

Flexible

# Dismantling Joint Range

Fully Restrained Double Flanged Fitting

 **TRAN-SIG-MA**

Jsme s Vámi již od roku 1990



 **VIKING JOHNSON®**

PIONEERS IN PIPE SOLUTIONS

**CRANE**

BUILDING SERVICES & UTILITIES

 **TRAN-SIG-MA**

distributor Viking Johnson pro ČR



## Developed for Complete Versatility

The Dismantling Joint range was developed to provide greater versatility for the designer at the planning stage and the engineer in the installation stage of flanged pipe work systems and to allow for simple maintenance programmes.

### Allows for Adjustment

The Dismantling Joints are double flanged fittings that accommodate up to 100mm (4") longitudinal adjustment and can be locked at the required length with the tie bars supplied. Not only does this system allow for fast, easy maintenance of valves, pumps or meters, it simplifies future pipe work modifications and reduces downtime when changes need to be made.

### Easy to Install

The installation is also straightforward using just a spanner and torque wrench to tighten the high tensile steel or stainless steel tie bars. With fewer tie bars than flange holes that also act as flange jointing bolts, the installation process is quick and easy while offering a secure, rigid, fully end load resistant system with a pressure rating equal to that of the flange.

### The Range

A comprehensive range is available from DN40 (1½") to DN2400 (80") with virtually any flange drilling or pressure rating supplied. Larger sizes and custom made Dismantling Joints can be designed and built on request.



Dismantling Joints

### Flanged Pipe Materials



# Dismantling Joint

## Product Design Benefits

### Full Flange Sealing

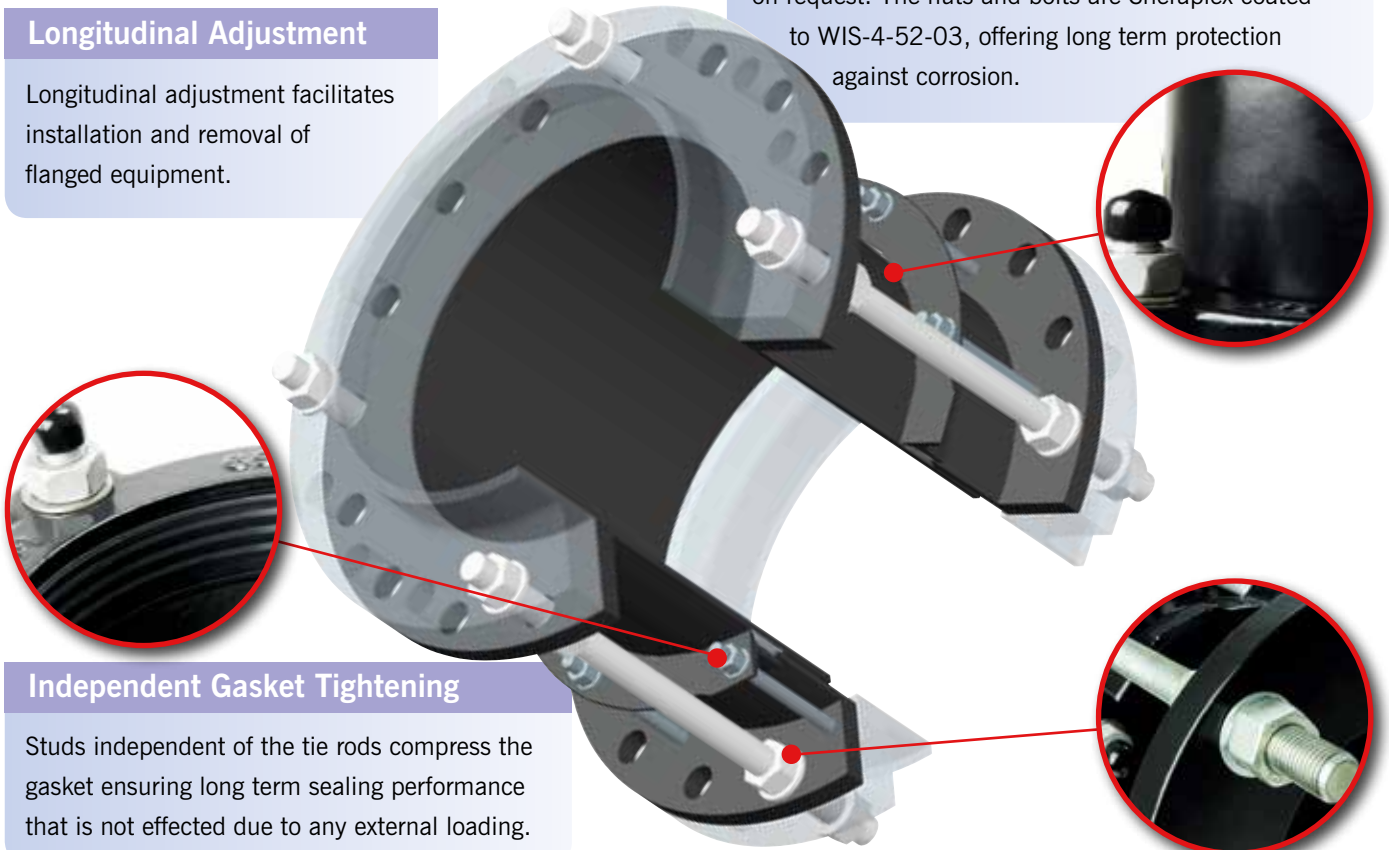
The flange of the spigot piece provides a full flange sealing area, making it ideal for applications where a full-face flange is required, e.g. wafer and butterfly valves.

### Longitudinal Adjustment

Longitudinal adjustment facilitates installation and removal of flanged equipment.

### Excellent Corrosion Protection

The flange adaptor and flange spigot are coated with WRAS approved Rilsan Nylon 11 providing excellent protection from transport, storage, site and corrosion damage. The tie bars are Zn<sup>3</sup> Zinc Plated as standard with other coatings, grades and finishes available on request. The nuts and bolts are Sheraplex coated to WIS-4-52-03, offering long term protection against corrosion.



### Independent Gasket Tightening

Studs independent of the tie rods compress the gasket ensuring long term sealing performance that is not effected due to any external loading.

### Reduced Weight

The use of high tensile steel in the tie rods reduces the number required to accommodate end load forces, reducing the overall weight of the product.

### Compact Design

Harnessing is provided within the bolt circle, eliminating other complex anchoring systems and reducing space requirements.

