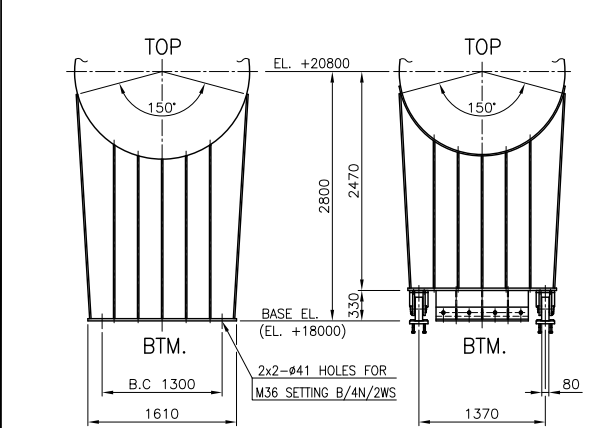
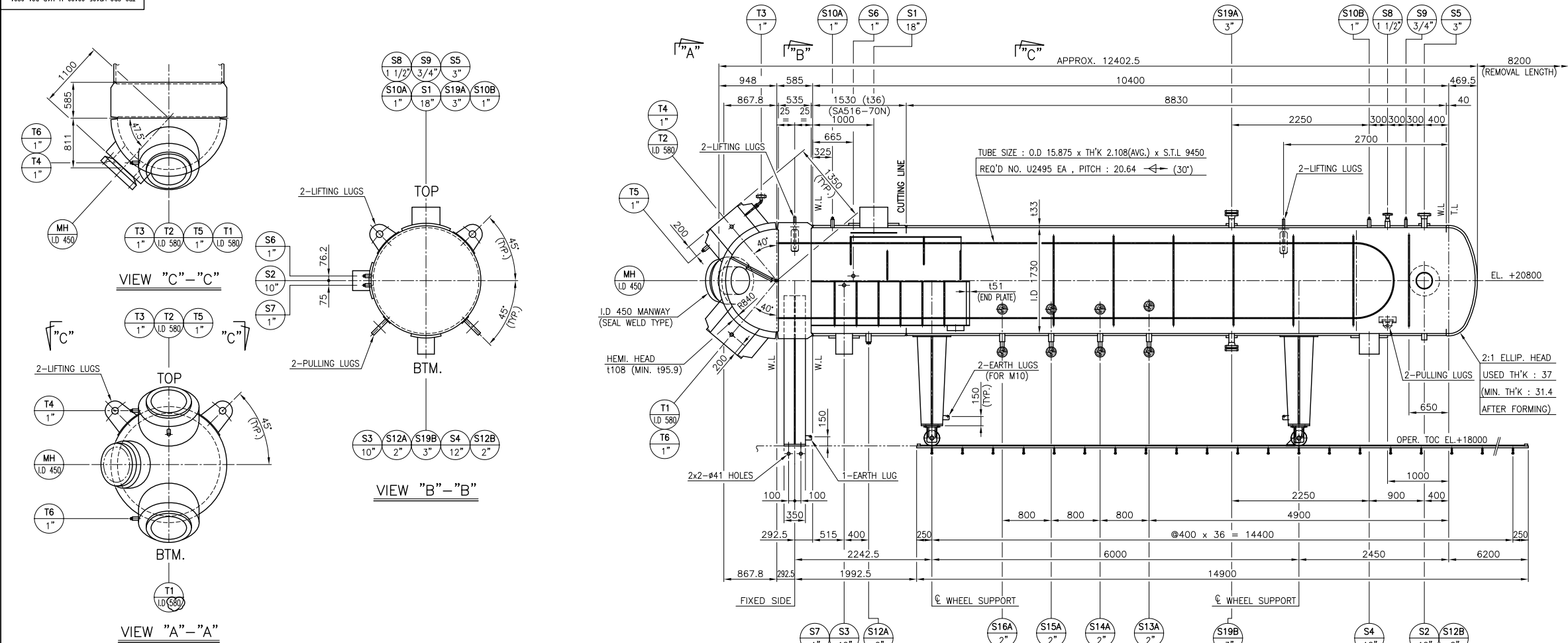
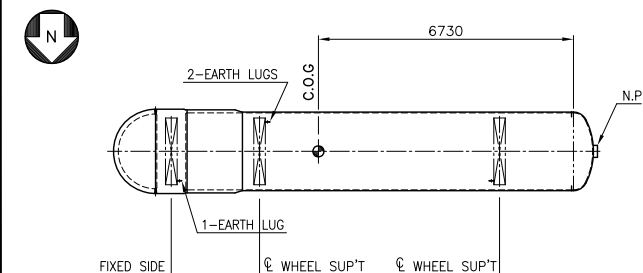




