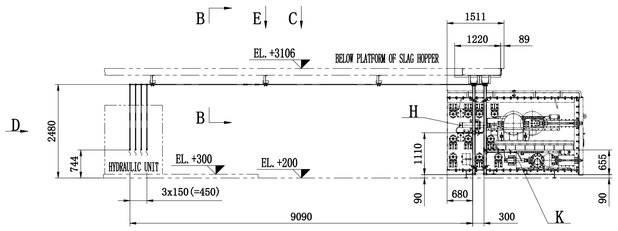
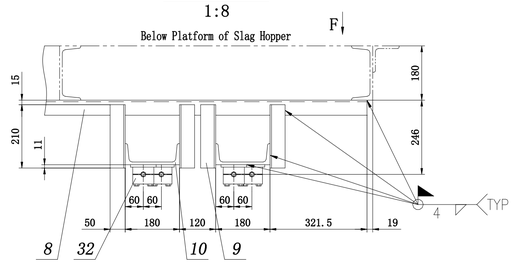
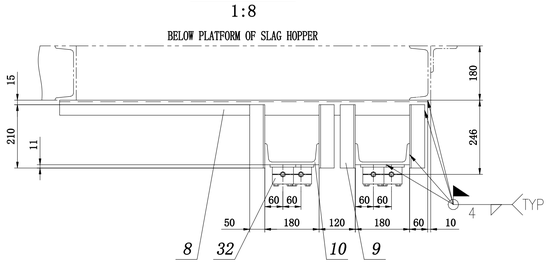
TB2-SDC.VP101-00100-M-M12-DSU-0222



