION (SEE LEGEND)	S.S.D.J.M.A.	S.S.D.J.M.A.
PERIPHERY GASKET METAL	304 SS	304 SS
FILLER	NON ASBESTOS	NON ASBESTOS
THICKNESS	0.118" [3]	0.118" [3]
PASS RIB GASKET METAL	304 SS	304 SS
HELPER	NON ASBESTOS	NON ASBESTOS
THICKNESS	0.118" [3]	0.118" [3]
INNER RING MATERIAL		
OUTER RING MATERIAL		
GASKET FACTOR	3.75	3.75
PASS RIBS	9000	9000
SEWING PERIPHERY	9000	9000
SHEARS PERIPHERY	9000	9000
PASS RIBS	9000	9000
LOCATION	20.01-2.01	30.01-2.01
FLANGE GASK. FACE FINISH	25um-250um	25um-250um
QUANTITY FOR HYDROTTEST	1	1
QTY REPLACED AFTER HYDROTTEST	-	-
QUANTITY SUPPLIED AS SPARES	3	3
TOTAL QUANTITY	4	4
REMARKS		

QTY. FOR 1 UNIT, 1 UNIT REQUIRED

APPROVED FOR CONSTRUCTION  
Date: 29 SEP 2005  
For PT Heat Exchangers Indonesia

**PT. HEAT EXCHANGERS INDONESIA**  
A MEMBER OF THE HUDSON BEI GROUP OF COMPANIES

**GASKET DETAILS**  
STABILIZER REBOILER  
ITEM No. : TBA

HEI DRG. No. **B0811/3-60**  
SCALE **A3**

STATUS **CONSTRUCTION**  
SCALE N.T.S.

EX DRG. No. **1013-30-04-DR-002-A-005**  
REV. 0

ASSOCIATED DRS:  
SETTING PLAN  
BUCKET  
CONSTRUCTION  
CALCULATIONS

CLIENT: PRESSON ENERTEK  
CLIENT AND THIRD PARTY: KAHN VILL. DIV. 1 2004 EDITION, TEMA 8th EDITION  
ORDER No.  
PLAN  
PROJECT: EASTERN GAS FIELD DEVELOPMENT PROJECT  
PHASE - III