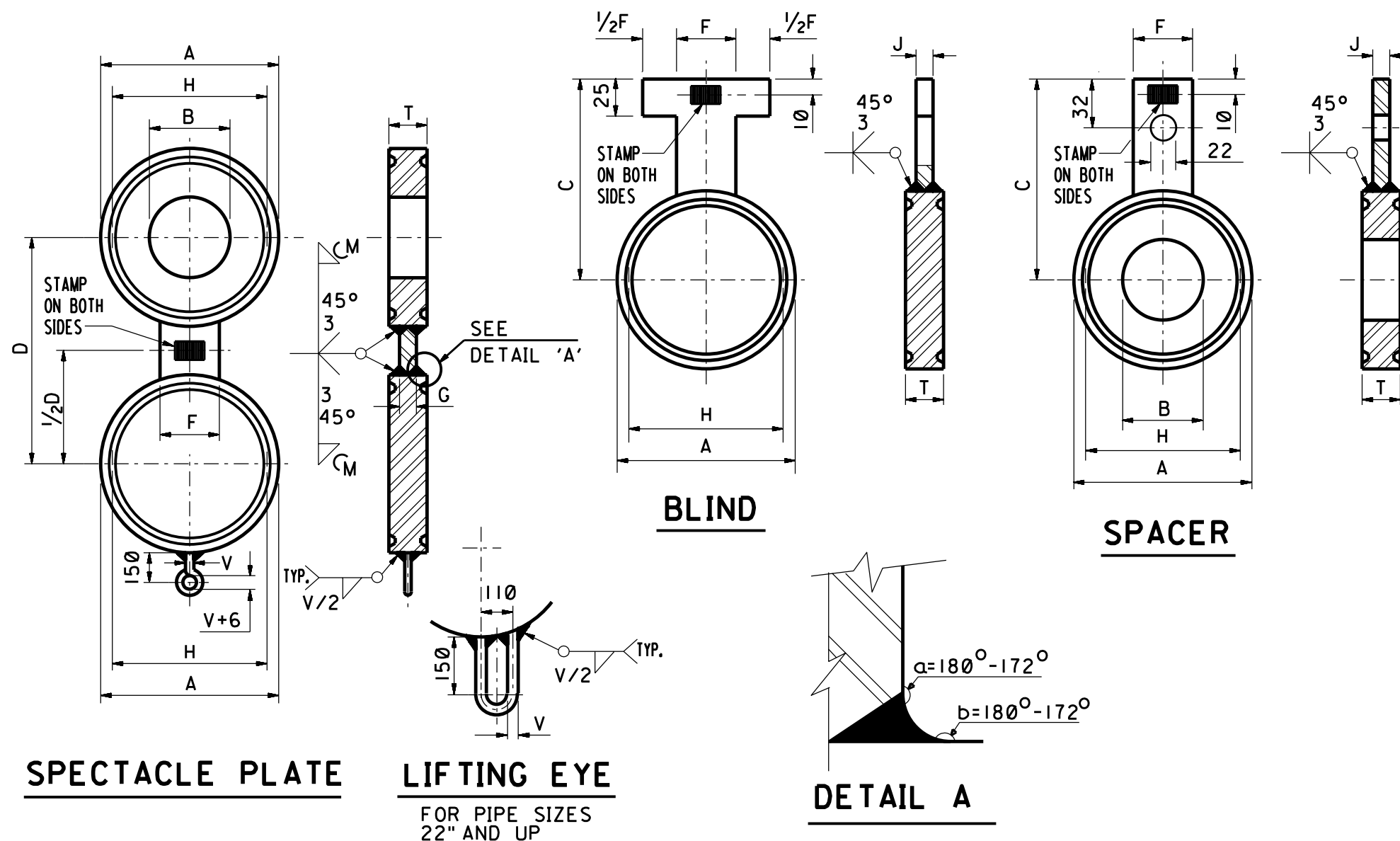




NOTES:

1. SPECTACLE PLATES, BLINDS AND SPACERS ARE TO BE MADE FROM STEEL PLATE 516 GR 70 OR EQUAL WITH SPECIFIED MINIMUM YIELD STRENGTH 262 MPa. MILL PLATE MAY BE USED, HOWEVER, PICKLING, SANDBLASTING OR EQUIVALENT SURFACE TREATMENT IS REQUIRED TO PERMIT VISUAL INSPECTION.
2. THICKNESS "T" IS CALCULATED PER ASME B31.3 PAR. 304.5.3 WITH $P = 15.5 \text{ MPa}$ AND $SE = 235.8 \text{ MPa}$ (0.9 SMYS) AT 38°C (100°F) TO OBTAIN THE MAXIMUM P/SE RATIO. FLANGE MATERIAL IS ASME B16.5 MATERIAL GROUP NO. 1.2.
3. TOLERANCES: DIAMETERS "A" & "B": $+3\text{mm}, -0$
THICKNESS "T": $+1.5\text{mm}, -0.25\text{mm}$
FOR DIMENSIONS AND TOLERANCES OF RING JOINT GROOVES AND RINGS SEE ASME B16.20 LATEST EDITION.
4. LIFTING EYE IS TO BE FORMED FROM STEEL ROD OF COMPOSITION SIMILAR TO THAT OF THE PLATE. COMMERCIAL STANDARD EYEBOLTS MAY BE USED IF THEY HAVE THE REQUIRED DIMENSIONS AND MATERIAL COMPOSITION.
5. WELDING SHALL BE 100% PENETRATION BY A PROCEDURE TO BE APPROVED BEFORE FABRICATION. WELDING TO BE GROUND TO SMOOTH CONTOUR.
6. EDGES OF BLINDS TO BE FREE FROM ROUGH BURN FINISH AND BURRS.
7. STAMP SIZE AND CLASS 600 AND GASKET RING NUMBER IN 8mm LETTERS WHERE INDICATED ON DRAWING.

MANDATORY DRAWING

SCALE: _____

REVISION VALIDATION

THIS REVISION NO. **10** IS COVERED, FOR ALL APPROVAL AND CERTIFICATION REQUIREMENTS, PER SAEP-334, UNDER DRAWING COMPLETION CERTIFICATE NO:

714310-1011-001

DESIGN CERTIFICATION (DESIGN AGENCY) REVIEW FOR KEY DRAWINGS (SAUDI ARAMCO) OTHER

ENGG./DATE **AMA** 10-31-11 CERTIFIED BY/DATE **HMM** 10-31-11 CONST. AGENCY/DATE **NIN** 10-31-11 BY/DATE

REV. NO. **10** DATE **11-12-11** REVISION DESCRIPTION **GENERAL REVISION**

JOB ORDER/EWO NO. **714310** THIS REVISION IS NOT TO BE USED FOR CONSTRUCTION UNTIL CERTIFIED AND DATED

SAUDI ARABIAN OIL COMPANY

SPECTACLE PLATES, BLINDS AND SPACERS FOR CLASS 600 OCT. DRAWING TYPE **STD**

RING JOINT FLANGES

STANDARD DRAWING METRIC

PLANT NO. **990** INDEX **L** DRAWING NUMBER **AD-036734** SHT. NO. **001** REV. NO. **10**

NOMINAL PIPE SIZE (in.)	A (mm)	B (mm)	C (mm)	D (mm)	F (mm)	G (mm)	H (mm)	J (mm)	T (mm)	V (mm) SEE NOTE-4	GASKET RING NO.	BLIND MASS (kg.)	SPACER MASS (kg.)	SPECTACLE MASS (kg.)
2"	110	AS SPECIFIED BY PURCHASE ORDER	190	180	25	10	SEE NOTE-3	6	27	-	R23	2	2	4
3"	145		215	220	40	12		6	32	-	R31	5	4	7
4"	175		245	285	40	12		6	35	-	R37	7	5	11
6"	240		285	370	40	15		8	42	12	R45	16	9	25
8"	300		315	430	40	20		12	48	16	R49	29	16	45
10"	355		360	520	40	25		12	54	16	R53	47		69
12"	415		385	570	40	25		15	61	20	R57	71	32	103
14" O.D.	455		410	615	40	25		20	65	20	R61	91	43	134
16" O.D.	510		450	700	50	30		20	70	20	R65	122	52	174
18" O.D.	575		480	755	50	40		25	77	20	R69	174	74	248
20" O.D.	635		515	825	50	40		25	86	24	R73	240	89	329
22" O.D.	685		545	885	50	45		30	92	24	R81	297	110	407
24" O.D.	750		580	950	50	50		30	101	24	R77	393	151	544
30" O.D.	920		675	1145	50	50		30	123	32	R95	705	245	950