



TEEKAY STEPPED COUPLINGS

- Patented Stepped Coupling System for joining pipes of the same nominal bore but with different outside diameters
- Suitable for joining dissimilar pipe materials
- Ideal for joining old pipes to new
- Readily available in non standard and discontinued pipe sizes
- No loose parts – pre-set and ready to install
- 100% rubber lined



- Steps up to 15mm for pipe sizes up to 275mm
- Steps up to 25mm for pipe sizes up to 3000mm
- Pressure range up to 16 bar (dependent on diameter)
- Full range of stainless or coated steel construction
- Gasket material EPDM

Unique Patented Seal Design





Teekay Stepped Couplings

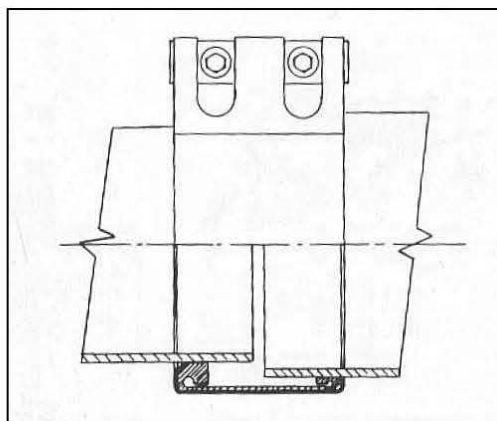
Teekay Stepped Couplings with a variety of asymmetric sealing sleeves can be provided for joining any two pipes with a difference in outside diameter of up to **15mm** for pipe sizes up to 275mm and **25mm** for pipe sizes up to 3000mm.

Teekay Stepped Couplings operate on the same principle as the Teekay Axiflex Coupling and therefore offer all the same features and advantages. They are light in weight and easy to install. **Teekay Stepped Couplings** have no loose parts and are despatched from our factory pre-set to slide completely over the smaller pipe.

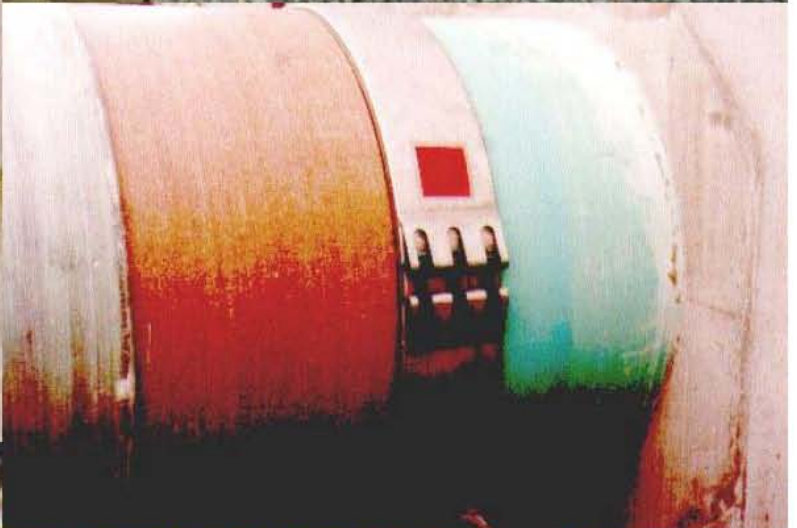
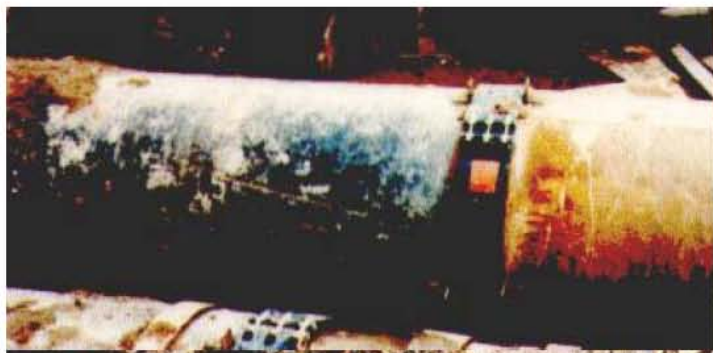
Teekay Stepped Couplings have a one piece asymmetric sealing sleeve which fully contains the pipeline media. Because one side of the rubber sealing sleeve is thicker than the other, the **Teekay Stepped Coupling** will tighten down evenly despite the difference in size of the two pipes.

Teekay Stepped Couplings can be used to join any two types of pipe, flexible or rigid, with standard or non-standard outside diameters. **Teekay Stepped Couplings** offer flexibility, generous tolerances and can accommodate a high degree of ovality. They allow for movement, angular deflection and lateral displacement.

Teekay Stepped Couplings are supplied in pressure classes from NP2.5 to NP16 (depending on diameter). As with all stepped couplings, care should be taken on pressure applications to prevent movement of the stepped coupling due to differential pressures. On buried applications soil compaction is usually sufficient to prevent movement.



Teekay Stepped Couplings are used widely in pipeline renovation where new pipes have to be connected to existing, often very old, systems.





TEEKAY STEPPED COUPLING MATERIAL SELECTION GUIDE

Type	I	II	IV	V	VI
Casing	AISI 304 DIN 1.4301	AISI 304 DIN 1.4301	AISI 316L DIN 1.4404	*Coated High Strength Steel	*Coated High Strength Steel
Fasteners	Alloy Steel Zinc + PTFE Coated	AISI 316L DIN 1.4404	AISI 316L DIN 1.4404	Alloy Steel Zinc Coated	AISI 316L DIN 1.4404
Gasket	EPDM	EPDM	EPDM	EPDM	EPDM

***Galvanized, Rilsan, PVC or Epoxy (Scotchkote)**

Please Note: When ordering, you will be asked for the outside diameters (or circumferences) of the two pipes to be joined.

TEEKAY STEPPED COUPLING

DIMENSIONAL DETAILS



PIPE SIZES			COUPLING WIDTH				MAX STEP	MAX PN	COUPLING SCREWS		APPROX WEIGHT
NOMINAL BORE		PIPE OD									
MM	INCHES	(SMALLER PIPE)	85mm	110mm	140mm	210mm	MM	BAR	NO	SIZE	KG
40	1½"	48.3 - 56	✓				5	16	2	M8	1
50	2"	57 - 72	✓				5	16	2	M8	1
65	2½"	73 - 82.5	✓				5	16	2	M8	1
80	3"	83 - 99		✓			12	16	2	M10	2
90	3½"	100-102		✓			15	16	2	M10	2
100	4"	100-127		✓			15	16	2	M10	2
125	5"	128-150		✓			15	16	2	M10	2.5
150	6"	151-186		✓	✓		15/20	16/16	2/2	M10/16	2.5/4
175	7"	187-205		✓	✓		15/20	16/16	2/2	M10/16	2.5/4
200	8"	200-240		✓	✓		15/25	16/16	2/2	M10/16	3/4.5
225	9"	241-260		✓	✓	✓	15/25/25	16/16/16	2/2/3	M10/16/16	3.5/5/8
250	10"	250-286		✓	✓	✓	15/25/25	16/16/16	2/2/3	M10/16/16	3.5/5/8.5
300	12"	287-326		✓			15	10	2	M10	4
300	12"	287-349			✓	✓	25/25	16/16	2/3	M16/16	6/10
350	14"	350-399			✓	✓	25/25	16/16	2/3	M16/16	7/11
400	15" 16"	400-453			✓	✓	25/25	16/16	2/3	M16/16	8/13
450	18"	450-507			✓	✓	25/25	10/16*/10/16*	2/3	M16/16	9/14
500	20"	500-560			✓	✓	25/25	10/16*/10/16*	2/3	M16/16	9.5/16
600	21" 24"	561-667			✓	✓	25/25	10/16*/10/16*	2/3	M16/16	11/17.5
700	27" 28"	668-750			✓	✓	25/25	6/16*/6/16*	2/3	M16/16	12.5/22.5
800	30" 32"	751 - 850			✓	✓	25/25	6/16*/6/16*	2/3	M16/16	14/25
900	33" 36"	851 - 950			✓	✓	25/25	6/10*/6/10*	2/3	M16/16	16/28
1000	40"	951 - 1050			✓	✓	25/25	6/6	2/3	M16/16	17/30
1100	44"	1051 - 1150			✓	✓	25/25	6/6	2/3	M16/16	18/38
1200	48"	1151 - 1250			✓	✓	25/25	2.5/6*/2.5/6*	2/3	M16/16	20/41
1300	52"	1251 - 1350				✓	25	2.5/6*	6	M16	48
1400	56"	1351 - 1450				✓	25	2.5/6*	6	M16	50.5
1500	60"	1451 - 1550				✓	25	2.5/6*	6	M16	53
1600	64"	1551 - 1650				✓	25	2.5/6*	6	M16	56.5
1700	68"	1651 - 1750				✓	25	2.5/5*	6	M16	60
1800	72"	1751 - 1850				✓	25	2.5/5*	6	M16	62.5
1900	76"	1851 - 1950				✓	25	2.5/5*	6	M16	65
2000	80"	1951 - 2050				✓	25	2.5/5*	6	M16	68
2100	84"	2051 - 2150				✓	25	2.5/4*	6	M16	71
2200	88"	2151 - 2250				✓	25	2.5/4*	12	M16	74
2300	92"	2251 - 2350				✓	25	2.5/4*	12	M16	76
2400	96"	2351 - 2450				✓	25	2.5/4*	12	M16	80
2500	100"	2451 - 2550				✓	25	2.5/3*	12	M16	87.5
2600	104"	2551 - 2650				✓	25	2.5/3*	12	M16	93
2700	108"	2651 - 2750				✓	25	2.5/3*	12	M16	96
2800	112"	2751 - 2850				✓	25	2.5/3*	12	M16	99
2900	116"	2851 - 2950				✓	25	2/3*	12	M16	110
3000	120"	2951 - 3050				✓	25	2/3*	12	M16	121

NOTES

* Denotes individual pressure rating for Type V Material Selection.

Test Pressure is 1.5 times working pressure.

The Teekay Stepped Coupling is a **non**-axial restraint pipe coupling type.

E&OE 171001



Teekay Reducers

Where two pipes have different nominal bores, or where the differences in outside diameter are greater than 25mm, select **Teekay Reducers**, comprising one smaller and one larger Teekay Axiflex Coupling connected by a reducer. Alternatively, one end may be flanged for connection to a new or existing flanged connection.

Teekay Reducers can be manufactured to suit any pipe outside diameter, standard or non-standard. They can be supplied either concentric or eccentric and to customised end to end dimensions to suit individual space requirements.

Teekay Reducers are made from steel to BS4360 43a and are supplied fully coated internally and externally in Rilsan, Fusion Bonded Epoxy or galvanized. Other materials and coatings are also available. The Teekay Axiflex Couplings can be provided in any of the materials listed on Page 4. Reducer lengths different from those listed on Page 8 are also readily available.



During installation, the couplings may be placed entirely over the ends of the reducer, allowing the entire unit to be dropped easily into place. The couplings are then slid back over the pipe ends and tightened. The coupling lock parts may be placed in the area of maximum access.

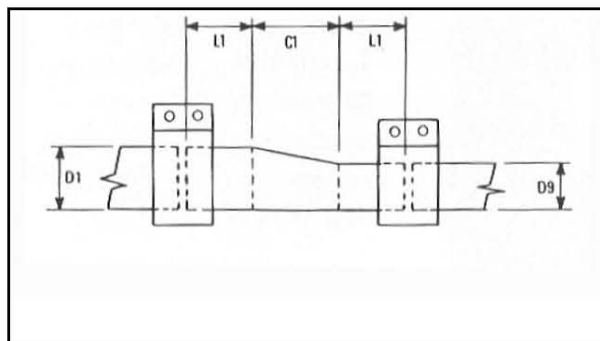
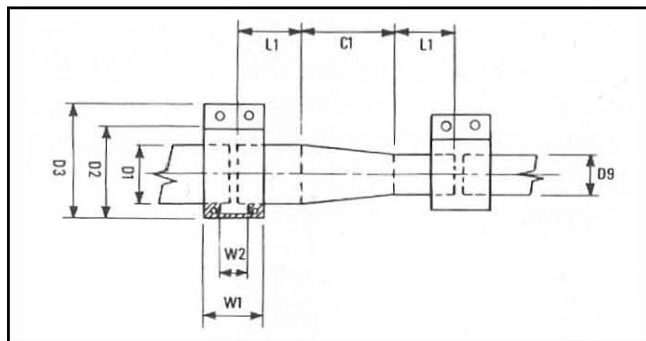
Overall, the **Teekay Reducer** offers huge space, weight, time and cost savings without compromising build quality.





TEEKAY REDUCERS

DIMENSIONAL DETAILS



D1 PIPE O.D. LARGE END	PIPE NOMINAL BORE	W1 COUPLING WIDTH	W2 GAP BETWEEN SEALING LIPS	D2 COUPLING O.D. = (D1 + D2)	D3 OVERALL COUPLING O.D. = (D1 + D3)	NO. OF SCREWS	L1	C1	D9 PIPE O.D. SMALL END
TEEKAY REDUCERS CAN BE MANUFACTURED TO SUIT ANY PIPE OUTSIDE DIAMETER	50	85	42	20	39	2	100	(D1-D9) X 3	TEEKAY REDUCERS CAN BE MANUFACTURED TO SUIT ANY PIPE OUTSIDE DIAMETER
	75	85	42	20	39	2	100		
	100	85	42	20	39	2	100		
	150	110	67	22	44	2	120		
	200	110	67	22	44	2	120		
	250	110	67	22	44	2	120		
	300	140	80	28	58	2	150		
	350	140	80	28	58	2	150		
	400	140	80	28	58	2	150		
	450	140	80	28	58	2	150		
	500	140	80	28	58	2	150		
	600	140	80	28	58	2	150		
	700	210	120	42	72	2/3	250		
	800	210	120	42	72	2/3	250		
	900	210	120	42	72	2/3	250		
	1000	210	120	42	72	2/3	250		
	1100	210	120	42	72	2/3	250		
	1200	210	120	42	72	3/6	250		
	1300	210	120	42	102	6	250		
	1400	210	120	42	102	6	250		
	1500	210	120	42	102	6	250		
	1600	210	120	42	102	6	250		
	1700	210	120	42	102	6	250		
	1800	210	120	42	102	6	250		
	1900	210	120	42	102	6	250		
	2000	210	120	42	102	6	250		