SUPPORT DETAIL

WHEEL SUPPORT DETAIL

ALLOWABLE NOZZLE LOADS									
NOZZLE MARK	SIZE (INCH)	FR (kg)	Fy=Pr (FRx0.5)	Fz=Vc (FRx1)	Fx=VL (FRx1)	MR (kg-m)	Mx=Mc (MRx0.5)	Mz=ML (MRx0.5)	My=Mt (MRx0.8)
S1	18"	11064	5532	11064	11064	11903	5952	5952	9522
S2,S3	10"	5493	2747	5493	5493	4512	2256	2256	3610
S4	12"	6583	3292	6583	6583	5832	2916	2916	4666
T1,T2	LD 580	41972	20986	41972	41972	53116	26558	26558	42493



KEY PLAN

INST. LEVEL SKETCH DIAGRAM

VIEW "C"

ASME CODE STAMPED WORK (U)

FOR FINAL

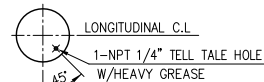
Doelim Industrial Co., Ltd.	
Job No.	110180
A - APPROVED	
B - APPROVED WITH COMMENTS	
C - RETURNED FOR CORRECTION	
D - REJECTED	
N - NOT APPLICABLE (REFERENCE ONLY)	
SIGNED BY :	DATE :
DICS PERMISSION TO PROCEED OR REVIEW TAKEN ON VENDOR PRINTS SHALL NOT RELIEVE VENDOR FROM ITS RESPONSIBILITIES OR LIABILITIES UNDER THE PURCHASE ORDER.	

18	DETAIL OF NAME PLATE	TB2-SDC.VP105-00100-M-M1B-DSW-0819
17	DETAIL OF INSULATION SUPPORT	TB2-SDC.VP105-00100-M-M1B-DSW-0818
16	DETAIL OF NOZZLE (4/4)	TB2-SDC.VP105-00100-M-M1B-DSW-0817
15	DETAIL OF NOZZLE (3/4)	TB2-SDC.VP105-00100-M-M1B-DSW-0816
14	DETAIL OF NOZZLE (2/4)	TB2-SDC.VP105-00100-M-M1B-DSW-0815
13	DETAIL OF NOZZLE (1/4)	TB2-SDC.VP105-00100-M-M1B-DSW-0814
12	DETAIL OF MANHOLE	TB2-SDC.VP105-00100-M-M1B-DSW-0813
11	FOUNDATION DRAWING	TB2-SDC.VP105-00100-M-M1B-DSW-0812
10	DETAIL OF SADDLE	TB2-SDC.VP105-00100-M-M1B-DSW-0811
9	HEMI. HEAD & PASS PARTITION DETAIL	TB2-SDC.VP105-00100-M-M1B-DSW-0810
NO.	DRAWING NAME	DRAWING NO.

REFERENCE DWG.

