C02A137-4140-000-A-02-S01

M 1:30

16534

20 GAP | 5874 | 5180 | 20 GAP | 5440

684 | 2400 | 2400 | 2000 | 2000 | 2000 | 2400 | 2400 | 300

384 | 300 | 390 | 1590 | 1590 | 390 | 250

B | C | X | Y | Z

FB | LB | LB | FB | LB | FB | LB | LB

ASM-001

BUSHING 5 C02A137-4100-001

2 CE-BRACKET FOR BEARING C02A137-4100-006

4 BUSHING C02A137-4100-008

CE-DRIVE BOX

MUST BE STRAIGHT FOR FULL LENGTH

100 | 40 x 400 = 16000 | 100

150 | 16200 | 150

EE ED EB EA | E1 E5 | E2 E4 | E3 E3

E
M 1:5

510 | 255 | 345 | 165

B-B
M 1:5

HEX.NUT M12 | 140 | 250

3 CE-HAMMER C02A137-4100-004

C-C
M 1:5

HEX. BOLT M16x170 10 | HEX. NUT M16 11 | WASHER 16 12

CE-BEARING 6 C02A137-4100-005

TACK WELD | 165 | 60 | 60 | 20 | 400

LOOSE BEARING
LB
X M 1:5

HEX. BOLT M12x120 7 | HEX. NUT M12 8 | WASHER 12 9

5 BUSHING C02A137-4100-001

70 | 15 | 15 | TACK WELD | ϕ60

FIXED BEARING
FB
Y M 1:5

5 BUSHING C02A137-4100-001

44 | 2 | 2 | TACK WELD | ϕ60

14 STOP BAR C02A137-4000-001

HEX. BOLT M16x40 13 | HEX. NUT M16 11 | WASHER 16 12

80 | 200 | 380 | 25 | 60 | 800 (SYSTEM) | 600 | 510

ALL BOLT CONNECTIONS ARE TO BE LOCKED BY TACK WELDING AFTER ADJUSTMENTS/ALIGNMENTS

ATTENTION ERECTION

10 | 3 | 20 | 3 | 20

AFTER FINAL ASSEMBLY HEXAGONAL NUTS AND U-BOLTS ARE TO BE LOCKED BY TACK WELDING

Z M 1:5

16 HEX. BOLT M8x25

D

ϕ100 | ϕ60 | 20 | 160

D

D-D
M 1:5

TACK WELD

FITTING KEY A18x11x50 15

Si NO	DESCRIPTION		MAT'L SPEC	UNIT WEIGHT	QTY	TOTAL WEIGHT	REMARKS
	ASM-001		JIS S45C	366.09	1	366.09	C02A137-4140-002
2	CE-bracket for bearing		JIS SS400	5.66	8	45.28	C02A137-4100-006
3	CE-Hammer		JIS SS400	9.5	41	389.5	C02A137-4100-004
4	Bushing		JIS S20C	6.17	2	12.34	C02A137-4100-008
5	Bushing		JIS S45C	1.96	8	15.68	C02A137-4100-001
6	CE-Bearing		JIS S45C	4.45	8	35.6	C02A137-4100-005
7	Hex.Bolt	M12X120	JIS B1180 (4.6)	0.14	16	2.24	
8	Hex.Nut	M12	JIS B1181 (5)	0.02	16	0.32	
9	Washer	12	JIS B1256	0.01	16	0.16	
10	Hex.Bolt	M16X170	JIS B1180 (4.6)	0.33	16	5.28	
11	Hex.Nut	M16	JIS B1181 (5)	0.33	32	0.96	
12	Washer	16	JIS B1256	0.0113	32	0.3616	
13	Hex.Bolt	M16X40	JIS B1180 (4.6)	0.12	16	1.92	
14	Stop bar		JIS SS400	0.093	32	2.976	C02A137-4000-001
15	Fitting Key	A18x11x50	JIS S45C	0.02	5	0.1	
16	Hex.Bolt	M8X25	JIS B1180 (4.6)	0.02	2	0.04	

BILL OF MATERIAL — TOTAL WEIGHT FOR ONE BOILER = 881.93x8=7055.44 Kg

TOTAL WEIGHT = 881.93 Kg

FLOW DIRECTION

E6 E1 | E7 E2 | E8 E3 | E9 E4 | E10 E5 | 8250 | 8250 | 8250 | 8250

5600 | 5600 | 5600 | 5600

EA | EB | EC | ED | EE

Daelim 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 :

DIC'S PERMISSION TO PROCEED OR REVIEW TAKEN ON VENDOR PRINTS SHALL NOT RELIEVE VENDOR FROM ITS RESPONSIBILITIES OR LIABILITIES UNDER THE PURCHASE ORDER.