## Customer Benefits

- ▶ Viking Johnson's Dismantling Joints are particularly suitable for simplifying the installation and removal of isolation valves, control valves, check valves, non-return valves, flow metering valves, pump sets, pressure reducing valves, flanged pipe and fittings.
- ▶ The simplicity and versatility of the fittings make them suitable for many applications including pumping stations, water treatment works, sewage treatment works, plant rooms, meter chambers, power generation equipment, gas distribution stations.
- ▶ Use of high tensile steel in the tie rods reduces the number required to accommodate the end load forces making it easier and quicker for operatives to install, especially in tight spaces, chambers and congested pump stations.
- ▶ Designed and manufactured to BS EN ISO 9001 and tested to the most exacting requirements of WRAS (Water Regulatory Advisory Scheme) for use with potable water.
- ▶ Studs independent of the tie rods compress the gasket allowing the use of smaller diameters than those in the flange connecting bolts so improving access for operatives during installation.



United Arab Emirates - UAE

# Fujairah Asia Power Co.

Dismantling Joint - DN2400



## Project

Fujairah is an integrated water and power plant. The complex is capable of processing 591,000 m<sup>3</sup> of water per day.

## Client

Fujairah Asia Power Company

## Distributor

Glynwed France

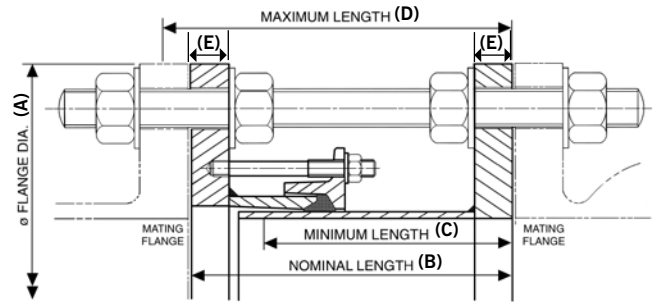
## Contractor

OTV France MGP

# Dismantling Joint DN40 to DN300 (PN10,16,25,40)

## Specifications

Note: Maximum Longitudinal Adjustment  
= Maximum Length – Minimum Length



## Dismantling Joint

Flange Details				Flange to Flange Details				Tie Rod Details					Flange Adaptor & Spigot Manufacture	
Nom	Drilling	Flange Thickness		Flange OD	Nominal Length	Minimum Length	Maximum Length	Steel Tie Rod			Stainless Steel Tie Rod			
		Flange Adaptor E (mm)	Spigot E (mm)	A (mm)	B (mm)	C (mm)	D (mm)	Dia x Length (mm)	No.	Total Weight of DJ (kg)	Dia x Length (mm)	No.		Total Weight of DJ (kg)
40	PN10,16,25,40	18	18	150	187	167	207	M16 x 300	4	7.8	M16 x 300	4	7.8	Fabricated
50	PN10,16,25,40	17	17	165	194	174	214	M16 x 300	4	6.9	M16 x 300	4	6.9	Cast/Cast
65	PN10,16	17	17	185	194	174	214	M16 x 300	4	7.7	M16 x 300	4	7.7	Cast/Cast
80	PN10,16,25,40	17	17	200	194	174	214	M16 x 300	4	9.4	M16 x 300	4	9.4	Cast/Cast
100	PN10,16	17	17	220	194	174	214	M16 x 300	4	10.4	M16 x 300	4	10.4	Cast/Cast
100	PN25,40	25	25	235	194	174	214	M20 x 320	4	19.2	M20 x 320	4	19.2	Fabricated
125	PN10,16	17	17	250	194	174	214	M16 x 300	4	11.9	M16 x 300	4	11.9	Cast/Cast
125	PN25,40	25	25	270	194	174	214	M24 x 330	4	26.2	M24 x 330	4	26.2	Fabricated
150	PN10,16	17	17	285	194	174	214	M20 x 310	4	15.8	M20 x 310	4	15.8	Cast/Cast
150	PN25	25	25	300	194	174	214	M24 x 330	4	28.9	M24 x 330	4	28.9	Fabricated
150	PN40	25	25	300	194	174	214	M24 x 330	4	28.8	M24 x 330	4	28.8	Fabricated
200	PN10	20	20	340	194	174	214	M20 x 310	4	21.6	M20 x 310	4	21.6	Cast/Cast
200	PN16	20	20	340	194	174	214	M20 x 310	4	21.6	M20 x 310	4	21.6	Cast/Cast
200	PN25	25	25	360	194	174	214	M24 x 340	4	37.5	M24 x 340	4	37.5	Fabricated
200	PN40	25	25	375	194	174	214	M27 x 350	4	42.6	M27 x 350	4	42.6	Fabricated
250	PN10	19	20	395	194	174	214	M20 x 310	4	28.9	M20 x 310	4	28.9	Cast/Cast
250	PN16	19	20	405	194	174	214	M24 x 330	4	31.6	M24 x 330	4	31.6	Cast/Cast
250	PN25	25	25	425	194	174	214	M27 x 350	4	49.1	M27 x 350	4	49.1	Fabricated
250	PN40	25	25	450	194	174	214	M30 x 370	4	57.9	M30 x 370	4	57.9	Fabricated
300	PN10	19	19	445	194	174	214	M20 x 310	4	32.8	M20 x 310	4	32.8	Cast/Cast
300	PN16	19	20	460	194	174	214	M24 x 330	4	35.4	M24 x 330	4	35.4	Cast/Cast
300	PN25	25	25	485	194	174	214	M27 x 350	4	57.1	M27 x 350	4	57.1	Fabricated
300	PN40	25	25	515	194	174	214	M30 x 380	4	69.8	M30 x 380	4	69.8	Fabricated

## Materials & Relevant Standards

### Flange Drilling

BS EN1092-1 (formerly BS4504), ISO7005

### Cast Flange Adaptor

Body - Ductile Iron to BS EN1563:

Symbol EN-GJS-450-10

End Rings - Ductile Iron to BS EN1563:

Symbol EN-GJS-450-10

### Fabricated Flange Adaptor

Body - Rolled Steel to BS EN 10025-2:

Grade S275

End Rings - Rolled Steel to BS EN 10025-2: Grade

S275

Sleeve - Steel Tube to BS EN10255:

or Steel Tube to BS EN10216-1: Grade P265TR1

or Rolled Steel to BS EN 10025-2: Grade S275

### Flanged Spigot

Cast Flange Spigot - Ductile Iron to BS EN1563:

Symbol EN-GJS-450-10

Fabricated Flange Spigot -

Flange - Rolled steel to BS EN10025-2:

Grade S275

Spigot - Steel tube to BS EN10255 or steel tube

to BS EN10216-1: Grade P265TR1 or Rolled steel

to BS EN10025-2: Grade S275

### Gaskets

BS EN681-1: Type WA WRAS listed

### Steel Tie Rods & Nuts

Tie Rods - BS EN10269: +A1: Name 42CrMo4

(Yield 725N/mm<sup>2</sup>) (formerly MB7)

Nuts - BS EN20898-2: Property Class 8.0

### Stainless Steel Tie Rods & Nuts

Tie Rods - Stainless Steel to BS EN3506-1: Grade

A2/A4 Property Class 70

(Yield 450N/mm<sup>2</sup>)

Nuts 4 per Tie Rod - Stainless Steel to BS

EN3506-2: Grade A2/A4 Property Class 80

### Studs/Nuts/Washers

Studs - Steel to BS EN ISO898-1:

Property Class 4.8

Nuts - Steel to BS4190: Grade 4

Washers - Stainless Steel to BS1449:Part 2: Grade

304S15

### Coatings (Others available on request)

Flange Adaptor - Rilsan Nylon 11

Flanged Spigot - Rilsan Nylon 11

End Ring - Rilsan Nylon 11

Studs/Nuts - Sheraplex to WIS 4-52-03

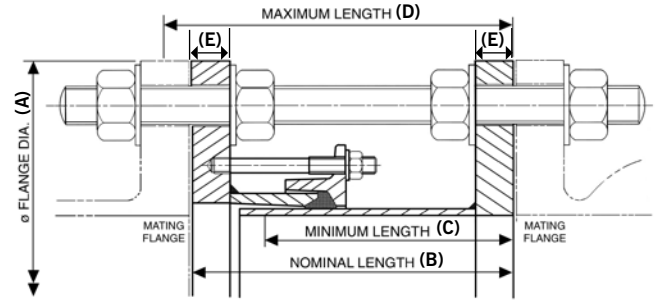
Steel Tie Rods/Nuts - Zn3 Zinc coated

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# Dismantling Joint DN350 to DN2400 (PN10)

## Specifications

Note: Maximum Longitudinal Adjustment  
= Maximum Length – Minimum Length



## Dismantling Joint

Flange Details		Flange To Flange Details					Tie Rod Details					
Nom	Drilling	Flange Thickness	Flange OD	Nominal Length	Minimum Length	Maximum Length	Steel Tie Rod			Stainless Steel Tie Rod		
		E (mm)	A (mm)	B (mm)	C (mm)	D (mm)	Dia x Length (mm)	No.	Total Weight of DJ (kg)	Dia x Length (mm)	No.	Total Weight of DJ (kg)
350	PN10	18	505	295	270	320	M20 x 430	4	57.7	M20 x 430	4	57.7
400	PN10	18	565	295	270	320	M24 x 440	4	68.9	M24 x 440	4	68.9
450	PN10	23	615	300	275	325	M24 x 450	5	87.2	M24 x 450	5	87.2
500	PN10	23	670	300	275	325	M24 x 460	5	97.1	M24 x 460	5	97.1
550	PN10	23	730	300	275	325	M27 x 470	5	112.0	M27 x 470	5	112.0
600	PN10	23	780	300	275	325	M27 x 470	5	120.0	M27 x 470	5	120.0
650	PN10	23	835	300	275	325	M27 x 480	6	132.0	M27 x 480	6	132.0
700	PN10	23	895	300	275	325	M27 x 480	6	146.0	M27 x 480	6	146.0
800	PN10	23	1015	300	275	325	M30 x 500	6	167.0	M30 x 500	8	169.0
900	PN10	25	1115	307	277	337	M30 x 520	7	211.0	M30 x 520	8	215.6
1000	PN10	25	1230	307	277	337	M33 x 530	7	246.0	M33 x 530	8	251.0
1100	PN10	25	1340	307	277	337	M33 x 540	8	276.0	M33 x 540	10	286.0
1200	PN10	38	1455	320	290	350	M36 x 570	8	414.0	M36 x 570	10	426.0
1300	PN10	38	1575	320	290	350	M39 x 590	8	475.0	M39 x 590	10	491.0
1400	PN10	38	1675	320	290	350	M39 x 600	9	509.0	M39 x 600	12	533.0
1500	PN10	38	1785	320	290	350	M39 x 610	9	606.0	M39 x 610	12	631.0
1600	PN10	38	1915	320	290	350	M45 x 630	10	731.0	M45 x 630	10	731.0
1800	PN10	38	2115	320	290	350	M45 x 650	11	829.0	M45 x 650	14	866.0
2000	PN10	60	2325	462	412	512	M45 x 830	12	1,412.0	M45 x 830	16	1,470.0
2200	PN10	60	2550	462	412	512	M52 x 860	13	1,699.0	M52 x 950	14	1,775.0
2400	PN10	60	2760	462	412	512	M52 x 880	14	1,878.0	M52 x 970	18	2,032.0

## Materials & Relevant Standards

### Flange Drilling

BS EN1092-1 (formerly BS4504), ISO7005

### Fabricated Flange Adaptor

Body - Rolled Steel to BS EN 10025-2: Grade S275

End Rings/Sleeve - Rolled Steel to BS EN 10025-2: Grade S275  
or Rolled Steel to BS EN 10025-2: Grade S355 (depending on section)

### Flanged Spigot

Flange - Rolled Steel to BS EN 10025-2: Grade S275  
Spigot - Steel Tube to BS10216-1: Grade P265TR1  
or Rolled Steel to BS EN 10025-2: Grade S275

### Gaskets

BS EN681-1: Type WA WRAS listed

### Steel Tie Rods & Nuts

Tie Rods - BS EN10269: Name 42CrMo4 (Yield 725N/mm<sup>2</sup>) (formerly MB7)  
Nuts - BS EN20898-2: Property Class 8.0

### Stainless Steel Tie Rods & Nuts

Tie Rods - Stainless Steel to BS EN3506-1: Grade A2/A4 Property Class 70 (Yield 450N/mm<sup>2</sup>)  
Nuts (sizes up to & including M48) 4 per Tie Rod - Stainless Steel to BS EN3506-2: Grade A2/A4 Property Class 80  
Nuts (sizes over M48) 6 per Tie Rod - Stainless Steel to BS EN3506-2: Grade A2/A4 Property Class 50

