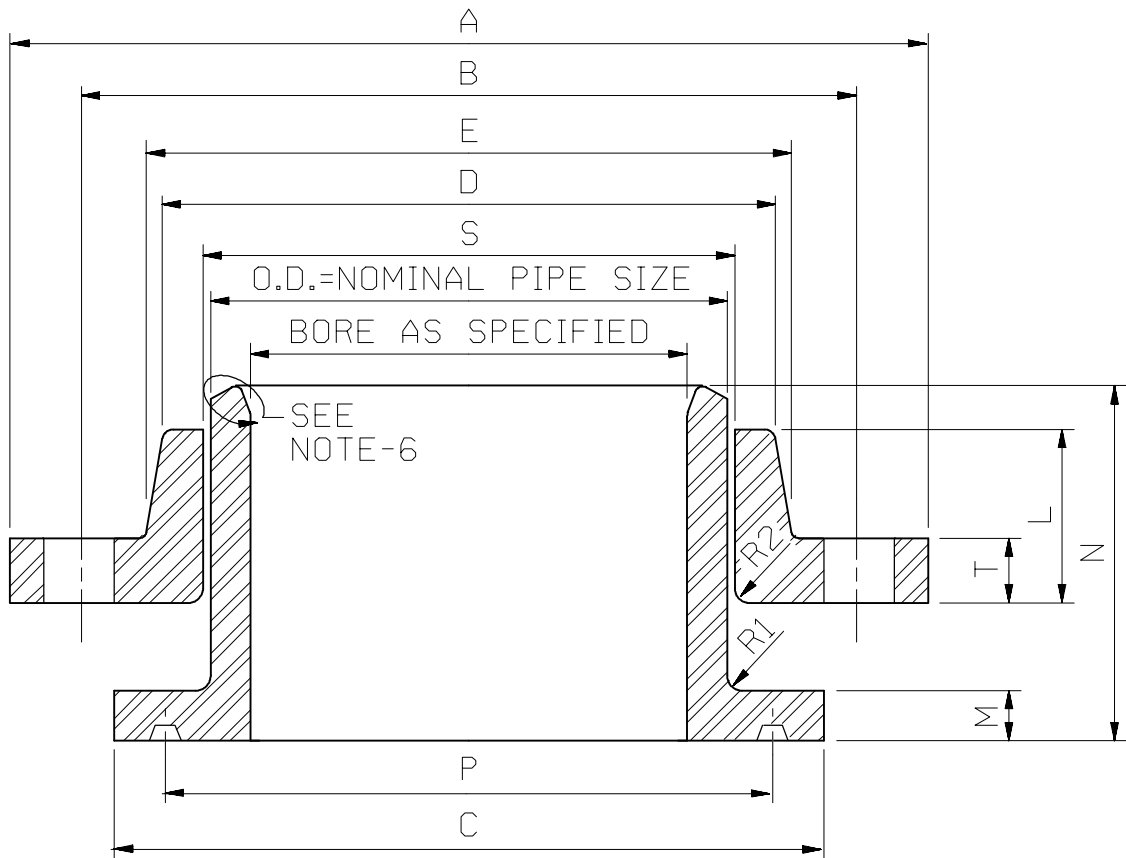
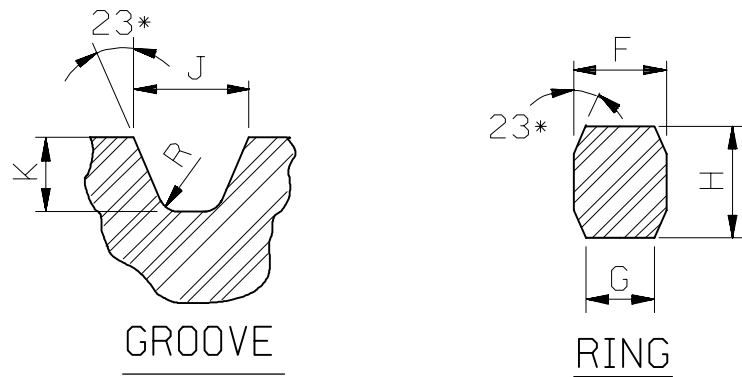
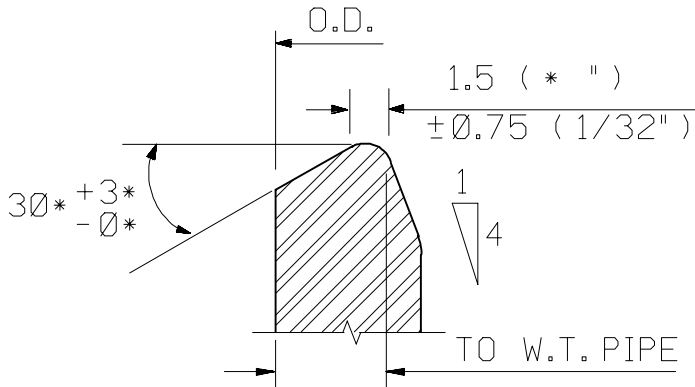


80	100	984930-04	7	066
PLANT NO.	INDEX	DRAWING NUMBER	SHT. NO.	REV. NO.



- NOTES:
- DIMENSIONAL TOLERANCES NOT SHOWN, MARKING, FINISHES AND SPOT FACING SHALL CONFORM TO ANSI B 16.5 LATEST EDITION, EXCEPT TOLERANCE ON WALL AND LAP THICKNESS OF STUB END TO BE + 1.5MM (*"), -0.
 - DRILLING DIMENSIONS FOR SIZES LARGER THAN 36" ARE EXTRAPOLATED FROM MSS-SP-44 AND DO NOT CORRESPOND WITH MSS-SP-44-1982; GROOVE AND RING DIMENSIONS ARE TAKEN FROM TAYLOR FORGE.
 - MATERIALS:
WELDING ENDS SHALL BE F52 IN ACCORDANCE WITH 02-SAMSS-011.
BACKING FLANGES SHALL BE ASTM A694 F52.
 - GROOVE RADIUS "R" IS 1.5 (*").
 - RADIUS AT STUB END "R1"=13MM (*"), RADIUS AT LOOSE FLANGE "R2"=13MM (*").
 - TAPER TO MATCH PIPE BORE TO BE IN ACCORDANCE WITH ANSI B 31.4.
 - BOLT HOLE DIAMETER=BOLT DIAMETER +3MM (*").
 - DIMENSIONS FOR SIZES 54 AND 60 IN. ARE SHOWN ON STD. DWG. AC-036438.
 - MARKINGS IN ACCORDANCE WITH 02-SAMSS-011 (NPS IN INCHES).

REVISION NOTE - 1 :
CONSOLIDATED SHEET NOS.1 & 2 INTO SHEET NO.1
COMPLETELY REDRAWN AND REVISED. CHANGE DRAWING SIZE FROM E TO C.

NOM. PIPE SIZE IN.	A		B		C		D		E		F		G		H		J		K		L		M		N		P		S		T		BORE STUB END		NO. OF BOLT HOLES	STUD BOLT SIZE				APPROX. MASS	
	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.		MM.	IN.	MM.	IN.	MM.	IN.
26	970	38*	876	34*	810	31*	724	28*	750	29*	19	*	12.3	.485	24	15/16	20	25/32	13	*	185	7*	35	1*	330	13	750	29*	667	26*	80	3*	619	24*	28	41	1*	290	11*	450	990
28	1035	40*	939	37	860	33*	780	30*	806	31*	19	*	12.3	.485	24	15/16	20	25/32	13	*	200	7*	35	1*	330	13	800	31*	718	28*	85	3*	667	26*	28	41	1*	320	12*	535	1180
30	1090	43	997	39*	920	36*	832	32*	860	33*	19	*	12.3	.485	24	15/16	20	25/32	13	*	210	8*	37	1*	355	14	857	33*	768	30*	95	3*	714	28*	28	44	1*	345	13*	635	1400
32	1150	45*	1054	41*	985	38*	886	34*	914	36	22	*	14.8	.583	27	1*	23	29/32	14	*	220	8*	40	1*	355	14	915	36	820	32*	100	3*	762	30	28	48	1*	370	14*	740	1630
34	1205	47*	1105	43*	1035	40*	937	36*	968	38*	22	*	14.8	.583	27	1*	23	29/32	14	*	230	9*	42	1*	355	14	965	38	870	34*	100	4	810	31*	28	48	1*	370	14*	850	1870
36	1270	50	1168	46	1090	43	994	39*	1026	40*	22	*	14.8	.583	27	1*	23	29/32	14	*	240	9*	45	1-11/16	380	15	1022	40*	920	36*	105	4*	857	33*	32	51	2	380	15	955	2100
38	1325	52*	1219	48	1100	43*	1045	41*	1080	42*	19	*	12.3	.485	24	15/16	20	25/32	13	*	254	10	42	1*	380	15	1030	40*	972	38*	110	4*	908	35*	32	51	2	395	15*	1020	2250
40	1385	54*	1276	50*	1135	44*	1095	43*	1130	44*	19	*	12.3	.485	24	15/16	20	25/32	13	*	265	10*	42	1*	380	15	1067	42	1022	40*	115	4*	959	37*	36	51	2	405	16	1100	2430
42	1450	57	1340	52*	1185	46*	1149	45*	1187	46*	19	*	12.3	.485	24	15/16	20	25/32	13	*	275	10*	42	1*	405	16	1118	44	1073	42*	120	4*	1010	39*	36	51	2	405	16	1240	2730
44	1505	59*	1397	55	1265	49*	1200	47*	1238	48*	19	*	12.3	.485	24	15/16	20	25/32	13	*	285	11*	45	1*	405	16	1195	47	1125	44*	120	4*	1054	41*	36	51	2	420	16*	1395	3070
46	1560	61*	1454	57*	1300	51*	1254	49*	1295	51	19	*	12.3	.485	24	15/16	20	25/32	13	*	300	11*	45	1*	405	16	1232	48*	1175	46*	125	4*	1105	43*	40	51	2	430	17	1505	3320
48	1650	65	1543	60*	1355	53*	1305	51*	1350	53*	19	*	12.3	.485	24	15/16	20	25/32	13	*	310	12*	45	1*	430	17	1283	50*	1225	48*	130	5*	1156	45*	40	51	2	445	17*	1745	3850

MANDATORY DRAWING

08	06-11-97	ESSD MAQ		DRAWING REVISED AS PER MARK-UP.			
07	03-20-94	ESSD CAC		REVISED NOTES 3 AND 9.			
06	04-21-90	RLO		REVISED NOTES AND ADDED NOTE 9.	ORIGINAL SIGNED	ORIGINAL SIGNED	ORIGINAL SIGNED
05	07-04-88	RLO		SEE REVISION NOTE 1.	ORIGINAL SIGNED	ORIGINAL SIGNED	ORIGINAL SIGNED
REV. NO.	DATE	BY	JO/EWO	DESCRIPTION	CHKD.	CERT.	APPD.

SAUDI ARABIAN OIL COMPANY

DRAWN BY J. GR. CHECKED BY _____ SCALE NONE
DATE STARTED _____ DATE COMPLETED 11-28-73
OPR'G. DEPT. _____ ENG. DEPT. ORIGINAL SIGNED
APP'D FOR CONSTR. _____
THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FOR ORDERING MATERIAL UNTIL CERTIFIED AND DATED
CERTIFIED BY _____ DATE _____

LAP JOINT FLANGES AND STUB ENDS

LARGE SIZE

CLASS 300 RING JOINT

STD. DWG.

PLANT NO.	INDEX	DRAWING NUMBER	SHT. NO.	REV. NO.
990	L	AC-036486	001	08