GENERAL NOTES

- ALL DIMENSIONS ARE IN "MM" UNLESS OTHERWISE NOTED.
 - ALL WELDS TO BE CONTINUOUS EXCEPT AS NOTED.
 - INTERNAL WELD SURFACE OF SHELL AND NOZZLE INSIDE TO BE FLUSHED.
 - ALL BOLT HOLES TO STRADDLE THE NORTH-SOUTH PLANT OR HORIZONTAL AND VERTICAL AXIS OF HEAT EXCHANGER, CENTER LINES.
 - DIMENSIONS TO BAFFLES ARE MEASURED TO CENTER LINE OF EACH PLATE.
 - GASKET CONTACT SURFACE OF FLANGE ;
 - GIRTH FLANGE & TUBESHEET : 125~250 AARH (WITH SERRATION)
 - NOZZLE FLANGE : 125~250 AARH. (WITH SERRATION)
 - REINFORCING PADS FOR NOZZLES SHALL BE TAPPED WITH AT LEAST ONE (1) TELL TALE HOLE NPT 1/4" WITH HEAVY GREASE
8. SPARE PART :
- | | COMMISSIONING AND START-UP | TWO YEARS OPERATION (AS AN OPTION) |
|--------------|----------------------------|------------------------------------|
| GASKET | 200% | 200% |
| BOLTS & NUTS | 10% (MIN. 2SETS) | 10% (MIN. 2SETS) |
9. GASKET MATERIAL AS FOLLOWS.
- a) NOZZLE FLANGE GASKET MATERIAL : SPIRAL WOUND (14.5)
- FILLER : FLEXIBLE GRAPHITE
 - INNER RING : 304 S.S
 - HOOP : 304 S.S
 - OUTER RING : C.S
10. PAINTING SPEC. : SEE SPEC. NO. TB2-0-LI-011-0020-R2-ANNEX-7
11. INSULATION MATERIAL : MINERAL WOOL



LONGITUDINAL C.L.

1-NPT 1/4" TELL TALE HOLE

W/HEAVY GREASE

DESIGN DATA

CODE	ASME SEC.VIII DIV.1 2010 ED. + '2011 ADD. / HEI	
NO. OF REQ'D	2 (TWO)	CODE STAMP
SURFACE AREA (EFF.) (m ²)	2207.3	TYPE
		U-TUBE
FLUID NAME	STEAM / DRAINS	FEED WATER
DENSITY (kg/m ³)	15.69 / 849	871 / 816
DESIGN PRESS. (barg)	F.V / 47	300
DESIGN TEMP. (SHELL/SKIRT) (°C)	265 / 350	285
OPER. PRESS. (kPa)	40 / 72.7	210
OPER. TEMP. (IN/OUT) (°C)	331.42/256.9 / 212.7	207.1 / 251.3
HYDRO. TEST PRESS. (SHOP) (barg)	70.55	450.18
HYDRO. TEST PRESS. (FIELD) (barg)	-	-
M.A.W.P (HOT & CORR.) (barg)	47.03	300.12
M.A.P (NEW & COLD) (barg)	-	-
P.W.H.T	NO	YES
STRESS-RELIEVED	YES (HEAD ONLY)	-
RADIOGRAPH (S/H)	FULL / FULL	- / FULL
JOINT EFFICIENCY (S/H) (%)	100 / 100	- / 100
CORR. ALLOW. (mm)	1.6	1.6 (T.S : 3.0 mm)
NO. OF PASS	1 (ONE)	2 (TWO)
M.D.M.T (°C)	4.8	4.8
M.M.T (°C)	259.94	232.42
PRESSURE DROP (ALLOW./CALC.) (bar)	- / 0.3187/0.0009/0.3275	1.14 / 0.8684
INSULATION (mm)	SHELL : 75 / SKIRT : 150	75
FIRE PROOFING (mm)	-	-
WIND VELOCITY	ASCE 7-05 (V=52m/sec, I=1.15, EXPOSURE D)	
SEISMIC	ASCE 7-05 (SITE CLASS E, I=1.25)	
TUBE TO TUBESHEET JOINT	STRENGTH WELDING WITH LIGHT EXPANDING	
VOLUME (m ³)	15.58	6.7
WEIGHT (kg)		
ERECTION	78200	EMPTY
OPERATING	87400	FULL OF WATER
		79500