### Studs/Nuts/Washers

Studs - Steel to BS EN ISO898-1: Property Class 4.8  
Nuts - Steel to BS4190: Grade 4  
Washers - Stainless Steel to BS1449:Part 2: Grade 304S15  
**Coatings (Others available on request)**  
Fabricated Flange Adaptor - Rilsan Nylon 11  
Flanged Spigot - Rilsan Nylon 11  
End Ring - Rilsan Nylon 11  
Studs/Nuts - Sheraplex to WIS 4-52-03  
Steel Tie Rods/Nuts - Zn3 Zinc coated

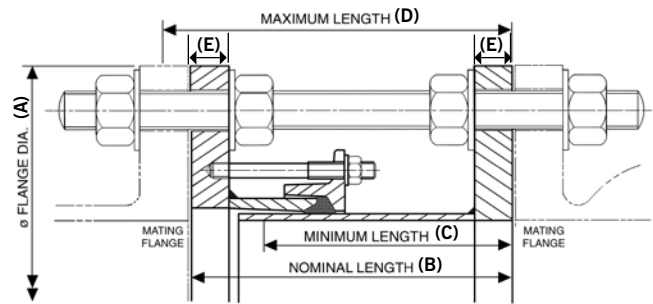
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# Dismantling Joint DN350 to DN2400 (PN16)

## Specifications

Note: Maximum Longitudinal Adjustment  
= Maximum Length – Minimum Length



## Dismantling Joint

Flange Details		Flange To Flange Details					Tie Rod Details					
Nom	Drilling	Flange Thickness	Flange OD	Nominal Length	Minimum Length	Maximum Length	Steel Tie Rod			Stainless Steel Tie Rod		
		E (mm)	A (mm)	B (mm)	C (mm)	D (mm)	Dia x Length (mm)	No.	Total Weight of DJ (kg)	Dia x Length (mm)	No.	Total Weight of DJ (kg)
350	PN16	18	520	295	270	320	M24 x 450	4	63.4	M24 x 450	4	63.4
400	PN16	18	580	295	270	320	M27 x 460	4	75.2	M27 x 460	4	75.2
450	PN16	23	640	300	275	325	M27 x 470	5	99.0	M27 x 470	5	99.0
500	PN16	23	715	300	275	325	M30 x 480	5	121.0	M30 x 480	5	121.0
550	PN16	23	775	300	275	325	M30 x 490	5	134.0	M30 x 490	5	134.0
600	PN16	23	840	300	275	325	M33 x 500	5	154.0	M33 x 500	5	154.0
650	PN16	23	860	300	275	325	M33 x 510	6	153.0	M33 x 510	6	153.0
700	PN16	23	910	300	275	325	M33 x 520	6	162.0	M33 x 520	6	162.0
750	PN16	23	970	300	275	325	M33 x 530	6	177.0	M33 x 530	8	182.0
800	PN16	23	1025	300	275	325	M36 x 540	6	184.0	M36 x 540	8	190.5
900	PN16	25	1125	307	277	337	M36 x 570	7	232.0	M36 x 570	10	251.5
1000	PN16	25	1255	307	277	337	M39 x 590	7	282.0	M39 x 590	10	306.5
1100	PN16	38	1355	320	290	350	M39 x 610	8	406.0	M39 x 610	12	438.0
1200	PN16	38	1485	320	290	350	M45 x 640	8	505.0	M45 x 640	10	529.0
1300	PN16	38	1585	320	290	350	M45 x 650	8	533.0	M45 x 650	12	582.0
1400	PN16	38	1685	320	290	350	M45 x 660	9	583.0	M45 x 660	14	644.0
1500	PN16	38	1820	320	290	350	M52 x 690	9	760.0	M52 x 770	12	829.0
1600	PN16	38	1930	320	290	350	M52 x 710	10	850.0	M52 x 800	12	903.0
1800	PN16	38	2130	320	290	350	M52 x 730	11	962.0	M52 x 810	16	1,075.0
2000	PN16	60	2345	462	412	512	M56 x 930	12	1,662.0	M56 x 1020	18	1,899.0
2200	PN16	60	2555	462	412	512	M56 x 950	13	1,871.0	M56 x 1040	20	2,145.0
2400	PN16	60	2765	462	412	512	M56 x 980	16	2,144.0	M56 x 1070	24	2,468.0

## Materials & Relevant Standards

### Flange Drilling

BS EN1092-1 (formerly BS4504), ISO7005

### Fabricated Flange Adaptor

Body - Rolled Steel to BS EN 10025-2: Grade S275

End Rings/Sleeve - Rolled Steel to BS EN 10025-2: Grade S275 or Rolled Steel to BS EN 10025-2: Grade S355 (depending on section)

### Flanged Spigot

Flange - Rolled Steel to BS EN 10025-2: Grade S275  
Spigot - Steel Tube to BS10216-1: Grade P265TR1 or Rolled Steel to BS EN 10025-2: Grade S275

### Gaskets

BS EN681-1: Type WA WRAS listed

### Steel Tie Rods & Nuts

Tie Rods - BS EN10269: Name 42CrMo4 (Yield 725N/mm<sup>2</sup>) (formerly MB7)  
Nuts - BS EN20898-2: Property Class 8.0

### Stainless Steel Tie Rods & Nuts

Tie Rods - Stainless Steel to BS EN3506-1: Grade A2/A4 Property Class 70 (Yield 450N/mm<sup>2</sup>)  
Nuts (sizes up to & including M48) 4 per Tie Rod - Stainless Steel to BS EN3506-2: Grade A2/A4 Property Class 80  
Nuts (sizes over M48) 6 per Tie Rod - Stainless Steel to BS EN3506-2: Grade A2/A4 Property Class 50

### Studs/Nuts/Washers

Studs - Steel to BS EN ISO898-1: Property Class 4.8

Nuts - Steel to BS4190: Grade 4

Washers - Stainless Steel to BS1449:Part 2: Grade 304S15

### Coatings (Others available on request)

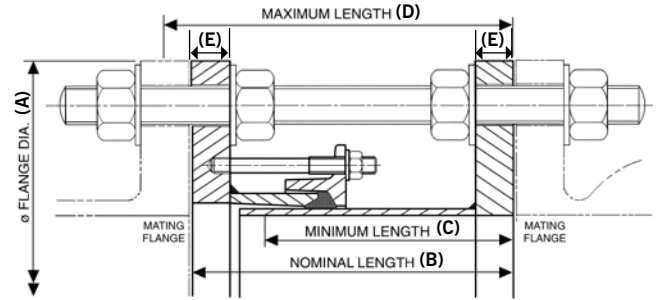
Fabricated Flange Adaptor - Rilsan Nylon 11  
Flanged Spigot - Rilsan Nylon 11  
End Ring - Rilsan Nylon 11  
Studs/Nuts - Sheraplex to WIS 4-52-03  
Steel Tie Rods/Nuts - Zn3 Zinc coated

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# Dismantling Joint DN350 to DN1800 (PN25)

## Specifications

Note: Maximum Longitudinal Adjustment  
= Maximum Length – Minimum Length



## Dismantling Joint

Flange Details		Flange To Flange Details				Tie Rod Details						
Nom	Drilling	Flange Thickness	Flange OD	Nominal Length	Minimum Length	Maximum Length	Steel Tie Rod			Stainless Steel Tie Rod		
		E (mm)	A (mm)	B (mm)	C (mm)	D (mm)	Dia x Length (mm)	No.	Total Weight of DJ (kg)	Dia x Length (mm)	No.	Total Weight of DJ (kg)
350	PN25	25	555	302	277	327	M30 x 480	4	91.1	M30 x 480	4	91.1
400	PN25	25	620	302	277	327	M33 x 490	4	109.0	M33 x 490	4	109.0
450	PN25	25	670	302	277	327	M33 x 500	5	122.0	M33 x 500	5	122.0
500	PN25	25	730	302	277	327	M33 x 510	5	137.0	M33 x 510	5	137.0
550	PN25	25	785	302	277	327	M36 x 530	5	155.0	M36 x 530	5	155.0
600	PN25	25	845	302	277	327	M36 x 540	5	170.0	M36 x 540	6	177.0
650	PN25	25	895	307	277	337	M36 x 550	6	199.0	M36 x 550	8	211.0
700	PN25	25	960	302	277	327	M39 x 570	6	212.0	M39 x 570	8	227.0
800	PN25	25	1085	307	277	337	M45 x 630	6	279.0	M45 x 630	8	302.0
900	PN25	25	1185	307	277	337	M45 x 630	7	317.0	M45 x 630	10	350.0
1000	PN25	38	1320	320	290	350	M52 x 660	7	520.0	M52 x 740	8	567.0
1200	PN25	38	1530	320	290	350	M52 x 690	8	637.0	M52 x 770	12	724.0
1400	PN25	60	1755	462	412	512	M56 x 890	9	1,181.0	M56 x 980	14	1,369.0
1600	PN25	60	1975	462	412	512	M56 x 920	10	1,514.0	M56 x 1010	16	1,740.0
1800	PN25	60	2185	462	412	512	M64 x 970	11	1,855.0	M64 x 1075	16	1,970.0

## Materials & Relevant Standards

### Flange Drilling

BS EN1092-1 (formerly BS4504), ISO7005

### Fabricated Flange Adaptor

Body - Rolled Steel to BS EN 10025-2: Grade S275

End Rings/Sleeve - Rolled Steel to BS EN 10025-2: Grade S275

or Rolled Steel to BS EN 10025-2: Grade S355 (depending on section)

### Flanged Spigot

Flange - Rolled Steel to BS EN 10025-2: Grade S275

Spigot - Steel Tube to BS10216-1: Grade P265TR1

or Rolled Steel to BS EN 10025-2: Grade S275

### Gaskets

BS EN681-1: Type WA WRAS listed

### Steel Tie Rods & Nuts

Tie Rods - BS EN10269: Name 42CrMo4 (Yield 725N/mm<sup>2</sup>) (formerly MB7)

Nuts - BS EN20898-2: Property Class 8.0

### Stainless Steel Tie Rods & Nuts

Tie Rods - Stainless Steel to BS EN3506-1: Grade A2/A4 Property Class 70 (Yield 450N/mm<sup>2</sup>)

Nuts (sizes up to & including M48) 4 per Tie Rod - Stainless Steel to BS EN3506-2: Grade A2/A4 Property Class 80

Nuts (sizes over M48) 6 per Tie Rod - Stainless Steel to BS EN3506-2: Grade A2/A4 Property Class 50

### Studs/Nuts/Washers

Studs - Steel to BS EN ISO898-1: Property Class 4.8

Nuts - Steel to BS4190: Grade 4

Washers - Stainless Steel to BS1449:Part 2: Grade 304S15

### Coatings (Others available on request)

Fabricated Flange Adaptor - Rilsan Nylon 11

Flanged Spigot - Rilsan Nylon 11

End Ring - Rilsan Nylon 11

Studs/Nuts - Sheraplex to WIS 4-52-03

Steel Tie Rods/Nuts - Zn3 Zinc coated

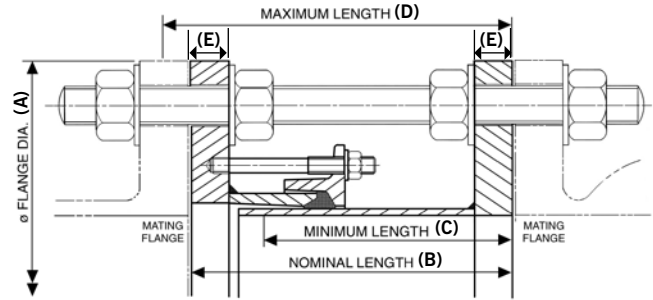
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# Dismantling Joint DN350 to DN1600 (PN40)

## Specifications

Note: Maximum Longitudinal Adjustment  
= Maximum Length – Minimum Length



## Dismantling Joint

Flange Details		Flange To Flange Details					Tie Rod Details					
Nom	Drilling	Flange Thickness	Flange OD	Nominal Length	Minimum Length	Maximum Length	Steel Tie Rod			Stainless Steel Tie Rod		
		E (mm)	A (mm)	B (mm)	C (mm)	D (mm)	Dia x Length (mm)	No.	Total Weight of DJ (kg)	Dia x Length (mm)	No.	Total Weight of DJ (kg)
350	PN40	25	580	307	277	337	M33 x 520	4	111.0	M33 x 520	4	111.0
400	PN40	25	660	307	277	337	M36 x 540	4	138.0	M36 x 540	4	138.0
450	PN40	25	685	307	277	337	M36 x 550	5	148.0	M36 x 550	5	148.0
500	PN40	25	755	307	277	337	M39 x 570	5	178.0	M39 x 570	6	186.0
550	PN40	38	835	320	290	350	M45 x 600	5	289.0	M45 x 600	5	289.0
600	PN40	38	890	320	290	350	M45 x 620	5	313.0	M45 x 620	6	325.0
650	PN40	38	945	320	290	350	M45 x 630	6	350.0	M45 x 630	8	374.0
700	PN40	38	995	320	290	350	M45 x 640	6	375.0	M45 x 640	8	399.0
800	PN40	38	1140	320	290	350	M52 x 680	6	479.0	M52 x 760	8	544.0
900	PN40	38	1250	320	290	350	M52 x 700	7	570.0	M52 x 780	10	661.0
1000	PN40	38	1360	320	290	350	M52 x 720	8	661.0	M52 x 810	14	826.0
1200	PN40	38	1575	320	290	350	M56 x 780	10	863.0	M56 x 870	16	1,073.0
1400	PN40	60	1795	462	412	512	M56 x 980	14	1,640.0	M56 x 1070	22	1,937.0
1600	PN40	60	2025	462	412	512	M64 x 1040	14	1,988.0	M64 x 1140	20	2,318.0

Note: Stainless steel tie rods can not accommodate this working pressure so not available.

## Materials & Relevant Standards

### Flange Drilling

BS EN1092-1 (formerly BS4504), ISO7005

### Fabricated Flange Adaptor

Body - Rolled Steel to BS EN 10025-2: Grade S275

End Rings/Sleeve - Rolled Steel to BS EN 10025-2: Grade S275

or Rolled Steel to BS EN 10025-2: Grade S355 (depending on section)

### Flanged Spigot

Flange - Rolled Steel to BS EN 10025-2: Grade S275

Spigot - Steel Tube to BS10216-1: Grade P265TR1

or Rolled Steel to BS EN 10025-2: Grade S275

### Gaskets

BS EN681-1: Type WA WRAS listed

### Steel Tie Rods & Nuts

Tie Rods - BS EN10269: Name 42CrMo4 (Yield 725N/mm<sup>2</sup>) (formerly MB7)

Nuts - BS EN20898-2: Property Class 8.0

### Stainless Steel Tie Rods & Nuts

Tie Rods - Stainless Steel to BS EN3506-1: Grade A2/A4 Property Class 70 (Yield 450N/mm<sup>2</sup>)

Nuts (sizes up to & including M48) 4 per Tie Rod - Stainless Steel to BS EN3506-2: Grade A2/A4 Property Class 80

Nuts (sizes over M48) 6 per Tie Rod - Stainless Steel to BS EN3506-2: Grade A2/A4 Property Class 50

### Studs/Nuts/Washers

Studs - Steel to BS EN ISO898-1: Property Class 4.8

Nuts - Steel to BS4190: Grade 4

Washers - Stainless Steel to BS1449:Part 2: Grade 304S15

### Coatings (Others available on request)

Fabricated Flange Adaptor - Rilsan Nylon 11

Flanged Spigot - Rilsan Nylon 11

End Ring - Rilsan Nylon 11

Studs/Nuts - Sherplex to WIS 4-52-03

Steel Tie Rods/Nuts - Zn3 Zinc coated

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**Qatar - Doha**

# Dukhan Road Highway East Construction

Dismantling Joints – DN200 - DN1200

Large Diameter Couplings

Large Diameter Flange Adapters

## **Project**

Dukhan Highway, Qatar development consists of ten grade-separated interchange, seven camel underpasses and an 87km two way collector road which will create a strategic east-west highway.

## **Client**

ASHGAL

## **Consultant**

Parsons

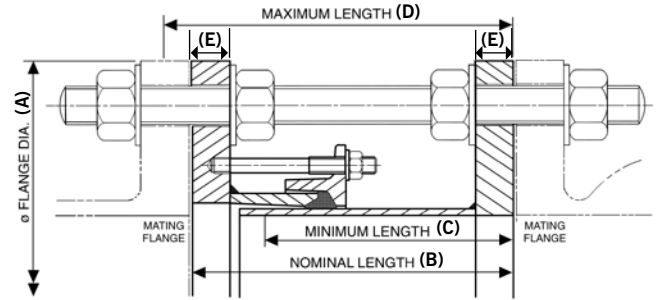
## **Contractor**

UNICORP

# Dismantling Joint 4" to 40" AWWA (Class D)

## Specifications

Note: Maximum Longitudinal Adjustment  
= Maximum Length – Minimum Length



## Dismantling Joint

Flange Details				Flange To Flange Details			Tie Rod Details				
Nom	Drilling	Flange Thickness	Flange OD	Nominal Length	Minimum Length	Maximum Length	Tie Rod Dia x Length	H.T Zinc Plated Steel H.T Steel BS4882 Grade MB7 Yield 725N/mm <sup>2</sup>		Stainless Steel Class 70 Yield 450N/mm <sup>2</sup>	
		E (mm)	A (mm)	B (mm)	C (mm)	D (mm)		No.	Total Weight of DJ (kg)	No.	Total Weight of DJ (kg)
4"	Class D	18	229	187	167	207	5/8" x 11 1/2"	4	14.2	4	14.2
6"	Class D	18	279	187	167	207	3/4" x 12"	4	19.7	4	19.7
8"	Class D	18	343	187	167	207	3/4" x 12"	4	27.5	4	27.5
10"	Class D	18	406	187	167	207	7/8" x 12"	4	35.4	4	35.4
12"	Class D	18	483	187	167	207	7/8" x 12 1/2"	4	48.3	4	48.3
14"	Class D	18	533	295	270	320	1" x 17 1/2"	4	69.3	4	69.3
16"	Class D	18	597	295	270	320	1" x 17 1/2"	4	79.7	4	79.7
18"	Class D	23	635	300	275	325	1 1/8" x 18 1/2"	4	98.3	4	98.3
20"	Class D	23	698	300	275	325	1 1/8" x 18 1/2"	5	115.0	5	115.0
24"	Class D	23	813	300	275	325	1 1/4" x 19"	5	143.0	5	143.0
28"	Class D	23	927	300	275	325	1 1/4" x 19"	7	176.0	7	176.0
30"	Class D	23	984	300	275	325	1 1/4" x 19"	7	189.0	7	189.0
32"	Class D	23	1060	300	275	325	1 1/2" x 20"	7	218.0	7	218.0
36"	Class D	25	1168	307	277	337	1 1/2" x 20 1/2"	8	278.0	8	278.0
40"	Class D	25	1289	307	277	337	1 1/2" x 20 1/2"	9	320.0	9	320.0

## Materials & Relevant Standards

### Flange Drilling

ANSI/AWWA C207-01

### Fabricated Flange Adaptor

Body - Rolled Steel to BS EN 10025-2: Grade S275

End Rings - Ductile Iron to BS EN1563: Symbol EN-GJS-450-10  
or Rolled Steel to BS EN 10025-2: Grade S275

