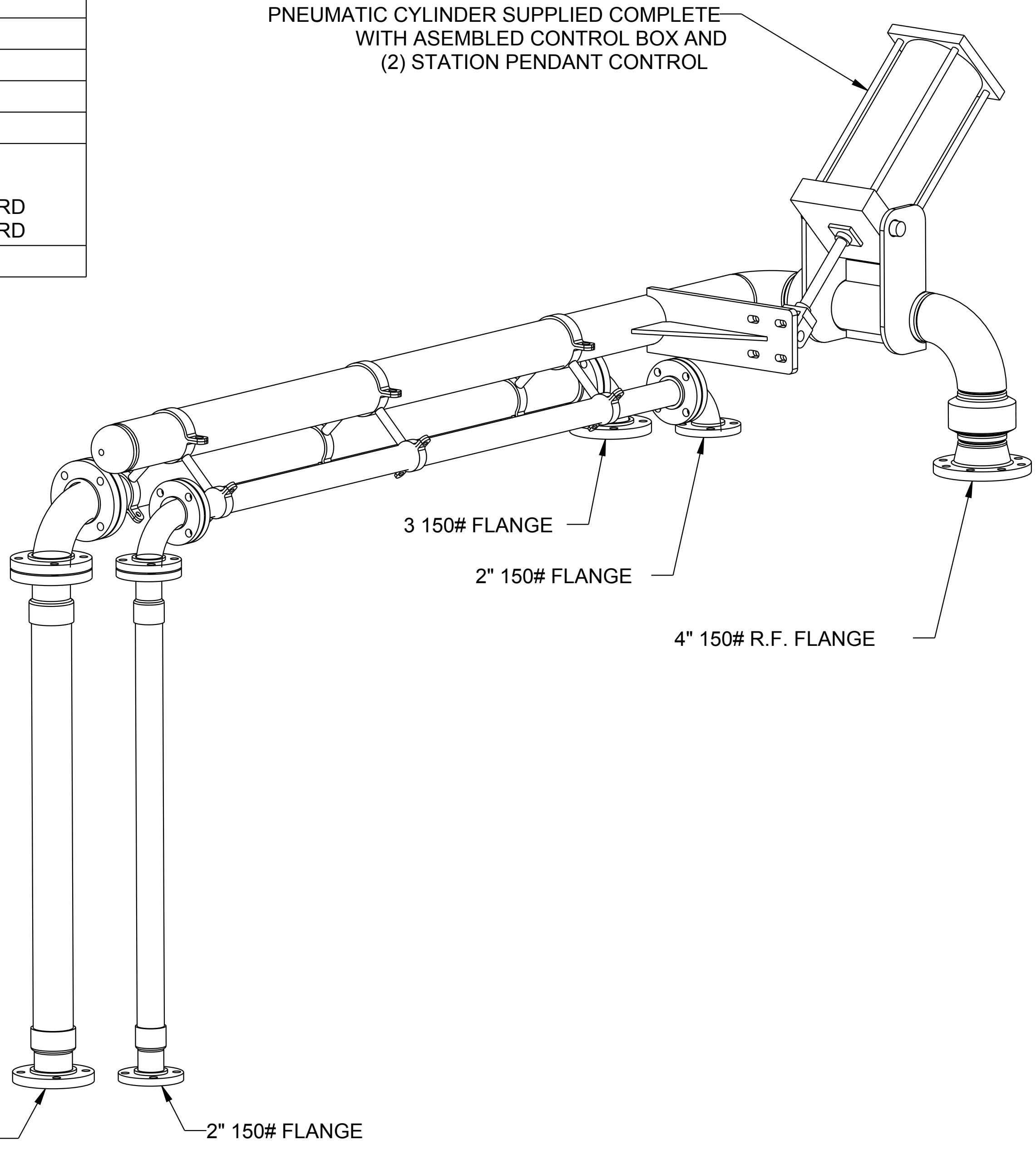


MATERIALS OF CONSTRUCTION	BY-PASS ARM: CARBON STEEL WETTED PARTS: PTFE LINED
SWIVEL JOINT SEALS	FLUOROCARBON GFLT
PRODUCT	CERIUM CHLORIDE
ESTIMATED WEIGHT	525 LBS
MOMENT LOAD AT CYLINDER	24,850 IN-LBS
TEST PRESSURE	90 PSI
PRODUCT RETENTION	NO
WEIGHT BY OTHERS	30 LBS BOTTOM OF 3" DROP HOSE 20 LBS BOTTOM OF 2" DROP HOSE 30 LBS @ 3" PTFE LINED FLG INBOARD 20 LBS @ 2" PTFE LINED FLG INBOARD
VERTICAL CYLINDER TRAVEL	-35° TO +35°

THIS DRAWING IS NOT TO BE SCALED. FOR ADDITIONAL INFORMATION, PLEASE CONTACT OUR ENGINEERING DEPT.

REVISIONS					
LTR	ECN #	DESCRIPTION	DRAWN	APPROVED	DATE
-	-	-	-	-	-

PNEUMATIC CYLINDER SUPPLIED COMPLETE WITH ASSEMBLED CONTROL BOX AND (2) STATION PENDANT CONTROL



~~CONFIDENTIAL~~ THIS DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO OPW, AND SHOULD BE PROTECTED ACCORDINGLY.

DESCRIPTION: 4" BY-PASS ARM, UFRH

SIGNATURES		MO-DA-YR
DRAWN: BJB		12/27/10
CHECKED: -		-
MATERIAL:	WEIGHT:	-

REV: -	PART NUMBER:	Engineered Systems <small>ALDOVE Resources Company</small> Lebanon, Ohio 45036 USA
SIZE: D	J32F-J417	
SCALE: 0.125	SHEET 1 OF 7	3D GENERATED DRAWING

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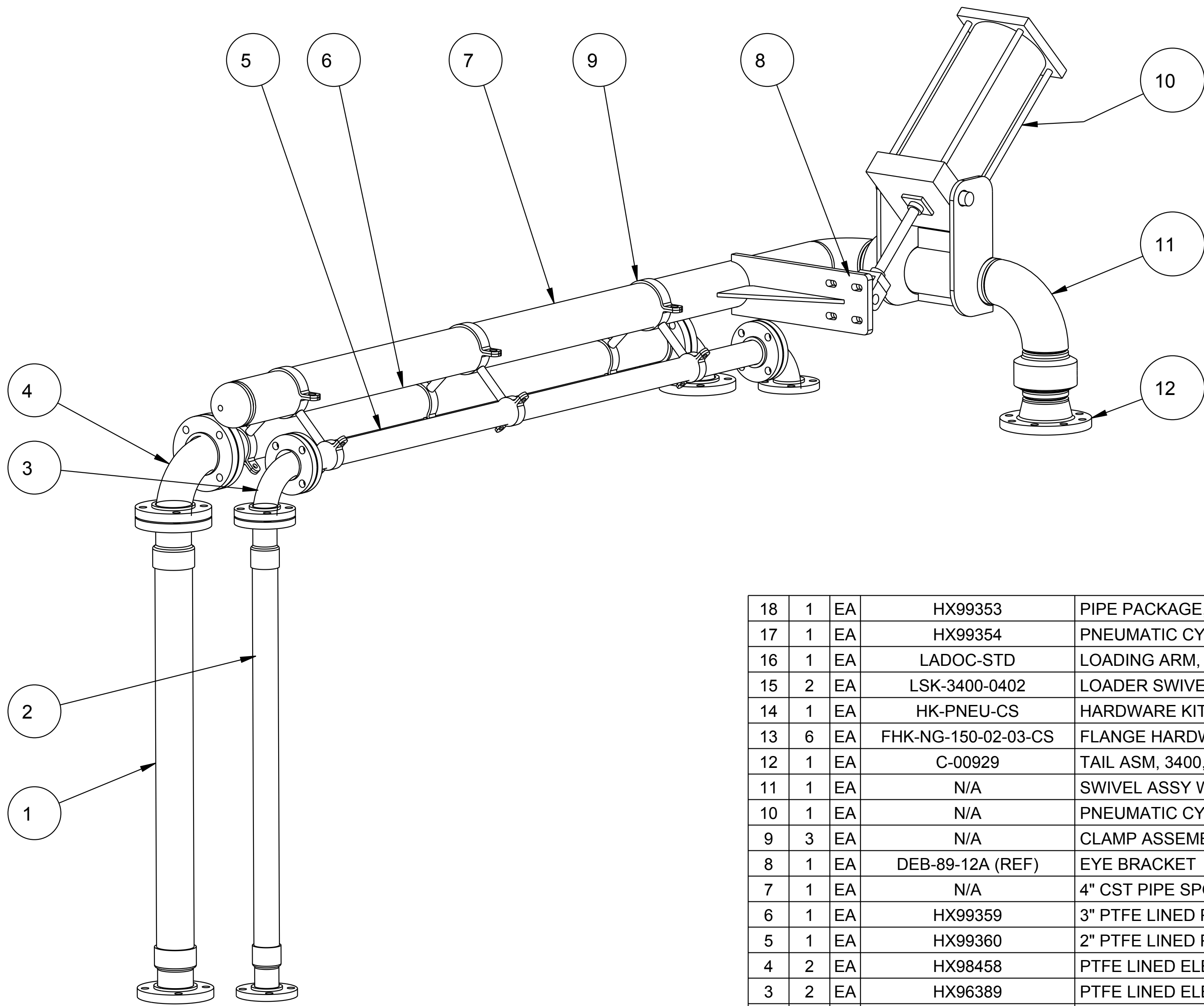
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THIS DRAWING IS NOT TO BE SCALED. FOR ADDITIONAL INFORMATION, PLEASE CONTACT OUR ENGINEERING DEPT.



18	1	EA	HX99353	PIPE PACKAGE, CST, J32F-J417
17	1	EA	HX99354	PNEUMATIC CYLINDER PACKAGE
16	1	EA	LADOC-STD	LOADING ARM, NAME TAG AND HARDWARE
15	2	EA	LSK-3400-0402	LOADER SWIVEL KIT, 3400, FLUOROCARBON, 4"
14	1	EA	HK-PNEU-CS	HARDWARE KIT, PNEU CYL, CS
13	6	EA	FHK-NG-150-02-03-CS	FLANGE HARDWARE KIT, NO GSKT, 150#, CS, 2", 3"
12	1	EA	C-00929	TAIL ASM, 3400, EF, 4"
11	1	EA	N/A	SWIVEL ASSY W/PNEU BRKT'G
10	1	EA	N/A	PNEUMATIC CYLINDER
9	3	EA	N/A	CLAMP ASSEMBLY
8	1	EA	DEB-89-12A (REF)	EYE BRACKET
7	1	EA	N/A	4" CST PIPE SPOOL
6	1	EA	HX99359	3" PTFE LINED PIPE SPOOL
5	1	EA	HX99360	2" PTFE LINED PIPE SPOOL
4	2	EA	HX98458	PTFE LINED ELBOW, 90 DEG, CST, 3"
3	2	EA	HX96389	PTFE LINED ELBOW, CST, 90 DEG, 2"
2	1	EA	HX99361	2" SST FLEXHOSE, 150# FLG EA END
1	1	EA	HX99362	3" SST FLEXHOSE, 150# FLG EA END
ITEM	QTY	UM	PART NUMBER	DESCRIPTION

CONFIDENTIAL		DESCRIPTION: 4" BY-PASS ARM, UFRH	
DRAWN: BJB		MO-DA-YR: 12/27/10	REV: -
CHECKED: -		SIZE: D	PART NUMBER: J32F-J417
MATERIAL: -		WEIGHT: -	SCALE: 0.125
			SHEET 2 OF 7
		OPW Engineered Systems Lebanon, Ohio 45036 USA 3D GENERATED DRAWING	

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THIS DRAWING IS NOT TO BE SCALED. FOR ADDITIONAL INFORMATION, PLEASE CONTACT OUR ENGINEERING DEPT.