DOCUMENT SUBMISSION STATUS : FF

NOTE: 1. ALL DIMENSIONS SHOWN ARE IN MILLIMETERS(mm)
2. REFERENCE TO DRAWING NO: TB2-SDC.VP126-00HDE-M-M9-DRD-4140-01
3. Erector Notes
– After final adjustments are completed, hex nits are to be tack welded.
– After adjustments are completed, U-bolts have to be tack welded to Hammer Arm & Shaft.
– After installation, all rapper hammers to be checked for freedom of movement.

REV	DATE	DESCRIPTION	PREP	CHKD	APRD	APRD
2	16.Aug.2016	REVISED AS MARK	S.M LEE	S.M CHO	B.I KIM	K.H YI
1	30.Jun.2015	REVISED AS COMMENT	S.M LEE	S.M CHO	B.I KIM	K.H YI
0	23.Jun.2014	FOR FINAL	H.B CHO	S.M CHO	B.I KIM	K.H YI

OWNER: VIETNAM OIL AND GAS GROUP (PVN)

OWNER'S CONSULTANT: FICHTNER; PV POWER PCC

EPC CONTRACTOR: PETROVIETNAM CONSTRUCTION JOINT STOCK CORPORATION (PVC)

EPC CONSTRACTOR'S CONSULTANT: WORLEYPARSONS

POWER ISLAND PACKAGE SUPPLIER: SOJITZ CORPORATION

DAELIM INDUSTRIAL CO., LTD.

PROJECT TITLE: THAI BINH2 THERMAL POWER PLANT 2 x 600MW

DRAWING TITLE: CE–RAPPING for ESP, Sheet 1/2

VENDOR NAME: Hamon Korea Co., Ltd.
Hamon Plaza, 33-2, 20Gil, Banpodaero
Seocho-Gu, Seoul, Korea
Tel: +82-70-4367-2483
Fax: +82-2-3473-5378

FUNCTION	NAME	SIGN	DATE
DRWN	S.M LEE	이상민	16.Aug.2016
CHKD	S.M CHO	조상목	16.Aug.2016
APPD	B.I KIM		16.Aug.2016
APPD	K.H YI		16.Aug.2016

DRAWING NO. TB2-SDC.VP126-00HDE-M-M9-DRD-4140-01 | JOB NO. 110180 | SCALE 1/30 | REV.NO. 2

FILE NAME : C02A137-4140-000-A-02-S01

General tolerances:
Welded plate constructions: DIN EN ISO 13920 - class B / E
Prefabricated steel components: DIN 15203-2
Mechanically worked parts: DIN ISO 2768 - class m / K
Connecting flanges: Hole axis and distance ±1.0 mm
Welding quality according to QA- and QI-Plan related to order
WELDING DETAILS:
GENERAL: Welding coordination acc. to AWS A03.0
Quality requirements for weldings : AWS B02.1
Welding joint preparation acc. to AWS A02.4
Welding joint preparation for site welds must be implemented in the workshop!
All screw and weld connections in contact with flue gas must be welded gas-tight.
All fillet welds a = 3mm, if not otherwise indicated.
Welding information: Symbolic representation

Site weld | Shop weld

DIMENSIONS HAVE TO BE CHECKED
DIMENSIONS NOT VALID FOR MACHINING
SURFACE QUALITY ACC. DIN EN ISO 1302
DIMENSIONS WITHOUT TOLERANCES ACC. TO TABLE GENERAL TOLERANCES

t_m	3	4	5	6	7	8
a	2	3	3	4	4	5
t	3	4	5	6	7	8
b	4	5	6	8	9	10

Stiffener: nx60-150 | Flange connection:

Sheet metal connections:

t	3	4	5	6	7	8
a	2	3	3	4	4	5

60° | dicht / tight | To put sheets together cross joint are inadmissible! Sheets have to be arranged in an offset pattern

A1 (594mm x 841mm)