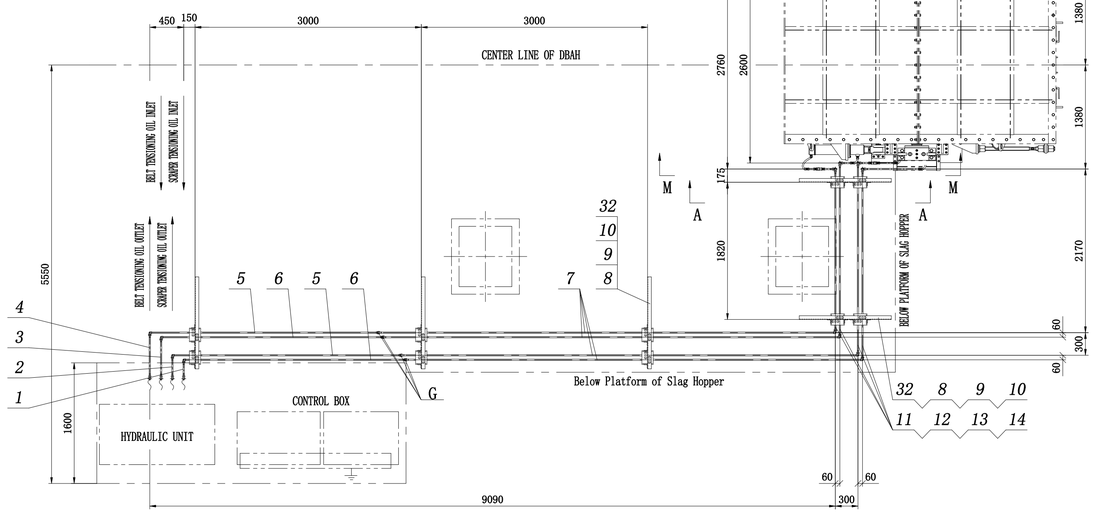

SECTION A-A
1:8



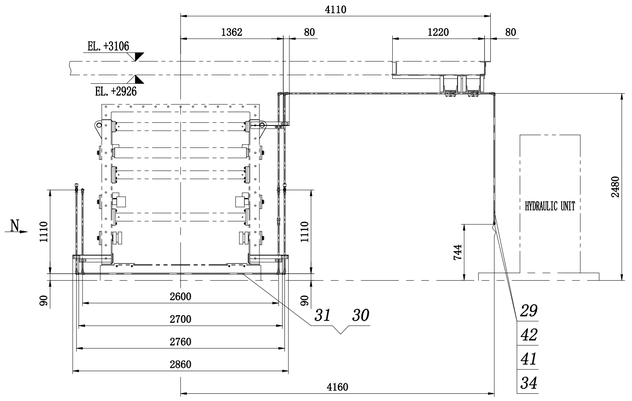

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1:8



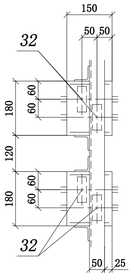

VIEW C
1:40



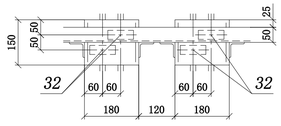

VIEW D
1:40



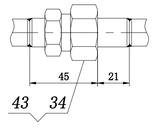

VIEW E
1:10




VIEW F
1:10




DETAIL G
1:2




## NOTES:

1. ALL DIMENSIONS AND ELEVATION ARE IN MILLIMETER(MM).
2. FINISHED GRADE ELEVATION EL. +0.00M = EL. +4.5M ABOVE MEAN SEA LEVEL.
3. ALL WELDS SHALL BE IN ACCORDING TO AWS D1.1.
4. THE QUANTITY IN THE MAJOR EQUIPMENT LIST IS FOR UNIT 1.
5. PROOF PRESSURE OF THE HYDRAULIC LINE IS 20 MPA.
6. MARKS B0203001801500_I , II, III, IV, V, VI, VII, VIII ARE EACH SHIPPING UNIT.
7. PREPARATION AND ADJUSTMENT BEFORE OPERATION:

*7.1. THE PARTS, JOINTS AND PIPES INSIDE OF HYDRAULIC STATION, OIL CYLINDER DEVICE AND ELECTRIC CONTROL CABINET SHALL BE TAKEN GOOD CARE TO AVOID DAMAGE OWING TO BURDEN FROM OUTSIDE FORCE DURING HOIST AND TRANSPORT.*

*7.2. THE OIL CYLINDER SHALL BE INSTALLED WITH A STRICT RESTRICTION ON ITS LINEARITY TO PREVENT THE OIL CYLINDER MOVING IMPROPERLY OR BEARING LOAD OF CROSS DIRECTIONS.*

*7.3. AFTER INSTALLATION AND CONNECTIONS, ALL FASTENERS SUCH AS BOLTS, SCREWS, FLANGES AND PIPE JOINTS SHALL BE RECHECKED TO MAKE SURE OF THE FIRMNESS AND RELIABILITY OF THE SEAL.*

*7.4. PIPELINES SHALL BE FLUSHED SEPARATELY WITH THE WASHING OIL AT A MINIMUM SPEED OF 7M/S(TURBULENT FLOW),AND A TEMPERATURE OF 60℃.ALL WELDS, BENDS AND CONNECTIONS SHALL BE STRICKEN WITH WOODEN OR COPPER STICK WHILE FLUSHING. ATTENTION: THE CLEANLINESS OF PIPELINES SHOULD BE UP TO NAS9 AT LEAST.*

*7.5. OIL SHALL BE ADDED INTO THE OIL BOX THROUGH AIR FILTER BY USING OIL FILTER VEHICLE (AT LEAST 25μM OF FILTER FINENESS ).*

*7.6. LIQUID LEVEL SHALL BE CHECKED TO BE IN A COMPARATIVELY HIGH POSITION OF THE INDICATOR.*

*7.7. SYSTEM PRESSURE SET VALVE SHOULD BE CONFIRMED TO BE IN A START-UP STATE (ADJUSTING BOLTS OF OVERFLOW VALVES ARE ALL LOOSENED, I.E. PRESSURE IS ZERO ).*

*7.8. ACCUMULATOR SHALL BE PERFORMED AIR CHARGING. PUT THE TWO EXTERNAL SHUT-OFF VALVES, SHUT-OFF VALVE OF ACCUMULATOR OPENING, RELEASE VALVE OF ACCUMULATOR AT THE SHUT-OF STATE. WHEN CHARGING, THE PRESSURE SHOULD BE NOT MORE THAN 80% OF THE MINIMUM WORKING PRESSURE OF ACCUMULATOR.*