MATERIAL SPECIFICATIONS

SHELL/HEAD	SA516-70N/SA516-70N	EARTH LUG/NAME PLATE	304 S.S
SHELL FLANGE	-	SETTING BOLT/NUT	SA307-B/SA563-A(H.D.G.)
SKIRT SHELL	SA516-70N	INSULATION SUPPORT	SA516-70/SA36
CHANNEL/HEAD	-/SA516-70N	SUPPORT SADDLE/PAD	SA283-C/SA516-70N
CHANNEL COVER	-	BASE PLATE	SA283-C
CHANNEL FLANGE	-	STUD BOLT/NUT	-
TUBESHEET	SA350-LF.2 CL.1	CHANNEL COVER	-
TUBE	SA566-C2 (K03006)	STATIONARY	-
BAFFLE/SUPPORT PLATE	SA516-70/-	SHELL COVER	-
IMPINGEMENT BAFFLE	304 S.S	CHANNEL NOZZLE	SA193-B7/SA194-2H
PASS PARTITION PLATE	SA516-70N	SHELL NOZZLE	SA193-B7/SA194-2H
TIE ROD/SPACER	SA36/SA53-B	INTERNAL	SA193-B8/SA194-8
ORIFICE PLATE	304 S.S	GASKET	-
SHROUDS	DSH	SA240-304	FLOATING HEAD
DC	SA516-70	CHANNEL SIDE	-
NOZZLE FLANGE	SEE "NOZZLE TABLE"	SHELL SIDE	-
(SHELL SIDE) NECK	SEE "NOZZLE TABLE"	SHELL COVER	-
SKIRT SHELL PART	SEE "NOZZLE TABLE"	SHELL NOZZLE	SEE NOTE "9"
NOZZLE FLANGE	SEE "NOZZLE TABLE"	CHANNEL NOZZLE	SEE NOTE "9"
(TUBE SIDE) NECK	SEE "NOZZLE TABLE"	INSULATION	SEE NOTE "11"

DOCUMENT SUBMISSION STATUS:

NOTE	DATE	FOR FINAL	S.W.E.	H.K.L.EE	J.C.YOON	S.S.KIM
03 MAR.2016		FOR FINAL	S.W.E.	H.K.L.EE	J.C.YOON	S.S.KIM
24 FEB.2014		FOR FINAL	S.W.E.	H.K.L.EE	J.C.YOON	S.S.KIM
27 DEC.2013		BY OWNER COMMENT	S.W.E.	H.K.L.EE	J.C.YOON	S.S.KIM
11 SEP.2013		BY OWNER COMMENT	S.W.E.	H.K.L.EE	J.C.YOON	S.S.KIM
30 APR.2013		BY OWNER COMMENT	S.W.E.	H.K.L.EE	J.C.YOON	S.S.KIM
26 Jun.2013		FOR PRELIMINARY	S.W.E.	H.K.L.EE	J.C.YOON	S.S.KIM
REV	DATE	DESCRIPTION	PREP	CHKD	APRD	APRD

OWNER	VIETNAM OIL AND GAS GROUP (P.V.N)	OWNER'S CONSULTANT	FICHTNER GmbH & Co. KG FICHTNER PV POWER PCC
EPC CONTRACTOR	PETROVIETNAM CONSTRUCTION JOINT STOCK CORPORATION (PVC)	EPC CONTRACTOR'S CONSULTANT	WorleyParsons
POWER ISLAND PACKAGE SUPPLIER	SOJITZ CORPORATION		DAELIM

PROJECT TITLE THAI BINH2 THERMAL POWER PLANT 2 x 600MW

DRAWING TITLE HP FEEDWATER HEATER #7 11LAD10AC007/21LAD10AC007 GENERAL ASSEMBLY SHEET 1/19

VENDOR NAME	FUNCTION	NAME	SIGN	DATE
WOORYANG HC Co., Ltd	DRWN	S.W.E.		03 MAR.2016
	CHKD	H.K.L.EE		03 MAR.2016
	APPD	J.C.YOON		03 MAR.2016
	APPD	S.S.KIM		03 MAR.2016

DRAWING NO. TB2-SDC.VP105-00100-M-M1B-DGA-0801 JOB NO. 110180 SCALE 1/40 REV. NO. 1

FILE NAME: TB2-SDC.VP105-00100-M-M1B-DGA-0801