Sleeve - Steel Tube to BS EN10255:

or Steel Tube to BS EN10216-1: Grade P265TR1

or Rolled Steel to BS EN 10025-2: Grade S275

or Rolled Steel to BS EN 10025-2: Grade S355 (depending on section)

### Flanged Spigot

Flange - Rolled Steel to BS EN 10025-2: Grade S275

Spigot - Steel Tube to BS EN10255

or Steel Tube to BS EN10216-1: Grade P265TR1

or Rolled Steel to BS EN 10025-2: Grade S275

### Gaskets

BS EN681-1:1996 Type WA WRAS listed

### Steel Tie Rods & Nuts

Tie Rods - BS EN10269: Name 42CrMo4 (Yield 725N/mm<sup>2</sup>) (formerly B7)

Nuts - BS EN20898-2: Property Class 8.0

### Stainless Steel Tie Rods & Nuts

Tie Rods - Stainless Steel to BS EN3506-1: Grade A2/A4 Property Class 70 (Yield 450N/mm<sup>2</sup>)

Nuts (sizes up to and including 2 1/4") 4 per Tie Rod - Stainless Steel to BS EN3506-2: Grade A2/A4 Property Class 80

Nuts (sizes over 2 1/4") 6 per Tie Rod - Stainless Steel to BS EN3506-2:2009 Grade A2/A4 Property Class 50

### Studs/Nuts/Washers

Studs - Steel to BS EN ISO898-1: Property Class 4.8

Nuts - Steel to BS4190: Grade 4

Washers - Stainless Steel to BS1449:Part 2: Grade 304S15

### Coatings (Others available on request)

Fabricated Flange Adaptor - Rilsan Nylon 11

Flanged Spigot - Rilsan Nylon 11

End Ring - Rilsan Nylon 11

Studs/Nuts - Sheraplex to WIS 4-52-03

Steel Tie Rods/Nuts - Zn3 Zinc coated

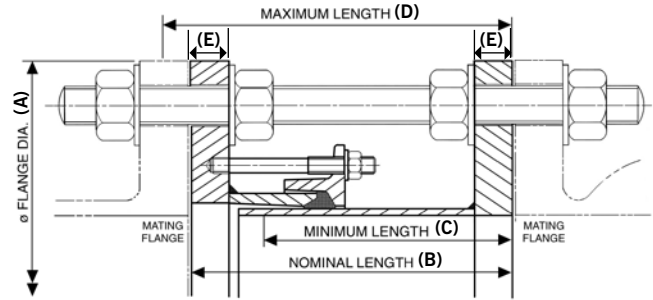
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# Dismantling Joint 3" to 40" (ANSI 150)

## Specifications

Note: Maximum Longitudinal Adjustment  
= Maximum Length – Minimum Length



## Dismantling Joint

Flange Details				Flange To Flange Details			Tie Rod Details				
Nom	Drilling	Flange Thickness	Flange OD	Nominal Length	Minimum Length	Maximum Length	Tie Rod Dia x Length	H.T Zinc Plated Steel H.T Steel BS4882 Grade MB7 Yield 725N/mm <sup>2</sup>		Stainless Steel Class 70 Yield 450N/mm <sup>2</sup>	
		E (mm)	A (mm)	B (mm)	C (mm)	D (mm)		No.	Total Weight of DJ (kg)	No.	Total Weight of DJ (kg)
3"	ANSI 150	25	190	194	174	214	5/8" x 12 1/2"	4	14.0	4	14.0
4"	ANSI 150	25	229	194	174	214	5/8" x 12 1/2"	4	17.4	4	17.4
6"	ANSI 150	25	279	194	174	214	3/4" x 13"	4	23.8	4	23.8
8"	ANSI 150	25	343	194	174	214	3/4" x 13"	4	33.3	4	33.3
10"	ANSI 150	25	406	194	174	214	7/8" x 13 1/2"	4	43.0	4	43.0
12"	ANSI 150	25	483	194	174	214	7/8" x 13 1/2"	4	59.1	4	59.1
14"	ANSI 150	25	533	302	277	327	1" x 19"	4	82.8	4	82.8
16"	ANSI 150	25	597	302	277	327	1" x 19"	4	95.8	4	95.8
18"	ANSI 150	25	635	302	277	327	1 1/8" x 19"	4	103.0	4	103.0
20"	ANSI 150	25	698	302	277	327	1 1/8" x 19 1/2"	5	121.0	6	121.0
24"	ANSI 150	25	813	302	277	327	1 1/4" x 20 1/2"	5	151.0	6	151.8
28"	ANSI 150	25	927	302	277	327	1 1/4" x 22"	7	187.0	8	187.6
30"	ANSI 150	25	984	302	277	327	1 1/4" x 22 1/2"	7	202.0	10	218.0
32"	ANSI 150	25	1060	302	277	327	1 1/2" x 23"	7	225.0	8	233.0
36"	ANSI 150	25	1168	307	277	337	1 1/2" x 24 1/2"	8	291.0	10	308.0
40"	ANSI 150	38	1289	320	290	350	1 1/2" x 25"	9	441.0	12	467.0

## Materials & Relevant Standards

### Flange Drilling

ASME/ANSI B16.5/B16.47

### Fabricated Flange Adaptor

Body - Rolled Steel to BS EN 10025-2: Grade S275

End Rings - Ductile Iron to BS EN1563: Symbol EN-GJS-450-10  
or Rolled Steel to BS EN 10025-2: Grade S275

Sleeve - Steel Tube to BS EN10255:

or Steel Tube to BS EN10216-1: Grade P265TR1

or Rolled Steel to BS EN 10025-2: Grade S275

or Rolled Steel to BS EN 10025-2: Grade S355 (depending on section)

### Flanged Spigot

Flange - Rolled Steel to BS EN 10025-2: Grade S275

Spigot - Steel Tube to BS EN10255:

or Steel Tube to BS EN10216-1: Grade P265TR1

### Gaskets

BS EN681-1:1996 Type WA WRAS listed

### Steel Tie Rods & Nuts

Tie Rods - BS EN10269: Name 42CrMo4 (Yield 725N/mm<sup>2</sup>) (formerly B7)

Nuts - BS EN20898-2: Property Class 8.0

### Stainless Steel Tie Rods & Nuts

Tie Rods - Stainless Steel to BS EN3506-1: Grade A2/A4 Property Class 70 (Yield 450N/mm<sup>2</sup>)

Nuts (sizes up to and including 2 1/4") 4 per Tie Rod - Stainless Steel to BS EN3506-2: Grade A2/A4 Property Class 80

Nuts (sizes over 2 1/4") 6 per Tie Rod - Stainless Steel to BS EN3506-2: Grade A2/A4 Property Class 50

### Studs/Nuts/Washers

Studs - Steel to BS EN ISO898-1: Property Class 4.8

Nuts - Steel to BS4190: Grade 4

Washers - Stainless Steel to BS1449:Part 2: Grade 304S15

### Coatings (Others available on request)

Fabricated Flange Adaptor - Rilsan Nylon 11

Flanged Spigot - Rilsan Nylon 11

End Ring - Rilsan Nylon 11

Studs/Nuts - Sheraplex to WIS 4-52-03

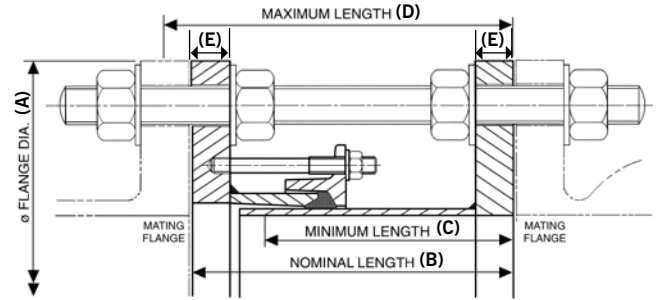
Steel Tie Rods/Nuts - Zn3 Zinc coated

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# Dismantling Joint 3" to 40" (ANSI 300)

## Specifications

Note: Maximum Longitudinal Adjustment  
= Maximum Length – Minimum Length



## Dismantling Joint

Flange Details				Flange To Flange Details			Tie Rod Details				
Nom	Drilling	Flange Thickness	Flange OD	Nominal Length	Minimum Length	Maximum Length	Tie Rod Dia x Length	H.T Zinc Plated Steel H.T Steel BS4882 Grade MB7 Yield 725N/mm <sup>2</sup>		Stainless Steel Class 70 Yield 450N/mm <sup>2</sup>	
		E (mm)	A (mm)	B (mm)	C (mm)	D (mm)		No.	Total Weight of DJ (kg)	No.	Total Weight of DJ (kg)
3"	ANSI 300	25	210	194	174	214	3/4" x 13"	4	19.3	4	19.3
4"	ANSI 300	25	254	194	174	214	3/4" x 13"	4	26.2	4	26.2
6"	ANSI 300	25	318	194	174	214	3/4" x 13 1/2"	4	32.1	4	32.1
8"	ANSI 300	25	381	194	174	214	7/8" x 14 1/2"	4	43.1	4	43.1
10"	ANSI 300	25	444	194	174	214	1" x 15"	4	63.0	6	60.8
12"	ANSI 300	25	521	194	174	214	1 1/8" x 16"	4	74.1	6	80.2
14"	ANSI 300	25	584	307	277	337	1 1/8" x 20 1/2"	5	117.0	8	129.0
16"	ANSI 300	25	648	307	277	337	1 1/4" x 21 1/2"	5	138.0	8	151.5
18"	ANSI 300	38	711	320	290	350	1 1/4" x 22"	6	220.0	10	241.0
20"	ANSI 300	38	775	320	290	350	1 1/4" x 22 1/2"	8	262.0	12	284.0
24"	ANSI 300	38	914	320	290	350	1 1/2" x 23 1/2"	8	359.0	12	393.0
28"	ANSI 300	38	1035	320	290	350	1 5/8" x 25"	7	427.0	12	489.0
30"	ANSI 300	38	1092	320	290	350	1 3/4" x 26"	8	500.0	12	551.0
32"	ANSI 300	38	1149	320	290	350	1 7/8" x 26 1/2"	8	546.0	14	646.0
36"	ANSI 300	38	1270	320	290	350	2" x 28"	10	676.0	14	749.0
40"	ANSI 300	60	1238	462	412	512	1 5/8" x 33 1/2"	16	844.0	26	958.0

## Materials & Relevant Standards

### Flange Drilling

ASME/ANSI B16.5/B16.47

### Fabricated Flange Adaptor

Body - Rolled Steel to BS EN 10025-2: Grade S275

End Rings - Ductile Iron to BS EN1563: Symbol EN-GJS-450-10  
or Rolled Steel to BS EN 10025-2: Grade S275

Sleeve - Steel Tube to BS EN10255:

or Steel Tube to BS EN10216-1: Grade P265TR1

or Rolled Steel to BS EN 10025-2: Grade S275

or Rolled Steel to BS EN 10025-2: Grade S355 (depending on section)

### Flanged Spigot

Flange - Rolled Steel to BS EN 10025-2: Grade S275

Spigot - Steel Tube to BS EN10255:

or Steel Tube to BS EN10216-1: Grade P265TR1

### Gaskets

BS EN681-1:1996 Type WA WRAS listed

### Steel Tie Rods & Nuts

Tie Rods - BS EN10269: Name 42CrMo4 (Yield 725N/mm<sup>2</sup>) (formerly B7)

Nuts - BS EN20898-2: Property Class 8.0

### Stainless Steel Tie Rods & Nuts

Tie Rods - Stainless Steel to BS EN3506-1: Grade A2/A4 Property Class 70 (Yield 450N/mm<sup>2</sup>)

Nuts (sizes up to and including 2 1/4") 4 per Tie Rod - Stainless Steel to BS EN3506-2: Grade A2/A4 Property Class 80

Nuts (sizes over 2 1/4") 6 per Tie Rod - Stainless Steel to BS EN3506-2: Grade A2/A4 Property Class 50

### Studs/Nuts/Washers

Studs - Steel to BS EN ISO898-1: Property Class 4.8

Nuts - Steel to BS4190: Grade 4

Washers - Stainless Steel to BS1449:Part 2: Grade 304S15

### Coatings (Others available on request)

Fabricated Flange Adaptor - Rilsan Nylon 11

Flanged Spigot - Rilsan Nylon 11

End Ring - Rilsan Nylon 11

Studs/Nuts - Sheraplex to WIS 4-52-03

Steel Tie Rods/Nuts - Zn3 Zinc coated

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Russia - Ural

# Ekaterinburg

Large Diameter Couplings

Stepped Couplings

Flange Adaptors

Dismantling Joints

## Project

Repair of existing pipeline to prevent water losses which were estimated at 30%.

## Client

Water Utility Ekaterinburg.

## Contractor

Renaissance



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## PIONEERS IN PIPE SOLUTIONS