*7.9. OUTER CONNECTIONS SHALL BE EXECUTED ACCORDING TO THE ELECTRIC DRAWING. THE CONNECTING WIRES ARE TO BE CHECKED AND POWER VOLTAGE SHOULD BE AC400V.*

8. THE HYDRAULIC SYSTEM COMMISSIONING REFERS TO DOCUMENT NO. TB2-SDC. VP101-00100-M-M12-MAN-9061.
9. SECTION M-M, DETAIL H & K & L AND VIEW N REFERS TO TB2-SDC. VP101-00100-M-M12-DSU-0223.

| ITEM | DRAWING TITLE ITEM CODE | ITEM NAME | QUAN. | UNIT | MATERIAL | WT KG | REMARK |
|---|---|---|---|---|---|---|---|
| | TOTAL | | | | | 478 | |
| 59 | W0100700800012 | PIN 8X50 | 2 | PCS. | OCR18NI9 | 0.1 | TB2-BWB1-201-020 |
| 58 | W0100700900062 | PIN B40X140 | 2 | PCS. | 45 | 3 | TB2-BWB1-201-020 |
| 57 | L0203001800850 | WASHER E | 2 | PCS. | 45 | 0.1 | TB2-BWB1-201-020 |
| 56 | W0100500900014 | SPRING WASHER 12-TZN | 16 | PCS. | Q235B | 0.1 | TB2-BWB1-201-020 |
| 55 | W0100500400013 | WASHER 12-200HV-TZN | 32 | PCS. | Q235B | 0.1 | TB2-BWB1-201-020 |
| 54 | W0100400300009 | HEX NUT M12-8-TZN | 16 | PCS. | 45 | 0.2 | TB2-BWB1-201-020 |
| 53 | W0100100800325 | HEX BOLT M12X80-8.8-TZN | 16 | PCS. | 45 | 1.2 | TB2-BWB1-201-020 |
| 52 | W0600300100060 | HSGL02-80/45E-5511-3301400(M22X1.5) | 2 | PCS. | ASSEMBLY | 90 | TB2-BWB1-201-020 |
| 51 | W0100700800011 | PIN 10X63 | 2 | PCS. | OCR18NI9 | 0.1 | TB2-BWB1-201-020 |
| 50 | W0100700900061 | PIN B50X160 | 2 | PCS. | 45 | 5.3 | TB2-BWB1-201-020 |
| 49 | L0203001800400 | WASHER C | 2 | PCS. | 45 | 0.22 | TB2-BWB1-201-020 |
| 48 | W0100500900018 | SPRING WASHER 16-TZN | 16 | PCS. | Q235B | 0.1 | TB2-BWB1-201-020 |
| 47 | W0100500400012 | WASHER 16-200HV-TZN | 32 | PCS. | Q235B | 0.36 | TB2-BWB1-201-020 |
| 46 | W0100400300012 | HEX NUT M16-8-TZN | 16 | PCS. | 45 | 0.64 | TB2-BWB1-201-020 |
| 45 | W0100100800342 | HEX BOLT M16X90-8.8-TZN | 16 | PCS. | 45 | 2.6 | TB2-BWB1-201-020 |
| 44 | W0600300100059 | HSGL02-100/70E-5511-5001400(M22X1.5) | 2 | PCS. | ASSEMBLY | 140 | TB2-BWB1-201-020 |
| 43 | W0600500110108 | WELD UNION FITTINGS 18 | 4 | PCS. | 20 | 0.8 | TB2-BWB1-201-075 |
| 42 | W0600500110109 | A TYPE BUCKLE HOSE CONNECTOR 16II-800 | 4 | PCS. | ASSEMBLY | 3.2 | TB2-BWB1-201-075 |
| 41 | W0600500100541 | WELD UNION FITTINGS 18/M27X1.5 | 4 | PCS. | 20 | 0.35 | TB2-BWB1-201-075 |
| 40 | W0600500110105 | HOSE CONNECTOR 16(18)II-90° ISO° -800-V0° | 8 | PCS. | ASSEMBLY | 7.2 | TB2-BWB1-201-075 |
| 39 | W0600500110106 | BITE TYPE UNION FITTINGS G18 | 5 | PCS. | 20 | 1.6 | TB2-BWB1-201-075,TOTAL 8 PCS |
| 38 | W0500300100009 | BONDED WASHER 22 | 16 | PCS. | 20 | 0.1 | TB2-BWB1-201-075 |
| 37 | W0600500110107 | BITE TYPE MAL STUD FITTINGS G18(M22X1.5) | 16 | PCS. | 20 | 2.2 | TB2-BWB1-201-075 |
| 36 | W0600400800037 | VALVE DRV12-1-10/V2 | 4 | PCS. | REXROTH, ASSEMBLY | 4 | NOT IN THE DELIVERY LIST |
| 35 | W0600500100031 | WELD TEE FITTINGS 18 | 4 | PCS. | 20 | 2 | TB2-BWB1-201-075 |
| 34 | W0500100400014 | O-RING 20X2.4 | 52 | PCS. | NBR | 0.1 | TB2-BWB1-201-075 |
| 33 | W0600500100502 | WELD ELBOW FITTINGS 18 | 10 | PCS. | 20 | 7 | TB2-BWB1-201-075,TOTAL 28 PCS |
| 32 | W0600500110103 | PIPE CLAMPS B(I) 18 | 40 | PCS. | PVC + Q235B | 16 | TB2-BWB1-201-075 |
| 31 | L0203001806000 | SS TUBE Φ18X3,L=2556 | 2 | PCS. | OCR18NI9 | 5.8 | TB2-BWB1-201-075 |
| 30 | L0203001805990 | SS TUBE Φ18X3,L=2716 | 2 | PCS. | OCR18NI9 | 6 | TB2-BWB1-201-075 |
| 29 | L0203001805980 | SS TUBE Φ18X3,L=1680 | 4 | PCS. | OCR18NI9 | 7.6 | TB2-BWB1-201-075 |
| 28 | L0203001805970 | SS TUBE Φ18X3,L=573 | 1 | PCS. | OCR18NI9 | 0.65 | TB2-BWB1-201-075 |
| 27 | L0203001805960 | SS TUBE Φ18X3,L=513 | 1 | PCS. | OCR18NI9 | 0.6 | TB2-BWB1-201-075 |
| 26 | L0203001805950 | SS TUBE Φ18X3,L=1028 | 2 | PCS. | OCR18NI9 | 2.3 | TB2-BWB1-201-075 |
| 25 | L0203001805940 | SS TUBE Φ18X3,L=1198 | 2 | PCS. | OCR18NI9 | 2.7 | TB2-BWB1-201-075 |
| 24 | L0203001805930 | SS TUBE Φ18X3,L=1713 | 1 | PCS. | OCR18NI9 | 1.9 | TB2-BWB1-201-075 |
| 23 | L0203001805920 | SS TUBE Φ18X3,L=1653 | 1 | PCS. | OCR18NI9 | 1.85 | TB2-BWB1-201-075 |
| 22 | L0203001805910 | SS TUBE Φ18X3,L=100 | 8 | PCS. | OCR18NI9 | 0.88 | NOT IN THE DELIVERY LIST |
| 21 | L0203001805900 | SS TUBE Φ18X3,L=220 | 2 | PCS. | OCR18NI9 | 0.5 | NOT IN THE DELIVERY LIST |
| 20 | L0203001805890 | SS TUBE Φ18X3,L=700 | 2 | PCS. | OCR18NI9 | 1.6 | NOT IN THE DELIVERY LIST |
| 19 | L0203001805880 | SS TUBE Φ18X3,L=475 | 1 | PCS. | OCR18NI9 | 0.5 | TB2-BWB1-201-075 |
| 18 | L0203001805870 | SS TUBE Φ18X3,L=535 | 1 | PCS. | OCR18NI9 | 0.6 | TB2-BWB1-201-075 |
| 17 | L0203001805860 | ANGLE L50X50X5,L=510 | 8 | PCS. | Q235B | 15.2 | TB2-BWB1-201-075 |
| 16 | L0203001805850 | ANGLE L50X50X5,L=430 | 8 | PCS. | Q235B | 12.8 | TB2-BWB1-201-075 |
| 15 | L0203001805840 | SS TUBE Φ18X3,L=990 | 2 | PCS. | OCR18NI9 | 2.2 | TB2-BWB1-201-075 |
| 14 | L0203001805830 | SS TUBE Φ18X3,L=2410 | 1 | PCS. | OCR18NI9 | 2.7 | TB2-BWB1-201-075 |
| 13 | L0203001805820 | SS TUBE Φ18X3,L=2430 | 1 | PCS. | OCR18NI9 | 2.7 | TB2-BWB1-201-075 |
| 12 | L0203001805810 | SS TUBE Φ18X3,L=2190 | 1 | PCS. | OCR18NI9 | 2.5 | TB2-BWB1-201-075 |
| 11 | L0203001805800 | SS TUBE Φ18X3,L=2050 | 1 | PCS. | OCR18NI9 | 2.3 | TB2-BWB1-201-075 |
| 10 | L0203001805790 | [ 18b,L=150 | 10 | PCS. | Q235B | 34.5 | TB2-BWB1-201-075 |
| 9 | L0203001805780 | ANGLE L50X50X5,L=210 | 20 | PCS. | Q235B | 16 | TB2-BWB1-201-075 |
| 8 | L0203001805770 | ANGLE L50X50X5,L=1220 | 5 | PCS. | Q235B | 23 | TB2-BWB1-201-075 |
| 7 | L0203001805760 | SS TUBE Φ18X3,L=6000 | 4 | PCS. | OCR18NI9 | 27 | TB2-BWB1-201-075 |
| 6 | L0203001805750 | SS TUBE Φ18X3,L=2890 | 2 | PCS. | OCR18NI9 | 6.5 | TB2-BWB1-201-075 |
| 5 | L0203001805740 | SS TUBE Φ18X3,L=2980 | 2 | PCS. | OCR18NI9 | 6.7 | TB2-BWB1-201-075 |
| 4 | L0203001805730 | SS TUBE Φ18X3,L=490 | 1 | PCS. | OCR18NI9 | 0.55 | TB2-BWB1-201-075 |
| 3 | L0203001805720 | SS TUBE Φ18X3,L=430 | 1 | PCS. | OCR18NI9 | 0.5 | TB2-BWB1-201-075 |
| 2 | L0203001805710 | SS TUBE Φ18X3,L=190 | 1 | PCS. | OCR18NI9 | 0.2 | TB2-BWB1-201-075 |
| 1 | L0203001805700 | SS TUBE Φ18X3,L=130 | 1 | PCS. | OCR18NI9 | 0.15 | TB2-BWB1-201-075 |

