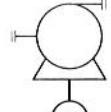
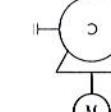
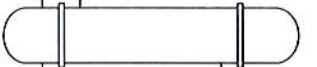
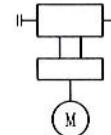
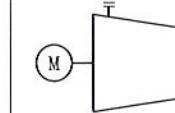
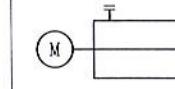
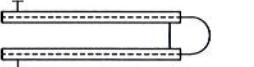
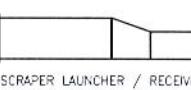
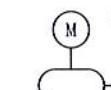
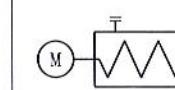
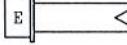
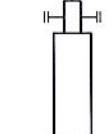
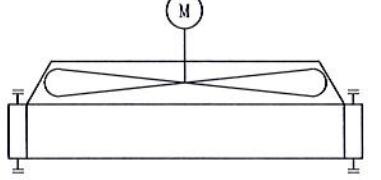
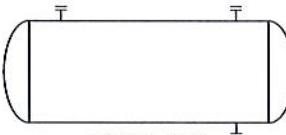
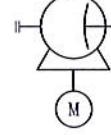
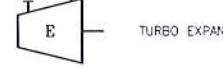
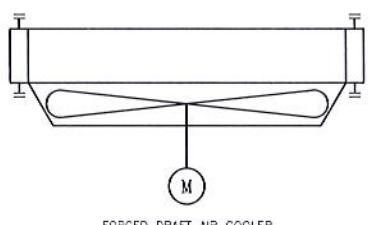
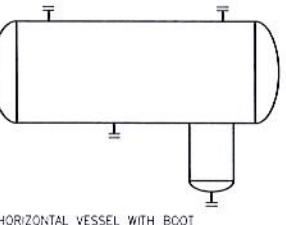
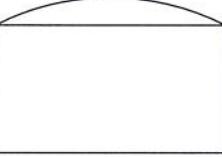
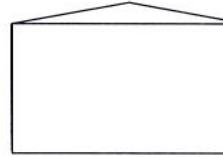
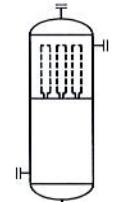
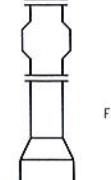
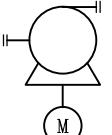
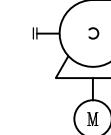
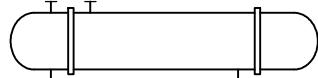
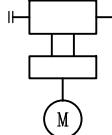
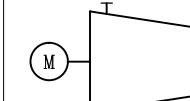
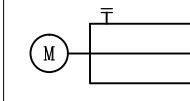
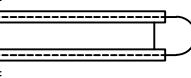
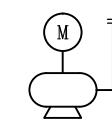
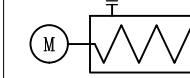
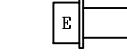
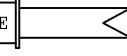
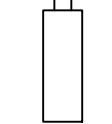
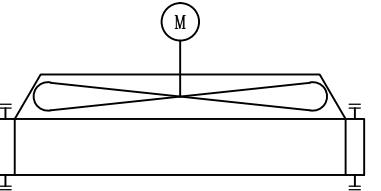
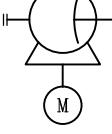
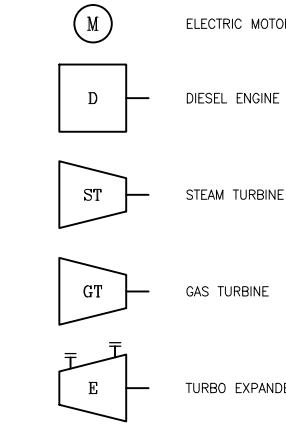
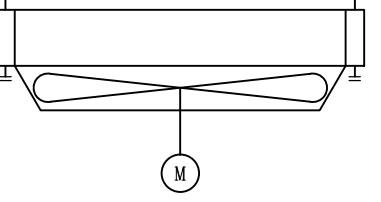
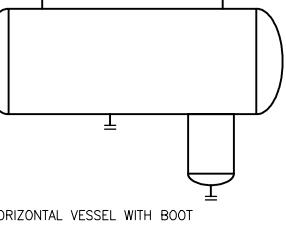
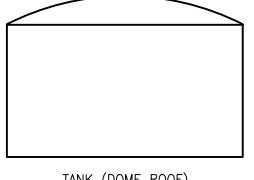
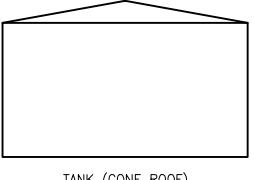
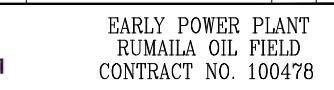


| PUMPS | COMPRESSORS AND BLOWERS | EXCHANGERS | VESSELS | NOTES: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|--|---|-------|----------|-------------------------|----|-----|----|----|-----|----------|---------------------|----|-----|----|----|-----|----------|-----------------------|----|-----|----|----|-----|----------|------------------------|----|-----|----|----|-----|----------|-------------------|----|------|----|----|-----|----------|---------------------------|----|-------|----|----|-----|------|-------------|--------|-------|-------|--|
