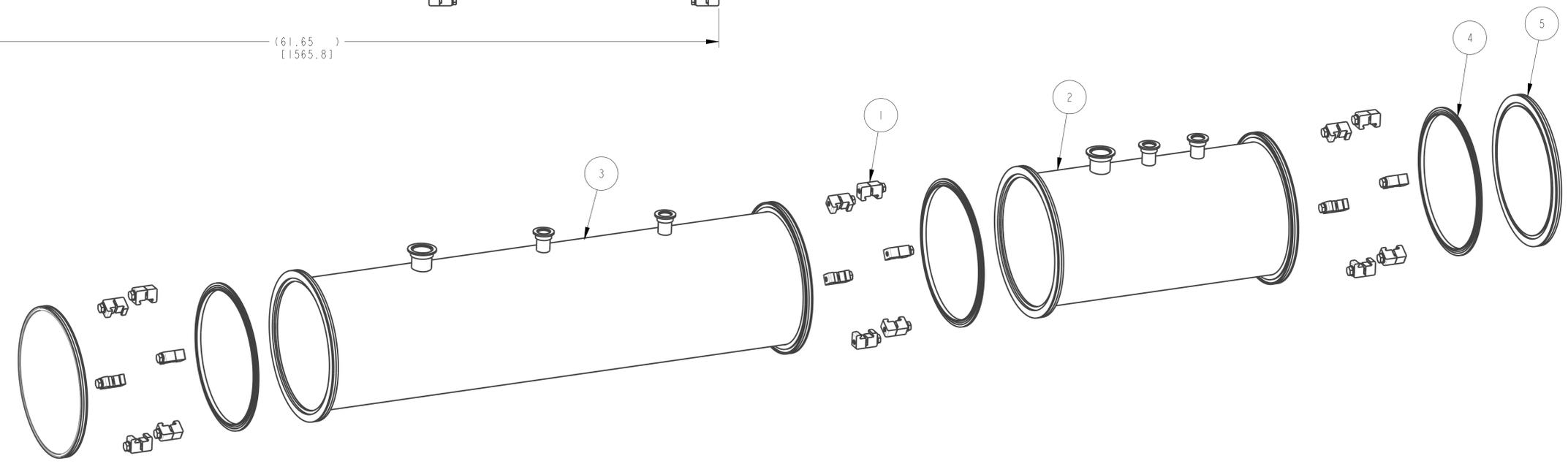
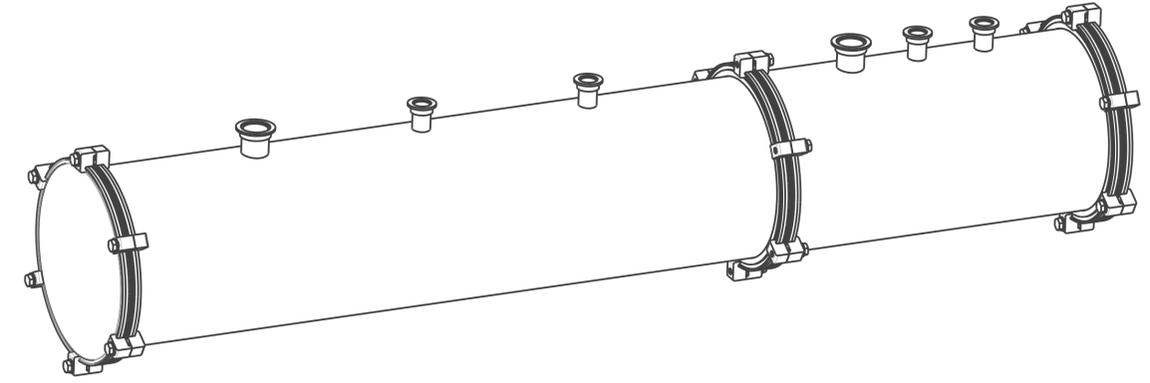
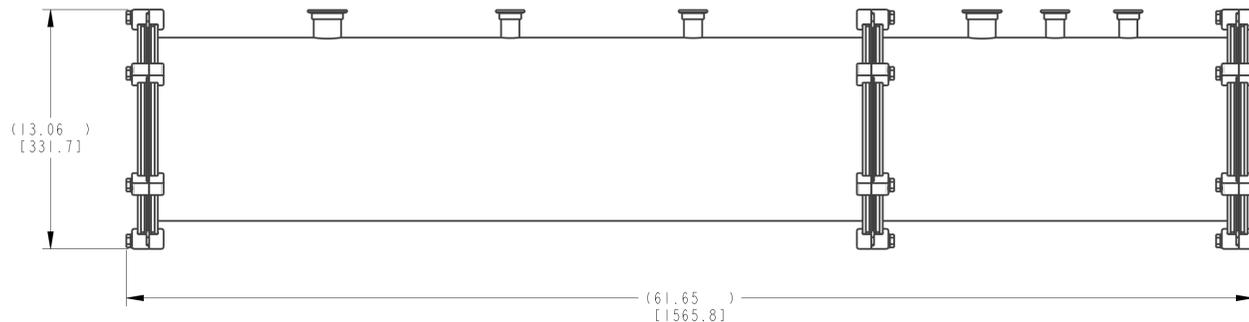