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:

| REV | DATE | DESCRIPTION | DRWN | CHKD | REVD | APRD |
|---|---|---|---|---|---|---|
| 1 | 18 Aug.2016 | FOR FINAL | LIU ZHONGWEI | DOU HONGYUN | YANG ZUNYAO | MA YI |

OWNER: VIETNAM OIL AND GAS GROUP (PVN)

OWNER'S CONSULTANT: FICHTNER GmbH & Co. KG — 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: ASSEMBLY DRAWING OF HYD LINE ASSEMBLY, HYD LINE

BIP SUPPLIER: BABCOCK & WILCOX BEIJING CO., LTD.

BIP SUB-SUPPLIER: CEEC 中国能建 广东省电力设计研究院 GUANGDONG ELECTRIC POWER DESIGN INSTITUTE

| FUNCTION | NAME | SIGN | DATE |
|---|---|---|---|
| DRWN | LIU ZHONGWEI | | 18 Aug.2016 |
| CHKD | DOU HONGYUN | | 18 Aug.2016 |
| REVD | YANG ZUNYAO | | 18 Aug.2016 |
| APPD | MA YI | | 18 Aug.2016 |

DRAWING NO.: TB2-SDC.VP101-00100-M-M12-DSU-0222 | JOB NO.: 110180 | SCALE: 1/80 | REV.NO.: 1

FILE NAME: TB2-SDC.VP101-00100-M-M12-DSU-0222.dwg.0

BWBC drawing No.

A1 (594mm x 841mm)