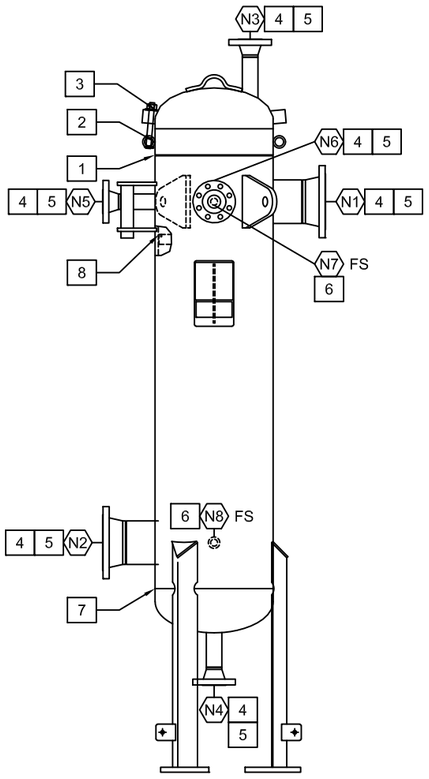
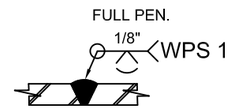
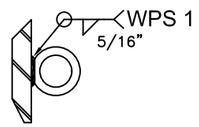
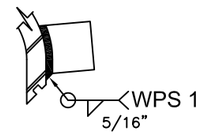


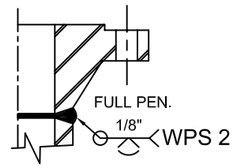

DETAIL #1



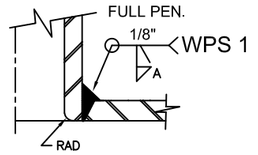

DETAIL #2



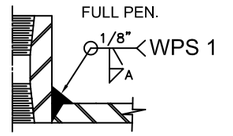

DETAIL #3



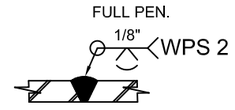

DETAIL #4



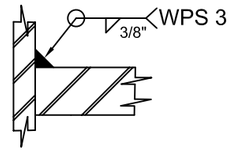

DETAIL #5




DETAIL #6




DETAIL #7




DETAIL #8

DETAIL #9

DETAIL #10

DETAIL #11

DETAIL #12

## NOZZLE DETAIL/WELD SIZE CHART

| MARK | DETAIL #'(s) | WELD 'A' SIZE | WELD 'B' SIZE | WELD 'C' SIZE | NOTES |
|---|---|---|---|---|---|
| N1 | 4,5 | 3/8" | | | |
| N2 | 4,5 | 3/8" | | | |
| N3 | 4,5 | 3/8" | | | |
| N4A | 4,5 | 3/8" | | | |
| N4B | 4,5 | 3/8" | | | |
| N5 | 4,5 | 3/8" | | | |
| N6 | 4,5 | 3/8" | | | |
| N7,N8 | 6 | 1/4" | | | |
| N9,N10 | 6 | 1/4" | | | |

△2

| WPS/PQR | PROCESS | ROOT | FILLER | CAP |
|---|---|---|---|---|
| HPD-GM-FC-SA-P1-C20 | GMAW/FCAW/SAW | ER-70S-6 | E71T-12M | EM12K |
| HPD-GT-FC-SA-P1 | GTAW/FCAW/SAW | ER-70S-6 | E71T-12M | EM12K |
| HPD-GM-P1-8 | GMAW | ER309/ER309L | ER309/ER309L | ER309/ER309L |
| HPD-GT-FC-P8 | GTAW/FCAW | ER316/ER316L | E316LT1-4 | E316LT-4 |

## WELD NOTES

1. ALL WELDS SHALL MEET THE REQUIREMENTS OF ASME SECTION IX.
2. WELDER ID SHALL BE STAMPED ON ALL WELDS PER HP&D STANDARD WELD REQUIREMENTS.
3. WELDS OF ATTACHMENTS NOT DETAILED SHALL BE CONTINUOUS FILLET TYPE NO LESS THAN THE SMALLER OF 1/4" OR THE THICKNESS OF THE MATERIAL BEING ATTACHED.
4. CONSUMABLE MTR'S REQ'D: YES, NO AML.
5. D&T 1/4" NPT HOLE IN RE-PADS (IF APPLICABLE).
6. INSIDE EDGES OR NOZZLE NECKS SHALL BE ROUNDED TO THE SMALLER OF ONE HALF THE NOZZLE WALL THICKNESS OR 1/8".
7. DOUBLE SIDED WELDS SHALL BE GOUGED, GROUND OR CHIPPED TO SOUND METAL BEFORE WELDING.
8. MDMT: 32°F
9. IMPACT TESTING: NOT REQUIRED
10. PWHT: NO

## ACCEPTABLE WPS/PQR's

1. HPD-GM-FC-SA-P1-C20
2. HPD-GT-FC-SA-P1
3. HPD-GM-P1-8
4. HPD-GT-FC-P8 (USED ON INTERNAL ASSEMBLY ONLY)

△1

## NON-DESTRUCTIVE EXAMINATION

RADIOGRAPHY: ONE SPOT ON EACH SHELL CIRC. SEAM AND LONG. SEAM

ULTRASOUND: NONE

MAG. PARTICLE: 100% OF ALL BACK GOUGED AREAS PRIOR TO BACK WELDING. 100% OF ALL AREAS WHERE TEMP. ATTACHMENTS AND ARC STRIKES REMOVED. 100% OF ALL SKIRT, LUG AND DAVIT ATTACHMENTS.

DYE PENETRANT: NONE

BASELINE THICKNESS: NONE

HARDNESS: NONE

PMI: NONE

FERRITE: NONE

VISUAL: 100% OF ALL WELDS

| Rev. No. | Revision Description | Drawn | Date | Check | Date |
|---|---|---|---|---|---|
| 6 | | | | | |
| 5 | | | | | |
| 4 | | | | | |
| 3 | | | | | |
| 2 | ADDED WELD CONSUMABLE MATERIAL CHART | RC | 10/14/2022 | | |
| 1 | ADDED PO#, REVISED WPS NOTE 4 | LC | 8/22/2022 | | |
| 0 | FIRST ISSUE - FOR APPROVAL | LC | 6/23/2022 | | |

| | | | |
|---|---|---|---|
| Customer: | AIR PRODUCTS / FLUOR | | |
| P.O. No.: | 4505711637 △1 | | |
| Location: | PARAMOUNT, CA | | |
| Project: | WORLD ENERGY RENEWABLES PROJECT | Work Order: | 4505325983 |
| Project No.: | EN-20-XXXX / A8KM △1 | Model No.: | VV003HF4S18AF1C |
| Tag: | 18-FD-1861 | Quantity: | ONE |
| Service: | RJFU-B STARTUP OIL FILTER | Shop No.: | 1665-1 |
| Drawing Type: | WELD/NDE MAP | Drawing No.: | 1665-A3 |

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