REVISIONS					
ZONE	REV	DESCRIPTION	BY	APPROVED	DATE



ITEM	DRAWING / PART NUMBER	REV	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC.	QTY
5	QF250-ABK	00	FLANGE BLANK CLAMP STYLE	ALUMINUM 6061-T6	2
4	QF250-AAVR	00	CENTERING RING ISO250	ALUMINUM	3
3	A308-BI2320	00	WAXPCS FLIGHT TUBE - LDDP - LONG	SEE PARTS LIST	1
2	A308-BI2310	00	WAXPCS FLIGHT TUBE - LDDP - SHORT	SEE PARTS LIST	1
1	802002	00	CLAMP DOUBLE CLAW	ALUMINUM/304 SST	18

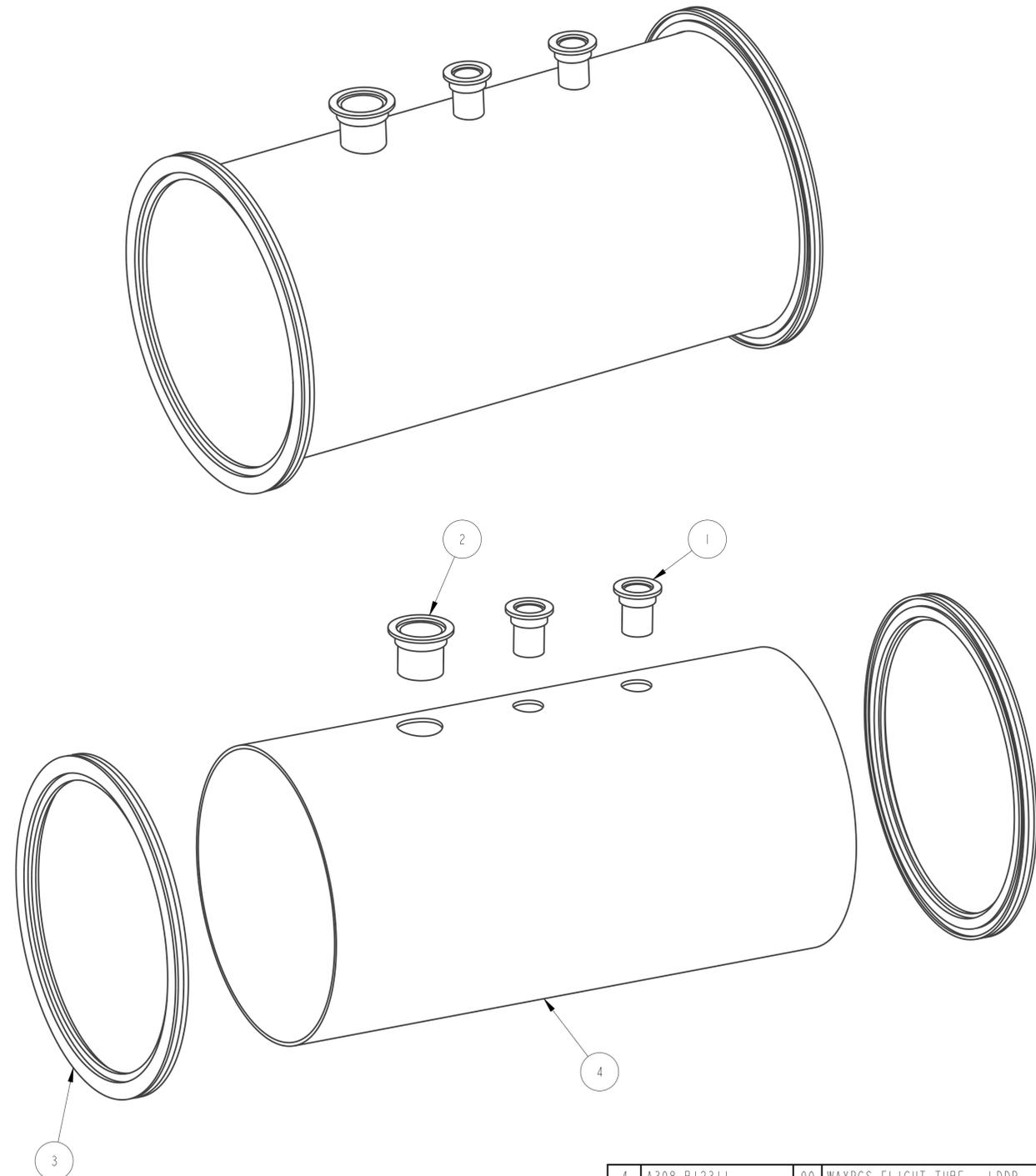
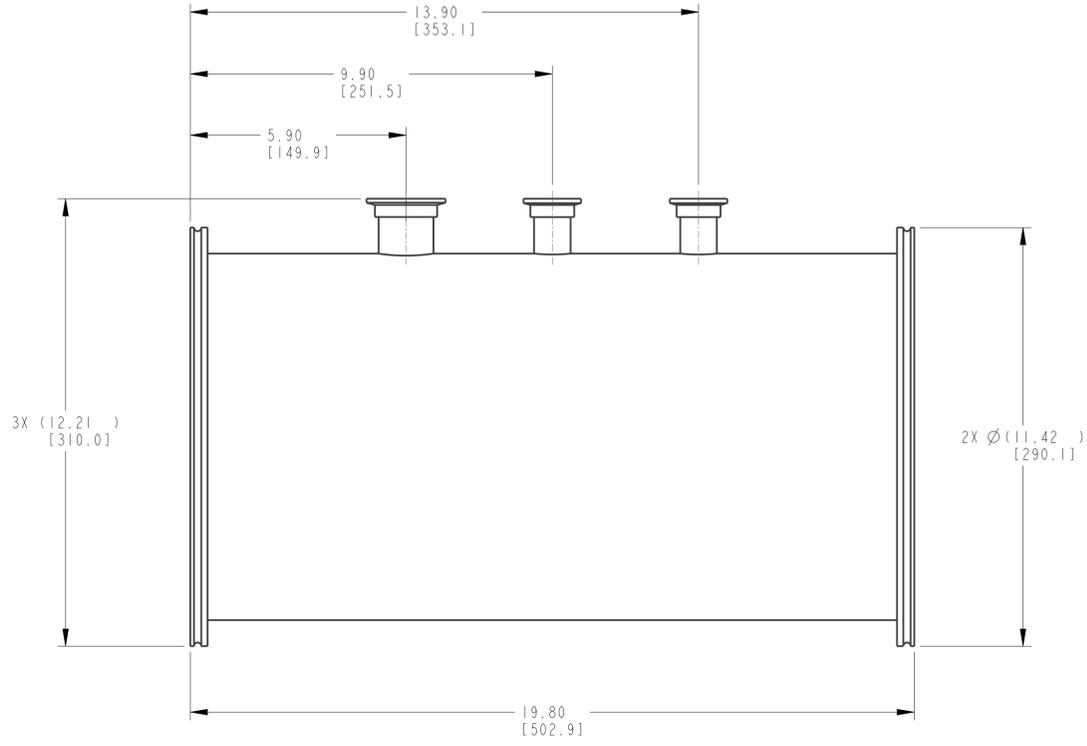
PARTS LIST / BILL OF MATERIALS											
SHARP EDGES .03" TO .765mm			DRAFTER: KEVIN WAKEFIELD			DATE: 26-AUG-22			THIS DRAWING IS THE PROPERTY OF		
MAX. SURFACE TEXTURE IN ACCORDANCE WITH LATEST ASME B46.1-2002 DIMENSIONING AND TOLERANCING IN ACCORDANCE WITH LATEST ASME Y14.5M-2009			DESIGNER: KEVIN WAKEFIELD			DATE: 26-AUG-22			Argonne NATIONAL LABORATORY		
UNLESS OTHERWISE SPECIFIED			CHECKER: DANIEL PASHOLK			DATE: 26-AUG-22			ADVANCED PHOTON SOURCE		
ALL DIMENSIONS ARE: in			GROUP LEADER/PROJECT LEADER/CAM: DANIELA CAPATINA			DATE: 26-AUG-22			BEAMLINE 8-ID		
DIMS IN [] ARE REF ONLY			APPROVER: BRIAN M RUSTHOVEN			DATE: 26-AUG-22			8ID BEAMLINE INSTRUMENTATION		
TOLERANCES			MATERIAL: SEE PARTS LIST			DATE: 26-AUG-22			WAXPCS INSTRUMENT		
ANGULAR .XX ± .03			APPROX. WT: 37 lbm			DATE: 26-AUG-22			VACUUM CHAMBERS		
±0.5° .XXX ± .005			RELEASE LEVEL: RELEASED			DATE: 26-AUG-22			WAXPCS FLIGHT TUBE - LDDP		
SURFACE ROUGHNESS 125/			SCALE: 1:5			DATE: 26-AUG-22			A308-BI2300		

1 SOURCE OR EQUIVALENT VACUUM ONE (MDC/ISI) 2502 NORTH CLARK STREET CHICAGO, IL 60614 773-244-3102

2 SOURCE OR EQUIVALENT KURT J. LESKER P.O. BOX 10 CLARTON, PA 15025-3681 800-245-1656

- NOTES:
- THIS CHAMBER IS INTENDED FOR ROUGH VACUUM SERVICE. HOWEVER, TO ENSURE THAT THE CHAMBER DOES NOT CONTAMINATE NEIGHBORING COMPONENTS, AND TO MAINTAIN CONSISTENT CLEANLINESS STANDARDS AT THE BEAMLINE, THE DESIGN, FABRICATION, AND CLEANING PROCEDURES SHALL BE CHOSEN AS IF IT IS INTENDED FOR UHV SERVICE.
 - VENDOR IS RESPONSIBLE FOR LEAK CHECKING CHAMBER ASSEMBLY TO VERIFY LEAK RATE IS <1.0E-9 STANDARD CC/SEC DURING HELIUM LEAK TEST.
 - VENDOR IS RESPONSIBLE FOR PROVIDING ALL COMPONENTS LISTED IN THE BILL OF MATERIAL.
 - PROTECT ALL FLANGE SEALING SURFACES DURING MACHINING AND HANDLING. ANY NICKS OR SCRATCHES TO A SEALING SURFACE WILL RENDER THE PART UNACCEPTABLE.

REVISIONS					
ZONE	REV	DESCRIPTION	BY	APPROVED	DATE



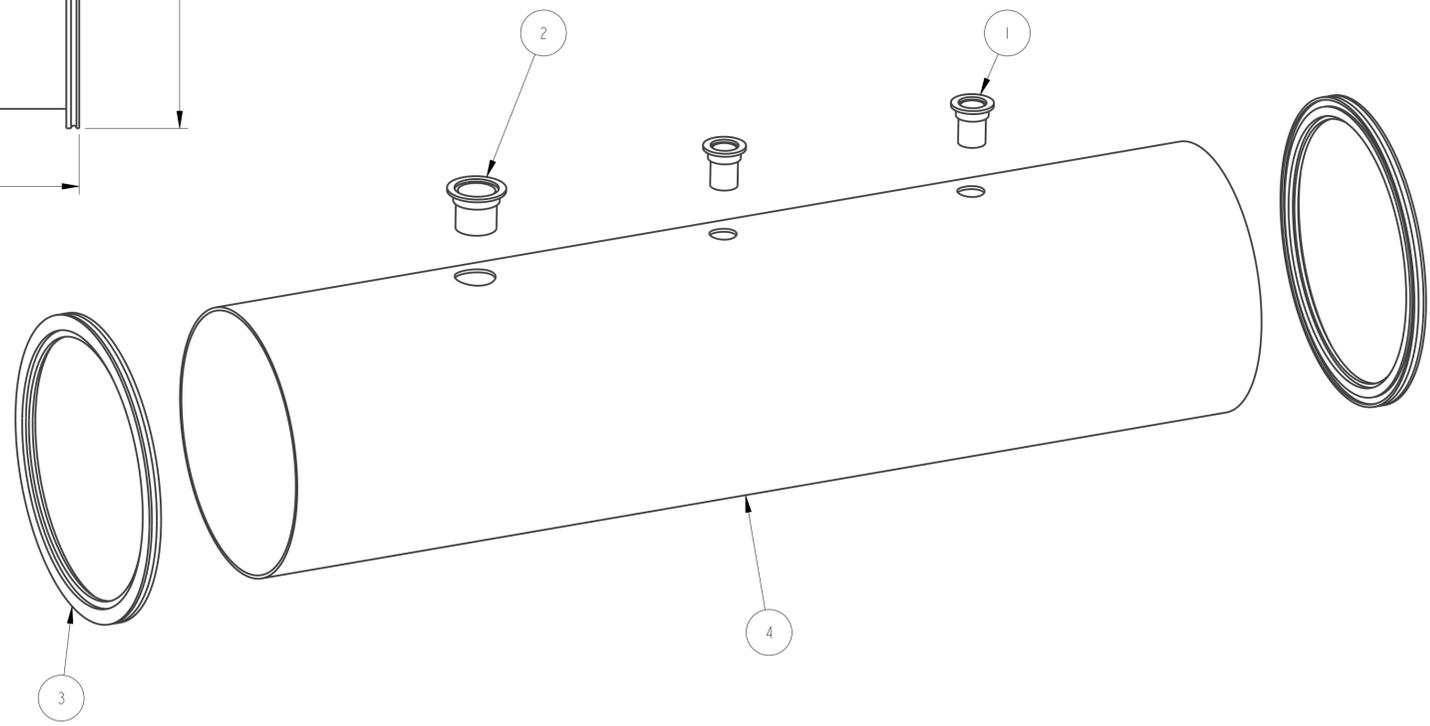
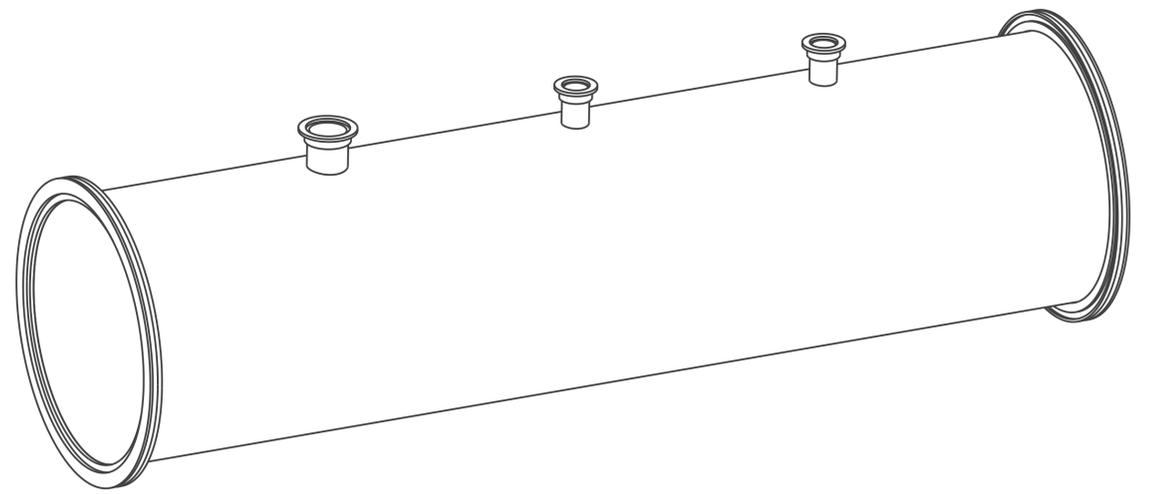
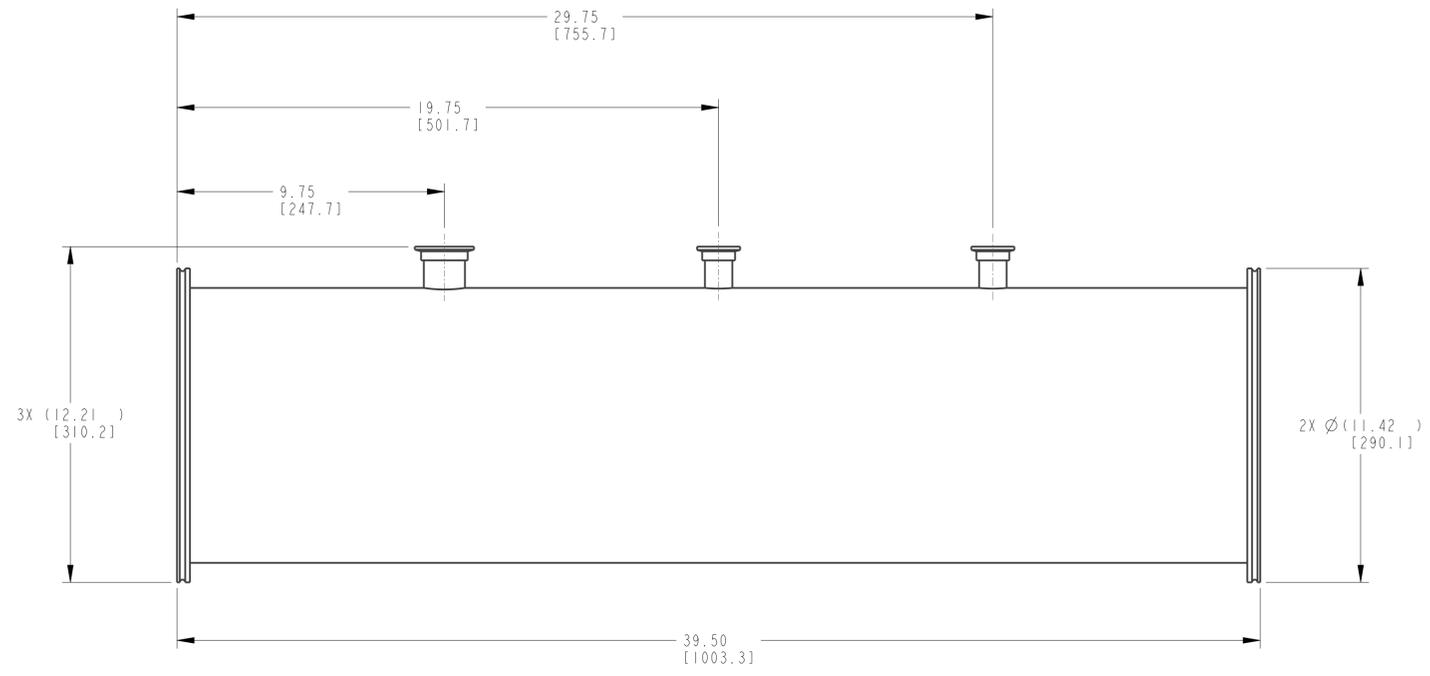
- NOTES:
- VENDOR MAY CHOOSE TO WELD COMPONENTS WITH OUTSIDE OR INSIDE WELDS. WELDING METHOD AND ORDER MUST BE CHOSEN APPROPRIATELY TO FORM A LEAK TIGHT ASSEMBLY.
 - CONTINUOUS WELDS FOR VACUUM JOINTS ARE TO BE LEAK TIGHT SUCH THAT A HELIUM LEAK TEST VERIFIES THE CHAMBER TO HAVE A LEAK RATE $1.0E-9$ STANDARD CC/SEC. THIS CAN BE DONE AS PART OF THE OVERALL CHAMBER ASSEMBLY LEAK CHECK. STRUCTURAL SKIP WELDS ARE ACCEPTABLE FOR RIBS AND MOUNTING BRACKETS.
 - THIS CHAMBER IS INTENDED FOR ROUGH VACUUM SERVICE. HOWEVER, TO ENSURE THAT THE CHAMBER DOES NOT CONTAMINATE NEIGHBORING COMPONENTS, AND TO MAINTAIN CONSISTENT CLEANLINESS STANDARDS AT THE BEAMLINE, THE DESIGN, FABRICATION, AND CLEANING PROCEDURES SHALL BE CHOSEN AS IF IT IS INTENDED FOR UHV SERVICE.
 - PROTECT ALL FLANGE SEALING SURFACES DURING MACHINING. ANY NICKS OR SCRATCHES TO A SEALING SURFACE WILL RENDER THE PART UNACCEPTABLE.

- SOURCE OR EQUIVALENT ANCORP
707 SW 19TH AVENUE
WILLISTON, FL 32696
352-528-4100
- SOURCE OR EQUIVALENT VACUUM ONE (MDC/ISI)
2502 NORTH CLARK STREET
CHICAGO, IL 60614
773-244-3102

ITEM	DRAWING / PART NUMBER	REV	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC.	QTY
4	A308-BI2311	00	WAXPCS FLIGHT TUBE - LDDP - PIPE1	ALUMINUM 6061-T6	1
3	4500083	00	SOCKET FLANGE 10" BORE ISO-LF250	ALUMINUM 6061-T6	2
2	715112	00	WELD STUB NW40 ISO KF 1.58" LG	ALUMINUM 6061-T6	1
1	715111	00	WELD STUB NW25 ISO KF 1.58" LG	ALUMINUM 6061-T6	2

PARTS LIST / BILL OF MATERIALS					
SHARP EDGES .03" TO .765mm	DRAWN BY: KEVIN WAKEFIELD	DATE: 29-AUG-22	THIS DRAWING IS THE PROPERTY OF		
MAX. SURFACE TEXTURE IN ACCORDANCE WITH LATEST ASME B46.1-2002 DIMENSIONING AND TOLERANCING IN ACCORDANCE WITH LATEST ASME Y14.5M-2009	DESIGNED BY: KEVIN WAKEFIELD	DATE: 29-AUG-22	Argonne NATIONAL LABORATORY		
UNLESS OTHERWISE SPECIFIED	CHECKED BY: DANIEL PASHOLK	DATE: 29-AUG-22	ADVANCED PHOTON SOURCE		
ALL DIMENSIONS ARE: in	GROUP LEADER/PROJECT LEADER/CAM: DANIELA CAPATINA	DATE: 29-AUG-22	BEAMLINE 8-ID		
DIMS IN [] ARE REF ONLY	APPROVER: BRIAN M RUSTHOVEN	DATE: 29-AUG-22	8ID BEAMLINE INSTRUMENTATION		
TOLERANCES	MATERIAL: 6061-T6	DATE: 29-AUG-22	WAXPCS INSTRUMENT		
ANGULAR .XX ± .03	SCALE: 2:5	DATE: 29-AUG-22	WAXPCS FLIGHT TUBE - LDDP - SHORT		
EQ.5" .XXX ± .005	RELEASE LEVEL: RELEASED	DATE: 29-AUG-22	A308-BI2310		
SURFACE ROUGHNESS 125/	PROJ ID: APSU	DOC TYP ID: DWG	SYS ID: BLS	LOC ID: BL	REV: 00

REVISIONS					
ZONE	REV	DESCRIPTION	BY	APPROVED	DATE



NOTES:

- VENDOR MAY CHOOSE TO WELD COMPONENTS WITH OUTSIDE OR INSIDE WELDS. WELDING METHOD AND ORDER MUST BE CHOSEN APPROPRIATELY TO FORM A LEAK TIGHT ASSEMBLY.
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SOURCE OR EQUIVALENT
 ANCORP
 707 SW 19TH AVENUE
 WILLISTON, FL 32696
 352-528-4100

SOURCE OR EQUIVALENT
 VACUUM ONE (MDC/ISI)
 2502 NORTH CLARK STREET
 CHICAGO, IL 60614
 773-244-3102

ITEM	DRAWING / PART NUMBER	REV	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC.	QTY
4	A308-BI2321	00	WAXPCS FLIGHT TUBE - LDDP - PIPE2	ALUMINUM 6061-T6	1
3	4500083	00	SOCKET FLANGE 10" BORE ISO-LF250	ALUMINUM 6061-T6	2
2	715112	00	WELD STUB NW40 ISO KF 1.58" LG	ALUMINUM 6061-T6	1
1	715111	00	WELD STUB NW25 ISO KF 1.58" LG	ALUMINUM 6061-T6	2

PARTS LIST / BILL OF MATERIALS					
SHARP EDGES .03" TO .765mm	DRFTER:	DATE	THIS DRAWING IS THE PROPERTY OF		
MAX. SURFACE TEXTURE IN ACCORDANCE WITH LATEST ASME B46.1-2002 DIMENSIONING AND TOLERANCING IN ACCORDANCE WITH LATEST ASME Y14.5M-2009	KEVIN WAKEFIELD	29-AUG-22	Argonne NATIONAL LABORATORY	ADVANCED PHOTON SOURCE	
UNLESS OTHERWISE SPECIFIED	DESIGNER:	DATE		BEAMLINE 8-ID	
ALL DIMENSIONS ARE: in	KEVIN WAKEFIELD	29-AUG-22	8ID BEAMLINE INSTRUMENTATION		
DIMS IN [] ARE REF ONLY	CHECKER:	DATE	WAXPCS INSTRUMENT		
TOLERANCES	DANIEL PASHOLK	DATE	WAXPCS FLIGHT TUBE - LDDP		
.X ± .1	RESPONSIBLE ENGINEER:	DATE	DOC. TITLE:		
.XX ± .03	DANIELA CAPATINA	DATE	WAXPCS FLIGHT TUBE - LDDP - LONG		
.XXX ± .005	MIKE FISHER	DATE	PROJ ID: APSU		
ANGULAR	APPROVER:	DATE	DWG: BLS		
± 0.5°	BRIAN M RUSTHOVEN	DATE	SYS ID: BL		
SURFACE ROUGHNESS	MATERIAL:	DATE	LOC ID: A308-BI2320		
125/	SEE PARTS LIST	DATE	MODEL NAME: A308-BI2320		
	APPROX. WT: 16 lbm	RELEASE LEVEL: RELEASED	REV: 00		
			SCALE: 3:10		
			SHEET 1 OF 1		

