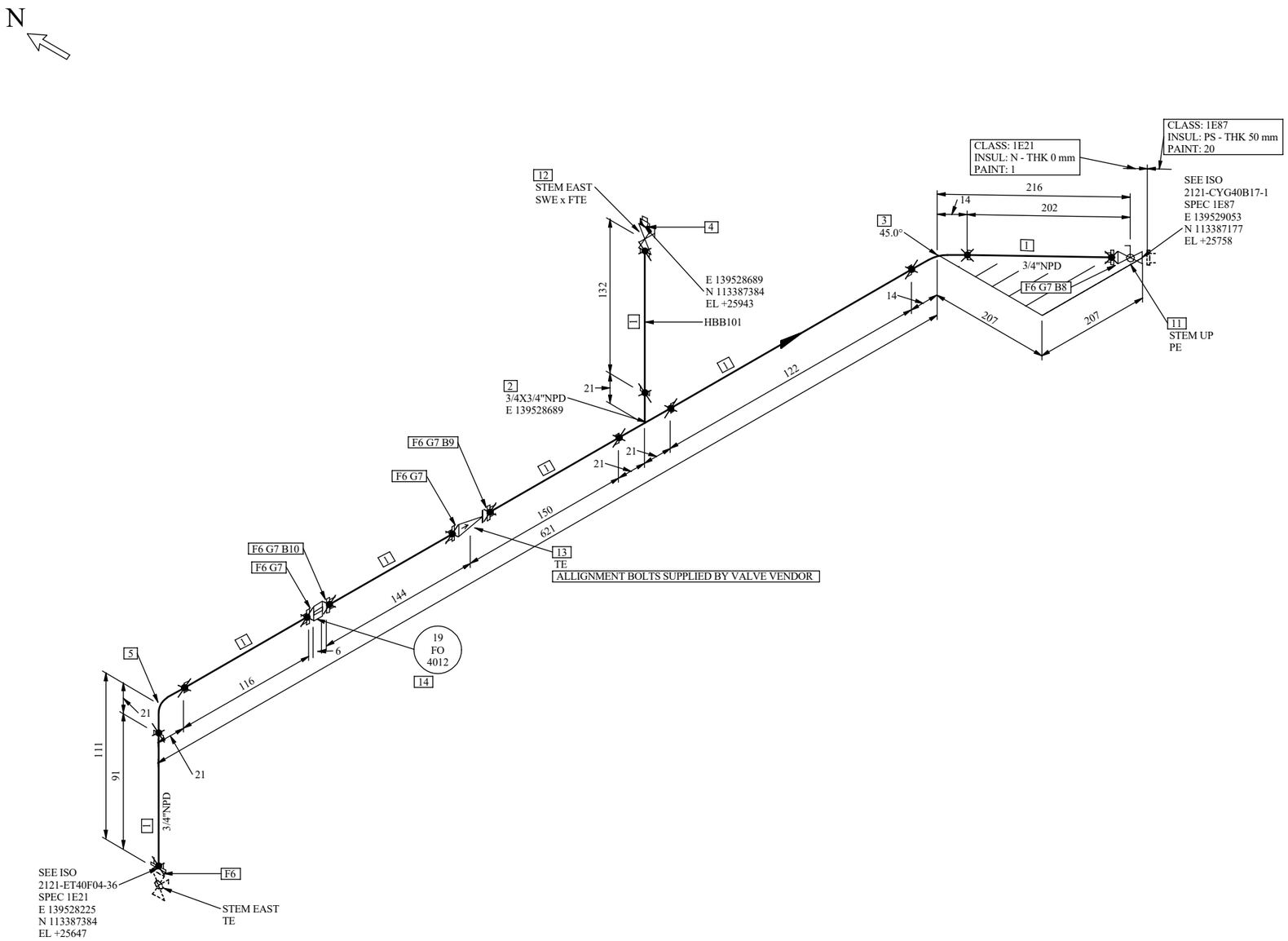


## BILL OF MATERIAL

| PT NO | COMPONENT DESCRIPTION | N.S. (IN) | ITEM CODE | QTY | HOLD STATUS |
|---|---|---|---|---|---|
| | PIPE | | | | |
| 1 | PIPE - A106-B PE SMLS T01AC03Z02 S-XS <PIPA010A13/4XS> (L-6679) | 3/4 | I132785 | 0.8 M | |
| | FITTINGS | | | | |
| 2 | TEE ASME B16.11 3000# A105N SWE SWE - R11FNC441101 NREQD <TESA300LBK3/4> (L-179) | 3/4X3/4 | I1651300 | 1 | |
| 3 | 45 ELBOW ASME B16.11 3000# A105N SWE SWE - R32FNC441101 NREQD <45FA300LBK3/4> (L-184) | 3/4 | I1651294 | 1 | |
| 4 | PLUG ROUND HEAD ASME B16.11 - A105N MTE NREQD - R42FQC44W001 NREQD <PLUA300CK3/4> (L-77) | 3/4 | I10088232 | 1 | |
| 5 | 90 ELBOW ASME B16.11 3000# A105N SWE SWE - R31FNC441103 NREQD <90FA300LBK3/4> (L-178) | 3/4 | I1651298 | 1 | |
| | FLANGES | | | | |
| 6 | SW FLANGE ASME B16.5 300# A105N RFFE SWE 125 - 250 AARH F02CFC44B105 S-XS <SWFA300R353/4XS> (L-375) | 3/4 | I9762190 | 6 | |
| | GASKETS | | | | |
| 7 | SPIRAL WOUND GASKET ASME B16.20 300# RFTBE 304/GRAFOIL CARBON STEEL SS 304 ASME B16.5 G03GFP1IS12 <N/A> (N/A) | 3/4 | I63508950 | 5 | |
| | BOLTS | | | | |
| 8 | STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE I01OB0301 <SB2R51G5/831/4> - 2 NUTS PER BOLT - 80 mm Length | 5/8 | I53437418 | 4 | |
| 9 | STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE I01OB0301 <SB2R51G5/84> - 2 NUTS PER BOLT - 100 mm Length | 5/8 | I53437267 | 4 | |
| 10 | STUD BOLTS&NUTS ASME B18.31.2/ B18.2.2 A193-B7/A194-2H INCH SIZE I01OB0301 <SB2R51G5/831/2> - 2 NUTS PER BOLT - 90 mm Length | 5/8 | I53437440 | 4 | |
| | VALVES / IN-LINE ITEMS | | | | |
| 11 | BALL V-FLT-SS-FB API 608 300# A216-WCB RFFE 316/PEEK B7/2H 125 - 250 AARH 2PSB-FULL BORE FLOATING BALL OHW TIGHT SHUT-OFF (TSO) ASME B16.5 V1FJFC29B01L NREQD <N/A> (N/A) | 3/4 | I64812606 | 1 | |
| 12 | GATE VALVE API 602 800# A105N SWE FTE 8-F6&HF WB-OS&Y SOW API 602 HW V01GIC4412BL NREQD <N/A> (N/A) | 3/4 | I10015410 | 1 | |
| 13 | DISC CHECK WFR VALVE ASME B16.34 300# A216-WCB RFTBE 316/R-PTFE, GF 125 - 250 AARH SL VERTICAL&HORIZONTAL CRACK. PRESS. 1/2 PSI ASME B16.5 V40JFC29P01 NREQD <N/A> (N/A) | 3/4 | I10208504 | 1 | |
| | INSTRUMENTS | | | | |
| 14 | INSTRUMENT COMPONENT | 3/4 | 19-FO-4012 | 1 | |

**REMARKS FOR MECHANICAL SUBCONTRACTOR:**

1) LINES 1.1/2" AND SMALLER SHALL BE SUPPORTED IN FIELD IF NOT OTHERWISE INDICATED.
2) ALL DIMENSION AND PROPER CONFIGURATION FOR LINES NPS 1.1/2" AND SMALLER SHALL BE CHECKED IN FIELD BEFORE CONSTRUCTION.
3) FOR THE COMPONENTS MARKED AS FIELD WELDED WITH THIS SYMBOL ✱ , ONE WELD FOR ADJUSTMENT OF IN LINE COMPONENT MUST BE LEFT
4) FOR EXTRA PIPE LENGTH REFER TO 4274-LZ-PC-00000603.
5) GUSSETING TO BE IMPLEMENTED BY MECHANICAL SUBCONTRACTOR AS PER 45-L-45-000-2-00-80004 / 4274-XH-SG-00000002.
6) CROSSING BETWEEN WELDS ON PIPELINE SHALL NOT BE ADMITTED.
7) IN CASE OF DISCREPANCIES BETWEEN DATA SHOWN ON ISO AND IN LINE LIST (AS APPLICABLE, DATA SHOWN IN LINE LIST GOVERN.
8) ACTUAL CUT LENGTH OF PIPE AND FIELD WELDS SHALL BE DEFINED BY MECHANICAL SUBCONTRACTOR (REF.TO 4274-LZ-PC-00000603).
9) WHERE EARTHING BONDING IS REQUIRED, MECHANICAL SUBCONTRACTOR TO PERFORM IT BASED ON DOC. 45-P-000-7-06-00902/ 4274 -NN-DW-00000002 AND ASSEMBLY NO FEA005 AND FE019.

**SUPPORTS LEGEND:** 1 DENOTES PARTS LIST NO — PIPE SUPPORT — A = RESTING SUPPORT, G = GUIDE, F = AXIAL STOP, B = ANCHOR, M = SPRING, S = TEFLON PAD
WHERE A WITHOUT NUMBERING IS INDICATED, THIS MEANS THAT THERE IS A REST DIRECTLY ON STEEL STRUCTURE.

| REV. | DESCRIPTION | DATE | DRW. BY | CHECK BY | APPR. BY | APPR. CLIENT |
|---|---|---|---|---|---|---|
| 00 | ISSUED FOR REFERENCE | 31-MAR-2023 | M.YADAV | P.VAZE | G.PAGANONI | |

STRESS CALC. Nº: -
P & ID: 19-A-19-000-1-01-00001 sheet 33
LINE LIST Nº: 19-L-19-000-2-00-80602
PIPE LAYOUT Nº: 19-L-19-000-2-00-86196 sheet 7

# ISSUED FOR REFERENCE

Signature for construction is shown on Iso list of relevant CWA

TITLE

# ISOMETRIC DRAWING LINE

3/4"-ET-40S08-1E21

| | |
|---|---|
| PIPE MATERIAL | CS |
| HEAT TREATMENT (PWHT) | N |
| PAINTING SCHEME (3) | 1 |
| PIPING CLASS | 1E21 |
| WELDING CLASS (4) | E |
| PED CATEGORY | Art 4.3 |
| INSULATION CODE / THK. (mm) | N 0 |

NOTES:
1. FOR TECHNICAL DETAILS SEE LINE LIST.
2. FOR VENT, DRAIN OR INSTRUMENT CONNECTION DETAILS SEE 45-L-45-000-2-00-80102.
3. WELDING ACCORDING TO 45-L-45-000-2-00-80021.
4. PAINTING ACCORDING TO 45-A-45-000-1-00-20160.
5. CODE SHOWN IN BOM BETWEEN "<" & ">" DENOTES REPSOL UNICODE. "<N/A>" MEANS UNICODE IS "NOT AVAILABLE".

CONTRACTOR: Tecnimont

CONTRACTOR DRAWING NUMBER: 4274-XH-DL-2121ET40S08-1

PROJECT: 4001008

REPSOL

LOW LINEAL DENSITY POLYETHILENE (PEL) AND POLYPROPYLENE (PP) PLANTS FOR PROJECT - ALBA PROJECT

CLIENT / COMPLEX: REPSOL POLYMEROS/ SINES INDUSTRIAL COMPLEX

| ANNEX | SPEC. | DRAWING NUMBER | REV. |
|---|---|---|---|
| 19 | L | 19-000-2-02-00001 sheet 2121ET40S08-1 | 00 |

FILENAME: 19-000-2-02-00001 sheet 2121ET40S08-1.dwg

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EXTR. DATE: 31-03-2023 16:19:17 STREAM NO.:4005 STREAM REV. NO. : 7 REV. CAUSE ID: