

DOCUMENT SUBMISSION STATUS:AP						
NOTE:						
0	Nov 20 2015	FOR FINAL	wangfang	jiabin	wanchengjun	wangyingjiang
C	June 26 2015	FOR APPROVAL	wangfang	wangchengjun	wangyingjiang	wumingjun
B	Dec 20,2014	FOR APPROVAL	wangfang	wangchengjun	wangyingjiang	wumingjun
A	Sep 30,2014	FOR APPROVAL	wangfang	wangchengjun	wangyingjiang	wumingjun
REV.	DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED	APPROVED
OWNER			OWNER'S CONSULTANT			
 VIETNAM OIL AND GAS GROUP (PVN)			 FICHTNER  PVPOWER PCC			
EPC CONTRACTOR			EPC CONSTRUCTOR'S CONSULTANT			
 PETROVIETNAM CONSTRUCTION JOINT STOCK CORPORATION (PVC)			 WORLEYPARSONS			
POWER ISLAND PACKAGE SUPPLIER						
 SOJITZ CORPORATION			 DAELIM INDUSTRIAL CO., LTD.			
PROJECT TITLE						
THAI BINH 2 THERMAL POWER PLANT 2 x 600MW						
DRAWING / DOCUMENT TITLE						
TECHNICAL DATA SHEETS OF BOTTOM ASH HANDLING SYSTEM						
BIP SUPPLIER:	BIP SUB-SUPPLIER:		FUNCTION	NAME	SIGN	DATE
	 广东省电力设计研究院 中国能建 GUANGDONG ELECTRIC POWER DESIGN INSTITUTE GEDI		DRWN	wangfang		Nov 20 2015
			CHKD	wangchengjun		Nov 20 2015
			APPD	wangyingjiang		Nov 20 2015
BWBC						
DOCUMENT NO: TB2-SDC.VP101-00100-M-M12-DAS-0003			No of page: 10		Scale	Rev.0

Document Review Comment Sheet

Daelim's Ref. No : TB2-DIC-BWBC-T-2289

No.	Document No.	Rev	Title	Purpose	Approval Status
1	TB2-SDCVP101-00100-M-M12-DAS-0003	C	TECHNICAL DATA SHEETS OF BOTTOM ASH HANDLING SYSTEM	AP	B
No.	Daelim's Comments		Vendor's Response		
1	TB2-SDCVP101-00100-M-M12-DAS-0003				
1.1	If possible,Please make material designation more specifically.		Noted, it has been modified.		
1.2	Please correct it.		Noted, it has been modified.		
1.3	It will be 52m/s.		Noted, it has been modified.		

* Legend

Purpose:

AP - For Approval
RE - For Reference
FF - For Final / FC - For Construction
F - Final / AB - As Built
INFO - For Information

Approval Status:

A - Approved
B - Approved with Comments
C - Returned for Correction
D - Rejected
N - Reference Only

Document Review Comment Sheet

PEB Ref. No : TB2-PEB-SDC-M12-TVI-10381

No.	Document No.	Rev	Title	Purpose	Review Status	
					In	Out
1	TB2-SDC.VP101-00100-M-M12-DAS-0003	C	TECHNICAL DATA SHEETS OF BOTTOM ASH HANDLING SYSTEM	AP		A
No.	Owner/PMC's Comments	Item status	Contractor's Response			
I	General comments					
1	TB2-SDC.VP101-00100-M-M12-DAS-0003					
	To add the lubrication oil/grease specification for lubricating of Component/Equipment with a note that, the oil/grease shall have to use the product of firm that they already have brander or factory in Vietnam Market if any, such as: Idemitsu, Hangzhou Derunbao Grease Co.,Ltd or Sinopec.		Noted,The lubrication oil can use the product of firm that they already have drander or factory in Vietnam as long as the oil product meet the oil quality requirement.			

* Legend

Contractor Purpose:

AP - For Approval
 RE - For Reference
 FC - For Construction
 AB - As Built
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Approval Status:

A - Approved
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 I - Accepted for Reference / IB - Accepted for Reference with Comments / R - Returned for Correction

	Technical Data Sheets		Thai Binh 2 Thermal Power Plant
1.0	Bottom Ash Handling System(per unit)		
	Type / Manufacturer	pneumatic bottom ash handling system/Sizhou/	
	Bottom ash hopper	1	Number
	Bottom Ash Hopper volume	150	m ³
	Bottom Ash Hopper KKS		16ETD01BB001 26ETD01BB001
	Quantity of cooling air for bottom ash conveyor	21000(max.)	Nm ³ /hr
	Specification for bottom ash conveyor		Alstom Power TMSU0016
	Ash discharging flow normal rate per bottom ash conveyor	t/h	13.23
	Ash discharging flow Max. rate per bottom ash conveyor	t/h	38.8
	Width of the bottom ash conveyor belt	mm	1600
	Capacity of cooling fan for ash hopper of boiler furnace	Nm ³ /h	12166
	Conveying speed of cleaning conveyor	m/min	0.27~2.7
1.1	Dry-type Ash Slag Conveyor		
	bottom ash conveyor KKS		16ETD01AF001 26ETD01AF001
	Type	-	Mesh Belt Conveyor
	Quantity	set/unit	100%x1
	Mesh or chain belt conveyor,		
	1) Mesh (material/diameter)		SS316L / φ5mm
	2) Pan (material/thickness)		SS304 / 5mm
	3) Roller(Upper)		GB20+GB45
	4) Pulley(Head)		GB20+GB45
	5) Casing		Q235B
	Length of conveyor, center to center-centre to centre is horizontal projection length from pulley (head) to pulley (tail)	mm	61590
	1) Rise of conveyor	mm	16365

2) Inclined slope angle from horizontal	°	32
Wide of belt	mm	1600
Belt speed range, min/max	m/s	0.01~0.05
Motor power, kW/V/Enclosure/P.F.		30/400/F/IP55
Fine ash removal equipment		
1) Type		Chain conveyor
2) Quantity/unit		100% x 1
3) Capacity,	t/h	2
4) Length of chain, center to center	mm	48514
- Rise of chain	mm	6600
- Inclined slope angle from horizontal	°	32
5) Wide of spill chain,	mm	1680
6) Material		Carbon Steel
7) Chain speed range, min/max	m/s	0.045 / 0.45
8) Motor power, kW/V/Enclosure/P.F.		5.5/400/F/IP55
Ash temperature, inlet/outlet	°C	850 / 150
Cooling air requirement	m ³ /h	20942/21000

1.2	Bottom ash crusher(per	4	Number
	Primary crusher kks		16ETD01 AJ011 16ETD01 AJ021
	Secondary crusher kks		16ETD01 AJ012 16ETD01 AJ022

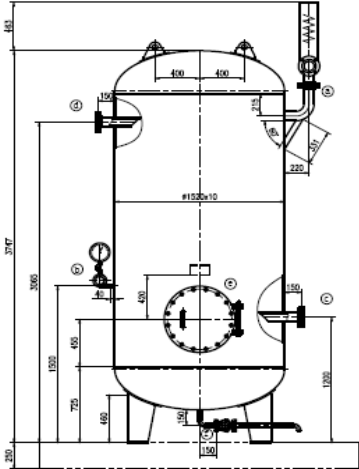
1.2.1	Primary Crusher		
	Type	-	Single roller
	Quantity	set/unit	100% x 2
	Capacity (Normal/Peak)	t/h	13.23 / 38.80
	Maximum ash size at inlet	mm	250x250
	Maximum ash size at outlet	mm	25x25
	Material		
	1) Cam		8630
	2) Anvil plate		86B30
	3) Grinder shaft		1045
	4) Casing		Carbon Steel
	Rotation	rpm	250

	Motor power, kW/V/Enclosure/P.F		37.5/400/F/IP55
1.2.2	Secondary Crusher		
	Type	-	Double Roller
	Quantity	set/unit	100% x 2
	Capacity (Normal/Peak)	t/h	13.23 / 38.80
	Maximum ash size at inlet	mm	25x25
	Maximum ash size at outlet	mm	100%<8, 95%<5
	Material		
	1) Cam		Alloy steel
	2) Anvil plate		Alloy steel
	3) Grinder shaft		1045
	4) Casing		Carbon Steel
	Rotation	rpm	300
	Motor power, kW/V/Enclosure/P.F		15x2/400/F/IP55
1.3	Intermediate Bottom ash silo(per unit)		
	Number	1	
	Type	steel structure	
	Effective volume of silo	80	m ³
	Storage capacity for bottom ash (BMCR,worst coal)	7	h
	ash pump volume of pneumatic bottom ash handling system	2	m ³
	ash pump quantity of pneumatic bottom ash handling system	2	set
	ash pump KKS in the unit 1		16ETD11BN001 16ETD12BN002
	Bottom ash pipe of pneumatic bottom ash handling system	DN200/DN250	
	Ash pipe quantity for pneumatic fly ash handling system per unit	2 pipes	
	Material/thickness		
	1) Shell		Q235B / 10mm
	2) Roof		Q235B / 6mm
1.4	Bag filter in the top(yes/no)	yes	Yes/No
	Number/kks		1/16ETD01 AT001
	Manufacturer		AlstomSizhou
	Filter area	27	m ²
	Filter-bag specification	Ø120×2000	mmxmm

	Operation temperature	200	°C
	Efficiency of dust collection	99.9	%
	Air to cloth ratio of bag filter	m ³ /(m ² .h)	0.8:1
1.5	Pressure relief valve		
	Number/kks		1/16ETD01 AA110
	Manufacturer		AlstomSizhou
	Release pressure (positive pressure /vacuum)	kPa	+2.58/-0.86
1.6	Hopper wall vibrator		
	Number/kks		4/16ETD01 CY001 16ETD01 CY002 16ETD01 CY003 16ETD01 CY004
	Manufacturer		Henan hebi general machinery plant
2.0	Bottom ash silo (per unit)		
	Number	1	
	Type	concrete	
	total volume of silo	450	m ³
	Storage capacity for bottom ash (BMCR,worst coal)	24	h
	Number of unloading hopper per silo	4	One of four is for future.
	Bottom aeration is provided (Yes/No)	No	
2.1	Bag filter in the top(yes/no)	yes	Yes/No
	Number/kks		1/16ETE01 AN002
	Manufacturer		AlstomSizhou
	Filter area	180	m ²
	Filter-bag specification	Ø130×3500	mmxmm
	Operation temperature	120	°C
	Efficiency of dust collection	99.9	%
	Air to cloth ratio of bag filter	m ³ /(m ² .h)	0.8:1
2.2	Dry ash unloader		
	Type/Manufacturer /	Dry ash unloader/AlstomSizhou /SZJ-100	
	amount	2	set(per silo)
	kks		16ETE11 AM031 16ETE12 AM032
	output	100	t/h
	Driving type	DC	
	Lifting motor power	0.75	KW
	Motor speed	980	r/min
	Insulation grade	IP54	
	Level of protection	F	

	Bulk head route	2000	mm
	Bulk head route lifting speed	8	m/min
	Dust fan		
	model	QY9-19N0.4.5A	
	Air quantity	33.3	m3/min
	Air pressure	3584	Pa
	Motor power	4	KW
	Rotate speed	2890	r/min
	Insulation grade	IP54	
	Level of protection	F	
2.3	Target box		
	Manufacturer	Sizhou	
	Inlet size	DN250	
	Outline dimention	710x1160	mmxmm

Note: The lubrication oil can use the product of firm that they already have drander or factory in Vietnam as long as the oil product meet the oil quality requirement.

I.A RECEIVER TANK TECHNICAL DATA SHEET				Rev.	Date	PAR'D	CHK'D	APP'D	Sheet No.	
				A	2014.9.30	wangfang	wanchengjun	wangyingjinag	1 of 1	
				B	2014.12.24	wangfang	wanchengjun	wangyingjiang		
				C	2015.6.26	wangfang	wanchengjun	wangyingjiang		
				0	2015.11.20	wangfang	jiabin	wanchengjun		
	Client	VIETNAM OIL AND GAS GROUP (PVN)		Location		VIETNAM				
	Project Name	THAI BINH 2 THERMAL POWER PLANT 2 x 600MW		Item No.		06ETP31BB001 16QFC20BB011 26QFC20BB011 06QFC40BB003 16QFC10BB002 26QFC10BB002				
	Service	INSTRUMENT AIR RECEIVER TANK		No. Req'd		WORKING : 6 STAND-BY : 0 TOTAL : 6				
	Vendor Name	SIZHOU		Model No.		C0515000180001				
TYPE				☒ VERTICAL ☐ HORIZONTAL						
FLUID				COMPRESSED AIR						
PRESSURE		OPERATING		0.8MPa						
		DESIGN		1.0MPa						
		HYDRO. TEST		1.5MPa						
TEMPERATURE		OPERATING		20~50℃						
		DESIGN		80℃						
CORROSION ALLOWANCE				1.5mm						
CODE AND STANDARD				ASME BOILER & PRESSURE VESSEL CODE SEC. VIII DIV. 1 RULES FOR CONSTRUCTION OF PRESSURE VESSELS, Ed 2010+2011ADDENDA						
WIND VELOCITY				52 m/s						
SEISMIC ZONE				IMAX = 7 (MSK-64; MM)						
POST WELD. HEAT TREATMENT(P.W.H.T)				AS PER UCS-56,EXEMPT						
SUPPORT TYPE				☐ SKIRT ☒ LEG ☐ SADDLE PLATE						
RADIOGRAPH (SHELL / HEAD)				UW-52						
SURFACE TREATMENT				TREDT WITH ABRASIVE BLASTING, GRADE OF FINISHING SA 2 1/2						
PAINTING / COLOR NO				FUTURA AS/30475(RAWHIDE)						
WEIGHT		ERECTION		1780kg						
		OPERATING		1840kg						
		FULL of WATER		6780kg						
DIMENSION (I.D x T.L~T.L x THICKNESS)				ID1500X2662~2662X10						
VOLUME				5m³						
MATERIAL		SHELL / HEAD		SA-516M GR.485						
		FLANGE		SA-105M						
		NOZZLE NECK		SA-106M GR.B						
		SUPPORT		SA-516M Gr.485,Q235B						
		HEX BOLT / NUT		SA-193M Gr.B7/SA-194M Gr.2H						
		OTHER		PTFE,316L,C.S						
AIR RECEIVER TANK NOZZLE SCHEDULE				SKETCH						
NOZ.	SIZE	TYPE	RAT'G	CONN.	SERVICE					
a	DN80	FL'G	C.L150	WN.RF	SAFETY VALVE					
b	Rc1/2	SCREW THREA D			PRESSURE GAUGE					
c	DN80	FL'G	C.L150	WN.RF	INLET					
d	DN80	FL'G	C.L150	WN.RF	OUTLET					
e	DN450	FL'G	C.L150	WN.RF	MANHOLE					
f	DN25	FL'G	C.L150	WN.RF	DRAIN					
ACCESSORIES										
1. GLOBE VALVE,DN25,PN1.0										
2. SAFETY VALVE DN80										
3. Pressure gaugePRESSURE GAUGE										
4. THREE-WAY PLUG VALVE 1/2"										
5. PRESSURE GAUGE BEND K01-02 90°										
6. REINFORCEMENT φ760/φ478×8										

	ACCESSORIES
	1. GLOBE VALVE,DN25,PN1.0
	2. SAFETY VALVE DN150
	3. Pressure gaugePRESSURE GAUGE
	4. THREE-WAY PLUG VALVE 1/2"
	5. PRESSURE GAUGE BEND K01-02 90°
	6. REINFORCEMENT $\phi 300/\phi 199 \times 8$

[illegible]

	ACCESSORIES