



整体式绝缘接头

INSULATING JOINT

安装使用手册



上海常浩高压管件有限公司

SHANGHAI CHANGHAO HIGH PRESSURE PIPEFITTINGS CO.,LTD.



Product Introduction

Steel pipes suffer chemical and electrochemical corrosion at any moment when they are used, and these metal materials which take up a lot of labor and energy to flow away. This is because iron metal is in an unstable thermodynamic state. Once there are opportunities, it tries to restore a comparatively stable state as it was in the lithosphere before, to produce Fe_2O_3 or transform into Fe^{+3} . In the course, it can be regarded as the reverse course of metallurgy.

Cathodic protection method applied in anti-sepsis engineering effectively resists corrosion of metal pipes, and electricity insulation is an indispensable condition for cathodic protection in anti-sepsis engineering of underground metal pipes. Integral Insulating joint invented by our company applies a patent technique, which more effectively ensures electricity insulating conditions for cathodic protection. Thus it is the best electricity component for cathodic protection.





Its functions are : to perform insulation and seclusion among each section of steel pipe, pipe lines and equipments ; to avoid flowing off of electricity because of cathodic protection ; to reduce Galvanic Corrosion and disturbance of disorder current, and so on. The joint can effectively protect steel pipelines from electrochemical corrosion, extend their usinglifes pan, and prevent electric components of equipments form disturbance of disorder current. product characteristics : high insulating resistance value, high breakdown voltage, better mechanic performance, direct underground use, needing no maintenance management, long using cycle.It is updated and replacing product of insulated Flange.

Monolithic Insulating joint is composed of the following parts : upper and lower conduits, sleeve, insulating part, seals and insulating coat.

Insulating part and seal are fixed where upper and lower conduits are j oined oppositely, which forms double sealing structure possessed of insulating performance. Groove welding is applied to sleeve, or it is directly welded with upper conduit. In this way, insulating part and upper and lower conduits are sealed inside firmly, which forms sealed vessel. Therefore, the joint can provide bette r in sulating effect, and it al so improves mechanic performances such as pull resistance, bending resistance and stress resi stance.

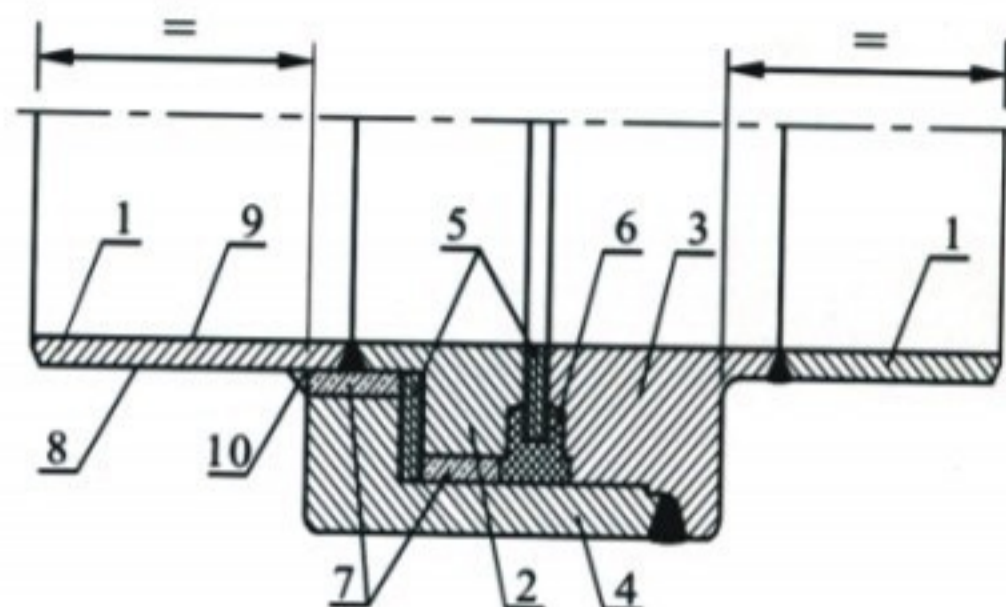


flanged insulating joint

APPLIED STANDARD

1. Design code:
ASME CODE Section VIII Division.1
UNI CIG 10285

2. Material



Item	Parts	Material
1	Pup	API5L
2	Flange-I	ASTMA105
3	Flange-II	
4	Flange-III	
5	Insulation Gasket	Epoxy Fiber Glass ASTM D709
6	Seal System	U-ring(Double Seal System) Viton ASTM D2000
7	Filling	Epoxy resin
8	External Coating	Epoxy Paint DET300Micron
9	Internal Coating	Epoxy Paint DFT300micron
10	Sealant	Epoxy resin

SIZE RANGE:DN25(1") ~ DN1200(48")

PRESSURE CLASS:ANSI 150 ~ ANSI600 (Up to ANSI1500)

WORKING TEMP. :-10 ~ +90°C

SUTABLE MEDIA:Gas, Oil, Water

TESTING

100%Hydrostatic test: 1.5 times MOP

100%Electrical resistance: $\geq 100 \text{ M}\Omega$ (1000 V DC) Under Dry air, 25°C

100%Dielectric Strength: 3.5KV/50Hz(1 min)(Can be 5.0 KV up to the request)

100%Coating Thickness $\geq 300 \mu\text{m}$

100%Appearance and dimension inspection

Standard NDE Test

PN25-MOP25-ANSI#150

1.Pipe Ring Wold(W1-W2): RT

2.ClosureWeld W3: MT

PN64-MOP64-ANSI#300

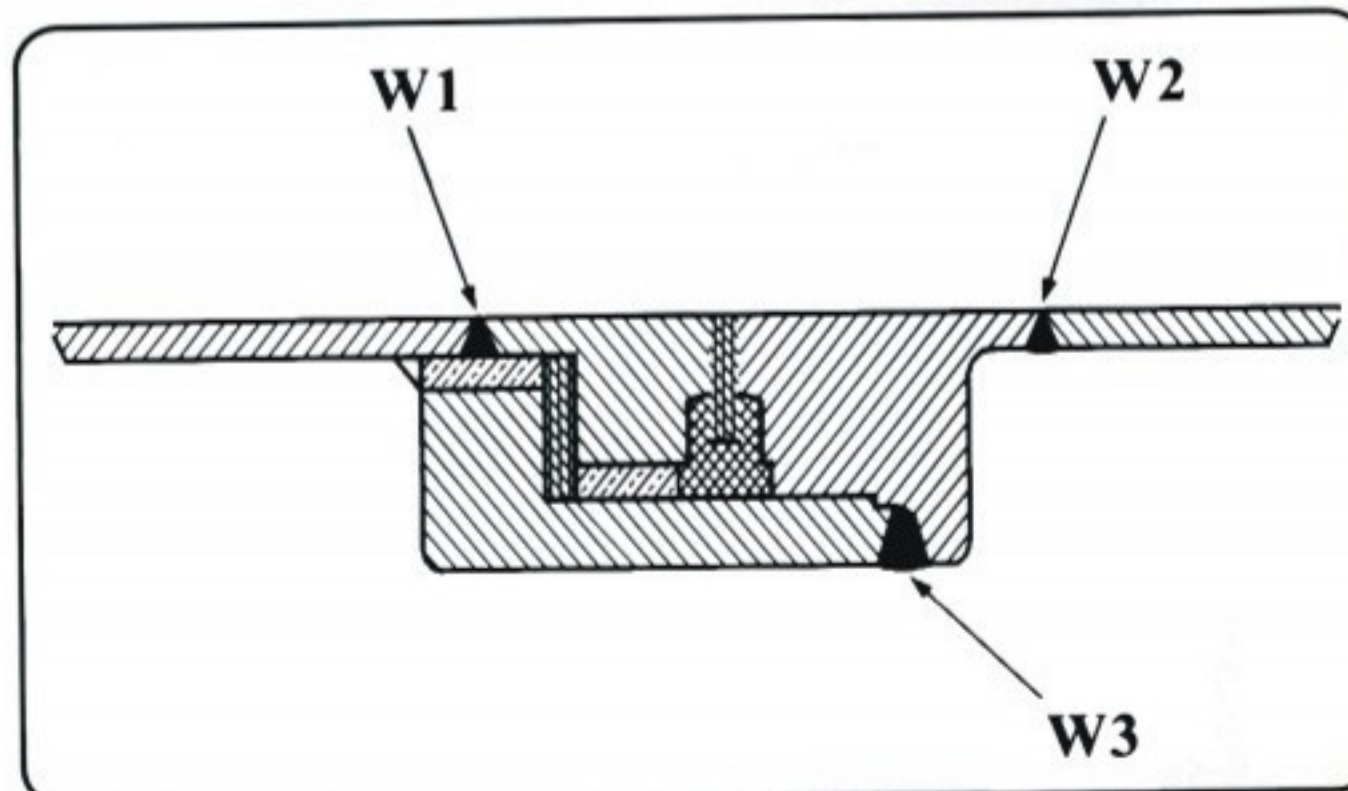
PN100-MOP100-ANSI#600

1.Pipe Ring Wold(W1-W2): RT, U

2.Closure Weld W3: MT

3.Weld End Bevel: MT

Additional NDE Test RT,UT, MT, PT is available upon request.



MAIN PIPELINE INSULATING JOINTS

Class:PN25-MoP25-ANSI#150/300/600

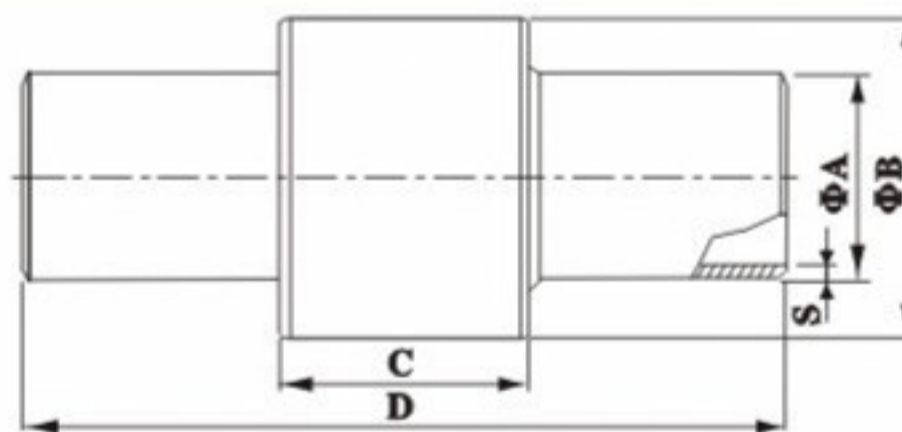
MAIN APPLICATIONS:

Steel pipeline for Methane, LPG, natural gas, water



T	R	RT	RP	P	Where:
90°C	>100 Mohm	3.5KV (>10)		25BAR	T=Max operating temperature
	Day Gas,25°C				R=Electric resistance in air at 1000 Volt d. c.
					RT=Dielectric test a. c.
					RP=Dielectric strength c. a
					P=Max operating pressure

OUTLINE DRAWING



Released certificate
●En10204 3.1B

PN100/ANSI 600							PN25/ANSI 150						PN64/ANSI 150					
Pipe Mat (*)	Φ A	S	B	C	D	N.W(kg)	Φ A	S	B	C	D	N.W(kg)	Φ A	S	B	C	D	N.W(kg)
APL 5L CR.B EN 10208-2 L245	Φ 33.4	3.9	90	100	250	5.3	Φ 33.4	3.9	65	48	250	2.1	Φ 33.4	3.9	80	85	250	4
APL 5L CR.B EN 10208-2 L245	Φ 48.3	3.9	100	100	300	6.5	Φ 48.3	3.9	82	65	300	3.5	Φ 48.3	3.9	95	90	300	5
APL 5L CR.B EN 10208-2 L245	Φ 60.3	3.9	115	105	350	8.5	Φ 60.3	4	102	66	350	4.1	Φ 60.3	4	108	90	350	6.5
APL 5L CR.B EN 10208-2 L245	Φ 76.1	5.5	135	120	350	13.5	Φ 76.1	5	112	68	350	6.5	Φ 76.1	6	125	95	350	8.8
APL 5L CR.B EN 10208-2 L245	Φ 88.9	5.5	155	125	500	18.7	Φ 88.9	5	125	72	400	7.1	Φ 88.9	6	140	95	400	10.5
APL 5L CR.B EN 10208-2 L245	Φ 114.3	6	190	135	500	28	Φ 114.3	6	154	72	400	9.5	Φ 114.3	7	165	115	500	18
APL 5L CR.B EN 10208-2 L245	Φ 141.3	6.5	220	150	600	41	Φ 141.3	6	194	85	500	17	Φ 141.3	7	196	120	600	26
APL 5L CR.B EN 10208-2 L245	Φ 168.3	7.1	255	170	600	57	Φ 168.3	7	234	95	500	25	Φ 168.3	8	240	135	600	42
APL 5L CR.B EN 10208-2 L245	Φ 219.1	8.2	320	187	600	90	Φ 219.1	7	276	110	500	34.2	Φ 219.1	10	278	158	600	51
APL 5L CR.B EN 10208-2 L245	Φ 273.1	9.27	372	215	800	138	Φ 273.1	7	325	144	800	60	Φ 273.1	10	350	186	800	98
APL 5L CR.B EN 10208-2 L245	Φ 323.9	9.53	440	235	800	193	Φ 323.9	8	384	168	800	94	Φ 323.9	10	395	203	800	152
APL 5L CR.B EN 10208-2 L245	Φ 355.6	12.7	480	255	1000	272	Φ 355.6	8	457	210	900	185	Φ 355.6	14	484	205	1000	213
APL 5L CR.B EN 10208-2 L245	Φ 406.4	12.7	550	280	1000	365	Φ 406.4	10	535	260	900	255	Φ 406.4	14	490	244	1000	220
APL 5L CR.B EN 10208-2 L245	Φ 457.2	14.3	600	300	1000	448	Φ 457.2	10	520	190	900	165	Φ 457.2	14.3	570	265	1000	315
APL 5L CR.B EN 10208-2 L245	Φ 508	15.9	685	330	1200	660	Φ 508	10	630	265	900	335	Φ 508	15.9	630	275	1200	421
APL 5L CR.B EN 10208-2 L245	Φ 609.6	19.1	815	400	1200	1070	Φ 609.6	12	695	250	1000	325	Φ 609.6	19.1	720	330	1200	580
APL 5L CR.B EN 10208-2 L245	Φ 660	19.05	790	425	1200	1130	Φ 660	12	260	380	1000	386	Φ 660	23.8	820	380	1000	650
APL 5L CR.B EN 10208-2 L245	Φ 711.2	19.1	900	440	1300	1280	Φ 711.2	12	800	250	1200	415	Φ 711.2	19.1	815	375	1300	756
APL 5L CR.B EN 10208-2 L245	Φ 812.8	23.8	1000	480	1300	1650	Φ 812.8	12	950	305	1300	706	Φ 812.8	20	970	410	1300	1220

OUR FACTORY