|  CENTRIFUGAL PUMP |  CENTRIFUGAL FAN / BLOWER |  SHELL AND TUBE EXCHANGER (STANDARD TYPE) |  VERTICAL VESSEL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  POSITIVE DISPLACEMENT PUMP |  CENTRIFUGAL COMPRESSOR |  RECIPROCATING COMPRESSOR |  DOUBLE PIPE HEAT EXCHANGER |  SCRAPER LAUNCHER / RECEIVER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  CENTRIFUGAL SUMP PUMP |  SCREW COMPRESSOR |  ELECTRICAL HEATER IN SHELL |  ELECTRICAL BAYONET HEATER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  VERTICAL CAN PUMP | |  INDUCED DRAFT AIR COOLER |  HORIZONTAL VESSEL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  DIAPHRAGM PUMP | DRIVERS <ul style="list-style-type: none">  ELECTRIC MOTOR  DIESEL ENGINE  STEAM TURBINE  GAS TURBINE  TURBO EXPANDER |  FORCED DRAFT AIR COOLER |  HORIZONTAL VESSEL WITH BOOT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | |  TANK (DOME ROOF) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | |  TANK (CONE ROOF) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MISCELLANEOUS | FILTERS | | | <table border="1"> <tr> <td>CO1</td><td>25.05.16</td><td>ISSUED FOR CONSTRUCTION</td><td>DX</td><td>S/U</td><td>AB</td><td>SO</td> </tr> <tr> <td>DO1</td><td>18.02.16</td><td>ISSUED FOR USE (DD)</td><td>DX</td><td>S/U</td><td>AB</td><td>SO</td> </tr> <tr> <td>HO1</td><td>09.11.15</td><td>ISSUED FOR HAZOP (DD)</td><td>DX</td><td>S/U</td><td>TT</td><td>SO</td> </tr> <tr> <td>GO1</td><td>26.10.15</td><td>ISSUED FOR REVIEW (DD)</td><td>DX</td><td>S/U</td><td>TT</td><td>SO</td> </tr> <tr> <td>BO1</td><td>28.05.15</td><td>ISSUED FOR DESIGN</td><td>DX</td><td>S/RS</td><td>TT</td><td>SO</td> </tr> <tr> <td>A01</td><td>10.02.15</td><td>ISSUED FOR COMPANY REVIEW</td><td>DX</td><td>HM/RS</td><td>VM</td><td>JF</td> </tr> <tr> <td>REV</td><td>DATE</td><td>DESCRIPTION</td><td>PREP'D</td><td>CHK'D</td><td>APP'D</td><td></td> </tr> </table> <p style="text-align: right;"><i>RECORDED</i></p> <p>EARLY POWER PLANT RUMAILA OIL FIELD CONTRACT NO. 100478</p> <p>中国石油工程设计公司 CHINA PETROLEUM ENGINEERING & CONSTRUCTION CORP.</p> <p>CH2MHILL</p> <p>DRAWING TITLE: PIPING AND INSTRUMENTATION DIAGRAM LEGEND SHEET EQUIPMENT SYMBOLS</p> <p>PROJECT NO: 100478CP SCALE: NONE DWG SIZE: A1 DRAWING NUMBER: SHT. NO.: REV. 100478CP-N-PC-PP01-PR-PID-0001-006 06/17 C01</p> <p>CAD FILENAME:100478CP-N-PC-PP01-PR-PD-0001-006-C01.DWG</p> | CO1 | 25.05.16 | ISSUED FOR CONSTRUCTION | DX | S/U | AB | SO | DO1 | 18.02.16 | ISSUED FOR USE (DD) | DX | S/U | AB | SO | HO1 | 09.11.15 | ISSUED FOR HAZOP (DD) | DX | S/U | TT | SO | GO1 | 26.10.15 | ISSUED FOR REVIEW (DD) | DX | S/U | TT | SO | BO1 | 28.05.15 | ISSUED FOR DESIGN | DX | S/RS | TT | SO | A01 | 10.02.15 | ISSUED FOR COMPANY REVIEW | DX | HM/RS | VM | JF | REV | DATE | DESCRIPTION | PREP'D | CHK'D | APP'D | |
