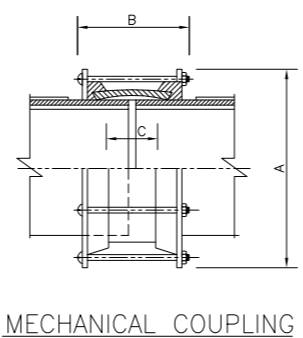
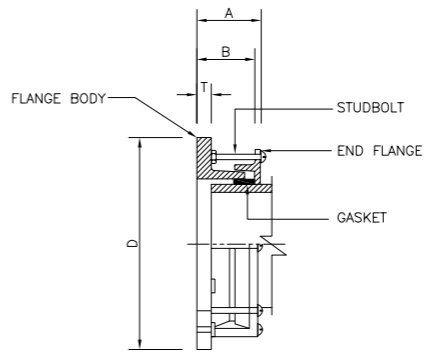


HEMI-SPHERICAL WELDED SLIP JOINT
(FOR PIPES 660.4 FID AND BELOW)

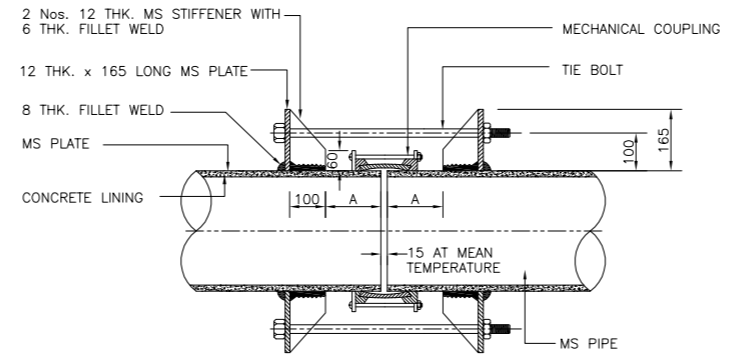


MECHANICAL COUPLING

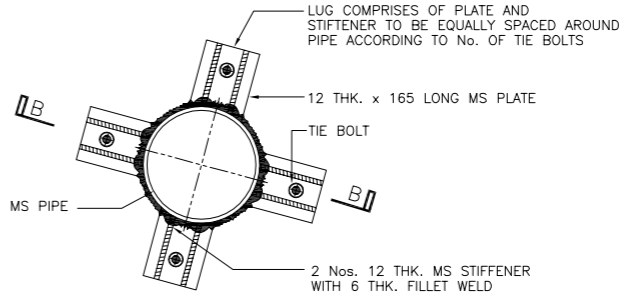


FLANGE ADAPTOR

PIPE ND (mm)	PIPE FID (mm)	PIPE OD (mm)	RADIUS R (mm)	STEEL PLATE THICKNESS T (mm)	ENGAGEMENT		A (mm)	B (mm)	C (mm)
					NORMAL 4T+(TTR/90) (mm)	MINIMUM 4T (mm)			
100	95.1	114.3	57.15	3.6	16.4	14.4	118.4	18.4	2.0
150	149.1	168.3	84.15	3.6	17.3	14.4	120.3	20.3	2.9
200	191.1	219.1	109.55	4	19.8	16	123.6	23.6	3.8
250	245	273	136.5	4	20.8	16	125.5	25.5	4.8
300	295.9	323.9	161.95	4	21.7	16	127.3	27.3	5.7
350	320.6	355.6	177.8	4.5	24.2	18	130.4	30.4	6.2
400	371.4	406.4	203.2	4.5	25.1	18	132.2	32.2	7.1
450	421	457	228.5	5	25.0	20	136.0	36.0	8.0
500	472	506	254	5	28.9	20	137.8	37.8	8.9
600	571.4	610	305	6.3	35.8	25.2	146.4	46.4	10.6



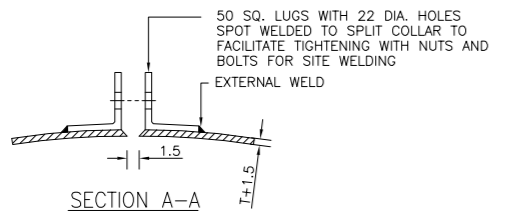
SECTION B-B



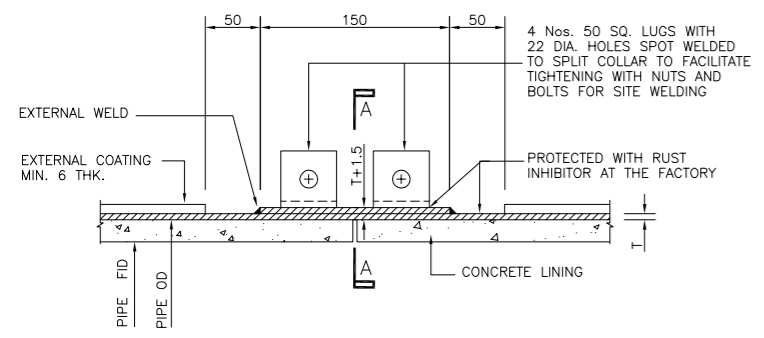
TYPICAL SECTIONAL VIEW

MECHANICAL COUPLING JOINT WITH TIE BOLTS

PIPE ND (mm)	TIE BOLT DIA (10 BAR)	No. OF BOLTS	A (mm)
100 TO 250	12	4	300
300 TO 400	16	4	350
450 TO 500	20	4	350
600	24	4	350



SECTION A-A



WELDED COLLAR JOINT
(FOR PIPES 660.4 FID AND BELOW)

DIAMETER		FLANGE ADAPTOR										
ND (mm)	OD (mm)	D (mm)	T (mm)	A (mm)	B (mm)	Nos.	FLANGE BOLTS	HOLE DIA. (mm)	Nos.	BOLT CIRCLE (mm)	STUD BOLTS DIA x LENGTH (INCHES)	
100	114.3	220	20	118	75	8	M16	18	4	180	1/2" x 4 1/2"	
150	168.3	285	22	118	75	8	M20	22	4	240	1/2" x 4 1/2"	
200	219.1	340	24	118	75	12	M20	22	6	295	1/2" x 4 1/2"	
250	273	405	25	136	90	12	M24	26	6	355	1/2" x 5 1/4"	
300	323.9	460	25	136	90	12	M24	26	6	410	1/2" x 5 1/4"	
350	355.6	520	25	155	105	16	M24	26	8	470	5/8" x 6"	
400	406.4	560	25	155	105	16	M27	30	8	525	5/8" x 6"	
450	457	640	25	155	105	20	M27	30	10	585	5/8" x 6"	
500	506	715	25	155	105	20	M30	33	10	650	5/8" x 6"	
600	610	840	25	155	105	20	M33	34	10	770	5/8" x 6"	

ND (mm)	FID (mm)	OD (mm)	A (mm)	B (mm)	C x THK. (mm)	BOLTS	
						Nos.	DIA. LENGTH
100	95.1	114.3	218	175	100 x 6	4	M12 x 165
150	149.1	168.3	270	175	100 x 7	4	M12 x 165
200	191.1	219.1	324	175	100 x 8	5	M12 x 165
250	245	273	377	175	100 x 8	6	M12 x 165
300	295.9	323.9	426	175	100 x 8	6	M12 x 165
350	320.6	355.6	460	228	150 x 8	6	M16 x 215
400	371.4	406.4	510	228	150 x 8	8	M16 x 215
450	421	457	562	228	150 x 8	8	M16 x 215
500	472	508	612	228	150 x 8	8	M16 x 215
600	571.4	610	716	228	150 x 9	10	M16 x 215

- NOTE:
1. ALL DIMENSIONS ARE IN MILLIMETRE UNLESS OTHERWISE STATED.
 2. FLEXIBLE MECHANICAL COUPLING AND FLANGE ADAPTORS SHALL BE VIKING JOHNSON OR DRESSER COUPLING OR SIMILAR APPROVED TYPE.
 3. ALL COUPLING, ADAPTOR, BOLTS AND NUTS SHALL BE COATED WITH FUSION BONDED EPOXY POWDER OR RILSAN NYLON 11.

REV.	REVISED BY	DESCRIPTION	DATE
01	NORAZLIN	CHANGE LOGO	JAN 2018

Ranhill SAJ
SAJ Ranhill Sdn. Bhd. (476718-H)
Jalan Garuda, LarKin, P.O Box 262,
80350 Johor Bahru, Johor, Malaysia
T_+607-224-4040 F_+607-224-0033

PROJECT:

DRAWING TITLE:
DETAILS OF JOINTS

DRAWN BY : MAZZ DESIGNED : W.C
CHECKED : MFB APPROVED : T.C
SCALE : NOT TO SCALE DATE : JAN 2018
DRAWING NO : SAJ/STD/PDJ/01 (01)