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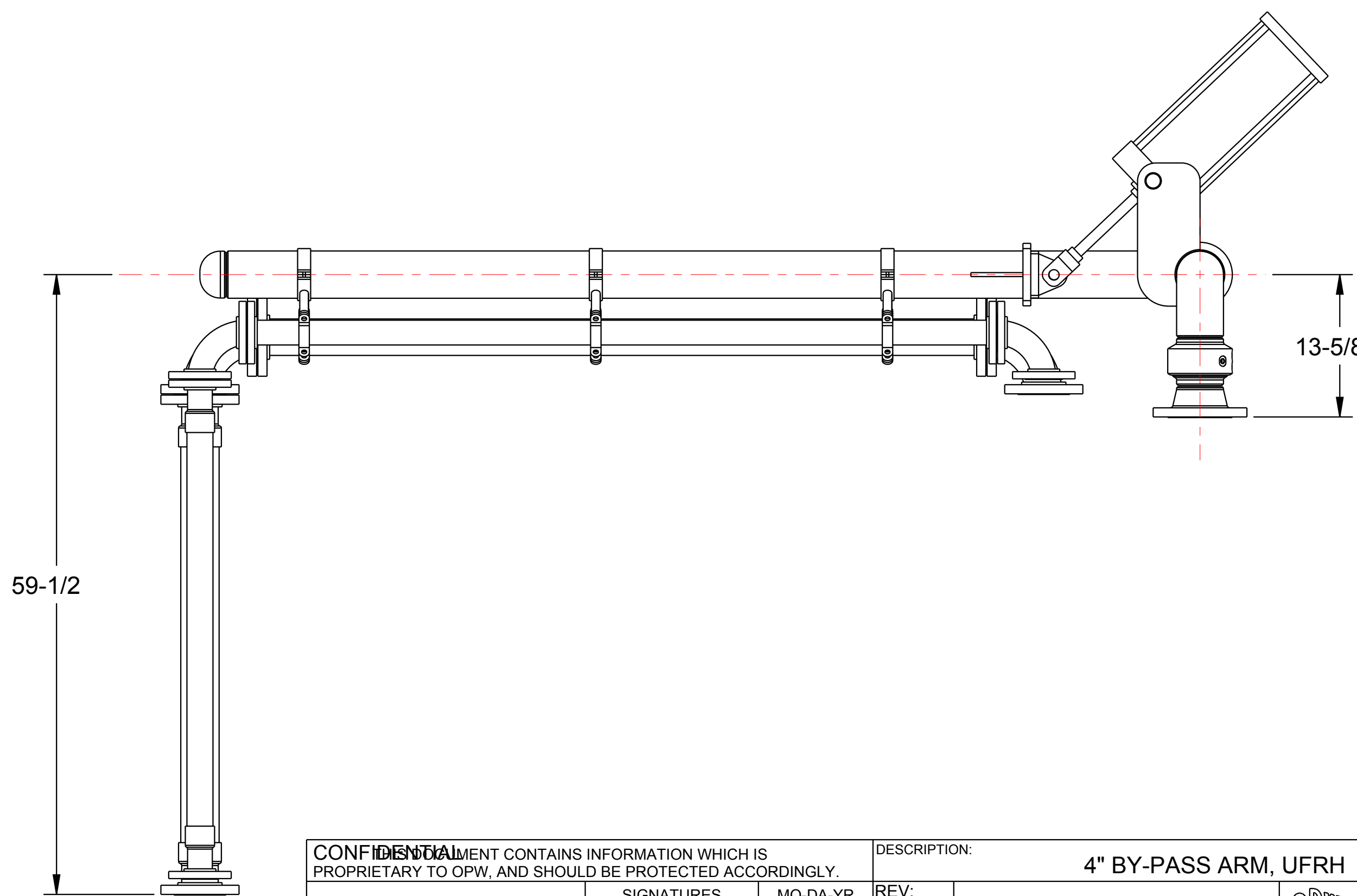
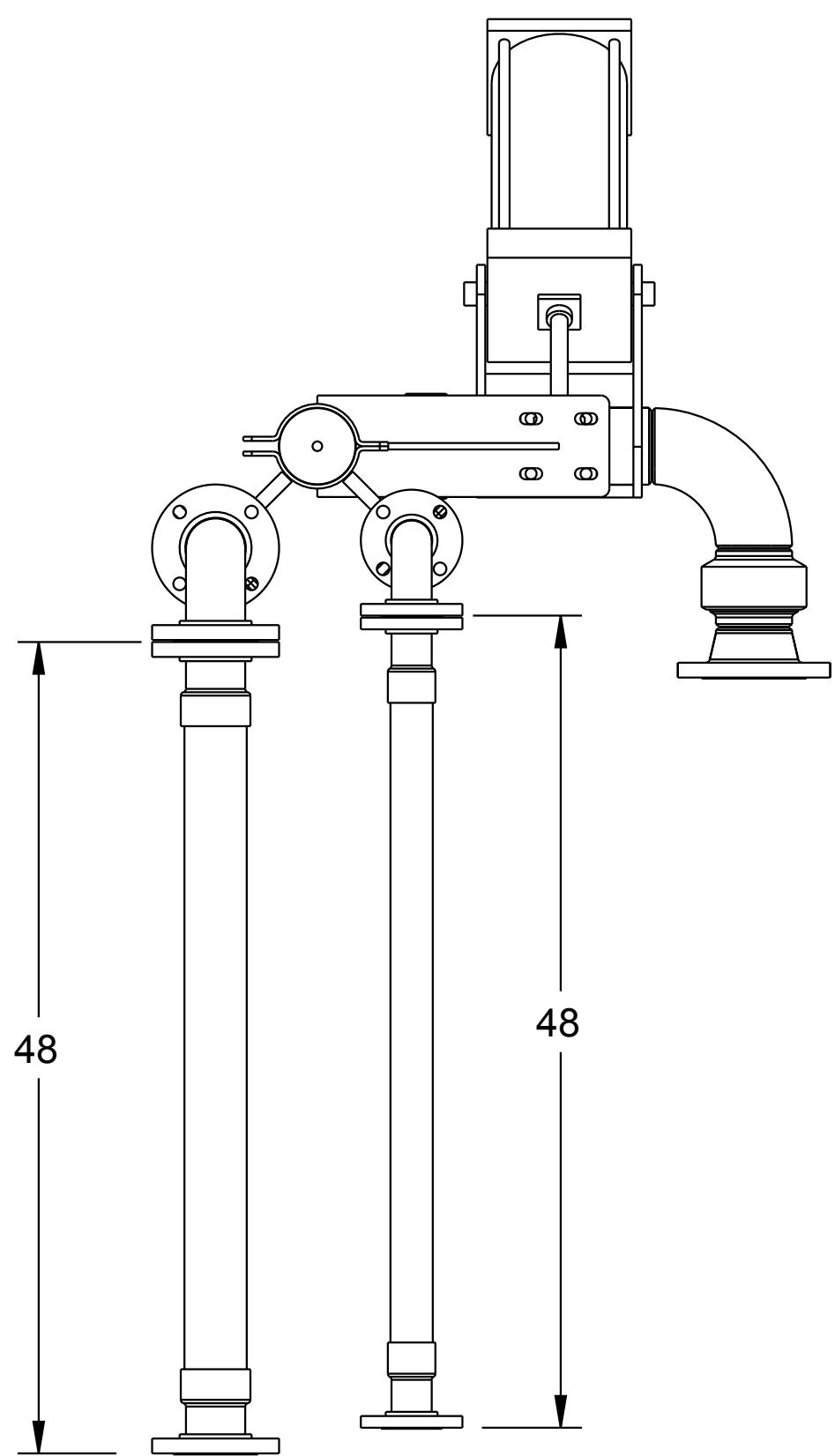
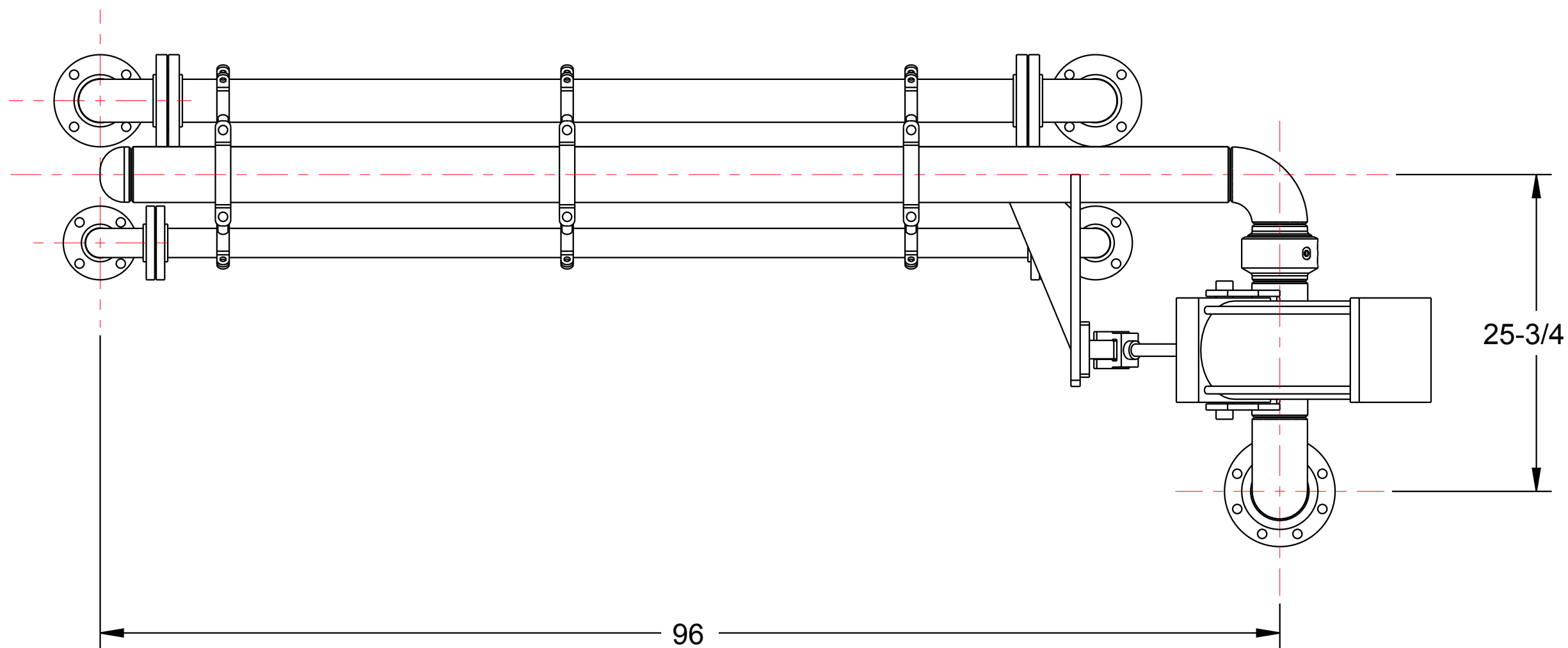
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<p>CONFIDENTIAL THIS DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO OPW, AND SHOULD BE PROTECTED ACCORDINGLY.</p>		<p>DESCRIPTION: 4" BY-PASS ARM, UFRH</p>	
SIGNATURES		MO-DA-YR	REV:
DRAWN: BJB		12/27/10	-
CHECKED: -		-	SIZE: D
MATERIAL: -		WEIGHT: -	-
		PART NUMBER: J32F-J417	
		SCALE: 0.100 SHEET 3 OF 7	
		<p>OPW Engineered Systems <small>A DOVER Resources Company</small> Lebanon, Ohio 45036 USA 3D GENERATED DRAWING</p>	

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