| CO1 | 25.05.16 | ISSUED FOR CONSTRUCTION | DX | S/U | AB | SO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DO1 | 18.02.16 | ISSUED FOR USE (DD) | DX | S/U | AB | SO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HO1 | 09.11.15 | ISSUED FOR HAZOP (DD) | DX | S/U | TT | SO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GO1 | 26.10.15 | ISSUED FOR REVIEW (DD) | DX | S/U | TT | SO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BO1 | 28.05.15 | ISSUED FOR DESIGN | DX | S/RS | TT | SO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A01 | 10.02.15 | ISSUED FOR COMPANY REVIEW | DX | HM/RS | VM | JF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| REV | DATE | DESCRIPTION | PREP'D | CHK'D | APP'D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  AGITATOR / MIXER |  FLARE 'TIP' AND PILOTS |  FILTER COALESCER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  DESUPERHEATER / MIXING ASSEMBLY |  EQUIPMENT INSULATION |  FLARE STACK |  CARTRIDGE FILTER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  HYDROCYCLONE |  VENT TYPE INLET DEVICE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  HALF OPEN PIPE INLET DEVICE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| PUMPS | COMPRESSORS AND BLOWERS | EXCHANGERS | VESSELS | NOTES: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|--|---|-------|----------|-------------------------|----|----|----|----|-----|----------|---------------------|----|-------|----|----|-----|----------|-----------------------|----|-------|----|----|-----|----------|------------------------|----|-------|----|----|-----|----------|-------------------|----|-------|----|----|-----|----------|---------------------------|----|-------|----|----|-----|------|-------------|--------|-------|-------|--|
|  CENTRIFUGAL PUMP |  CENTRIFUGAL FAN / BLOWER |  SHELL AND TUBE EXCHANGER (STANDARD TYPE) |  VERTICAL VESSEL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  POSITIVE DISPLACEMENT PUMP |  CENTRIFUGAL COMPRESSOR |  RECIPROCATING COMPRESSOR |  DOUBLE PIPE HEAT EXCHANGER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  CENTRIFUGAL SUMP PUMP |  SCREW COMPRESSOR |  ELECTRICAL HEATER IN SHELL |  ELECTRICAL BAYONET HEATER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  VERTICAL CAN PUMP | |  INDUCED DRAFT AIR COOLER |  HORIZONTAL VESSEL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  DIAPHRAGM PUMP |  DRIVERS |  FORCED DRAFT AIR COOLER |  HORIZONTAL VESSEL WITH BOOT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | |  TANK (DOME ROOF) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | |  TANK (CONE ROOF) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | <table border="1"> <tr> <td>C01</td><td>25.05.16</td><td>ISSUED FOR CONSTRUCTION</td><td>DX</td><td>VU</td><td>AB</td><td>SQ</td></tr> <tr> <td>D01</td><td>18.02.16</td><td>ISSUED FOR USE (DD)</td><td>DX</td><td>SI/VU</td><td>AB</td><td>SQ</td></tr> <tr> <td>H01</td><td>09.11.15</td><td>ISSUED FOR HAZOP (DD)</td><td>DX</td><td>SI/VU</td><td>TT</td><td>SQ</td></tr> <tr> <td>G01</td><td>26.10.15</td><td>ISSUED FOR REVIEW (DD)</td><td>DX</td><td>SI/VU</td><td>TT</td><td>SQ</td></tr> <tr> <td>B01</td><td>28.05.15</td><td>ISSUED FOR DESIGN</td><td>DX</td><td>SI/RS</td><td>TT</td><td>SQ</td></tr> <tr> <td>A01</td><td>10.02.15</td><td>ISSUED FOR COMPANY REVIEW</td><td>DX</td><td>HM/RS</td><td>VM</td><td>JF</td></tr> <tr> <td>REV</td><td>DATE</td><td>DESCRIPTION</td><td>PREP'D</td><td>CHK'D</td><td>APP'D</td><td></td></tr> </table> | C01 | 25.05.16 | ISSUED FOR CONSTRUCTION | DX | VU | AB | SQ | D01 | 18.02.16 | ISSUED FOR USE (DD) | DX | SI/VU | AB | SQ | H01 | 09.11.15 | ISSUED FOR HAZOP (DD) | DX | SI/VU | TT | SQ | G01 | 26.10.15 | ISSUED FOR REVIEW (DD) | DX | SI/VU | TT | SQ | B01 | 28.05.15 | ISSUED FOR DESIGN | DX | SI/RS | TT | SQ | A01 | 10.02.15 | ISSUED FOR COMPANY REVIEW | DX | HM/RS | VM | JF | REV | DATE | DESCRIPTION | PREP'D | CHK'D | APP'D | |
| C01 | 25.05.16 | ISSUED FOR CONSTRUCTION | DX | VU | AB | SQ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D01 | 18.02.16 | ISSUED FOR USE (DD) | DX | SI/VU | AB | SQ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| H01 | 09.11.15 | ISSUED FOR HAZOP (DD) | DX | SI/VU | TT | SQ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| G01 | 26.10.15 | ISSUED FOR REVIEW (DD) | DX | SI/VU | TT | SQ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B01 | 28.05.15 | ISSUED FOR DESIGN | DX | SI/RS | TT | SQ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A01 | 10.02.15 | ISSUED FOR COMPANY REVIEW | DX | HM/RS | VM | JF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| REV | DATE | DESCRIPTION | PREP'D | CHK'D | APP'D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | |  EARLY POWER PLANT RUMAILA OIL FIELD CONTRACT NO. 100478 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | |  中国石油工程建设公司 CHINA PETROLEUM ENGINEERING & CONSTRUCTION CORP. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | |  CH2MHILL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | DRAWING TITLE: PIPING AND INSTRUMENTATION DIAGRAM LEGEND SHEET EQUIPMENT SYMBOLS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | PROJECT NO. 100478CP SCALE: NONE DWG SIZE: A1 DRAWING NUMBER: 100478CP-N-PG-PP01-PR-PID-0001-006 SHT. NO.: REV. 06/17 C01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |