_tipes _values _narges _ritings _couplings





Teekay Pipe Couplings

Axilock | Axiflex | Repair couplings | Stepped couplings | Accessories





Butt welding fittings	Threaded fittings	Industrial valves	Flanges
butt weluing intilings	Tilleaueu Illilligs	illuusillai valves	Flallyes









stainless steel

Pipe couplings		Beverage fittings	Installation supplies
Introducing the pipe coupling system	4-5		
Axilock-S – axially restrained –	6-7		
Axilock – axially restrained –	8-9		
Axiflex – non axially restrained –	10-13		
Plastlock – axially restrained –	14		
Repair coupling – non axially restrained –	15-17		
Stepped coupling – non axially restrained –	18-19		
Accessories	20		
Pipe materials	21		
Calling the technical data up the internet	22		
Short names for the pipe coupling system	22		
Installation instructions	23		

Latest news

Technical brochure for Teekay pipe couplings

Refer to the stock levels on our website

You will find the current stock levels for all of the products in this brochure on our website, you also being able to download datasheets from here as a PDF document. A description of this is on page 22.

heco gmbh is a producer and reseller of stainless steel fittings and valves.

Our products are used in machine and plant manufacturing, as well as in the chemical and food industries. With multiple locations across Europe, we are close to you no matter where you are on the continent.

Remchingen - Berlin - Bielefeld - Frankfurt - Nuremberg - Warsaw - Brno



Introducing the Teekay pipe coupling system

With Teekay pipe couplings, pipes can be joined fast and easily without the necessity to flange, weld, groove or thread the pipe. You can cut the pipe to length on site, butt them and then connect them with a pipe coupling. This saves space, weight, time and therefore costs with all installations.



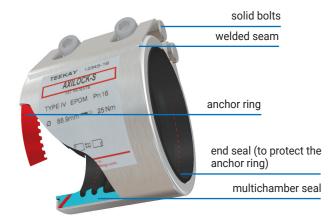
The pipe couplings in sizes of 21,3 to 4200 mm can be put to diverse uses, e.g. in general pipeline engineering, shipbuilding, the automotive industry, building services engineering, in civil engineering, for production plants and in the oil and gas indutries.

The couplings are manufactured in accordance with DIN 86128 and ASTM F1476.

Teekay Axilock - axially restrained -

The Axilock range has been developed for the connection of plain-ended pipes. The use of a grip ring on each side of the coupling provides a high degree of safety. It ensures that the pipe is unable to be pulled apart when under pressure.

Each of the couplings has a rubber lining in order to ensure that the high corrosion resistance standard is ensured throughout the entire duration of use of the coupling.



Teekay Axiflex – non axially restrained –

With its very distinctive progressive sealing lips, the Axiflex coupling is suitable for installation on pipes that have already been fixed in position.

The Axiflex range includes the repair coupling, the repair clamp and the stepped coupling. The repair couplings are ideal for all applications, with which a permanent repair is requiered under pressure. The stepped coupling enables different materials and pipe diameters to be joined together.



Sealing concept of the Teekay pipe coupling system

Each of the couplings (both Axilock and Axiflex) comprise a casing, a seal and a locking mechanism. The purpose of the casing is the enclosing of the seal when the locking mechanism has been tightened, it hereby being pressed against the upper surface of the pipe. The locking machanism pulls both of the ends of the casings together so that it is uniformly positioned around the entire pipe circumference.

This necessitates an application of the required torque to the coupling. This ensures that the seal exercises an adequate compression against the upper surface of the pipe.

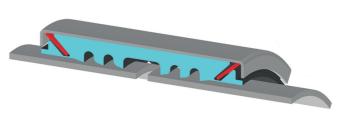
Teekay Axilock
- axially restrained -

The Axilock coupling has two anchor rings that are adjacent to each other, but seperated by the sealing mechanism.

Teekay Axiflex

– non axially restrained –

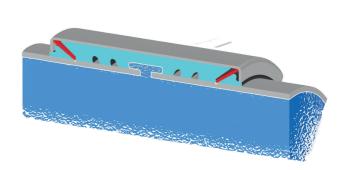
The Axiflex coupling has two distinctive sealing lips that enable the pipe to expand or be displacd in the coupling.



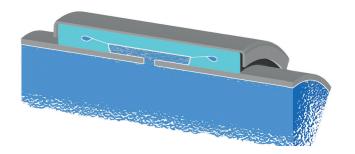
After the locking mechanism has been tightened, the multichamber sealing lips are pressed against the upper surface of the pipe, thereby sealing it.

The teeth in the anchor rings are pressed through the last sealing lip and into the upper surface of the pipe, thereby preventing the two pipes from being pulled apart when subjected to pressure or a tensile load.

The end seal is also pressed against the pipe, it hereby protecting both the anchor ring and the position on the pipe which the anchor ring impinges with, against possible corrosion.



The sealing lips are pressed against the upper surface of the pipe, thereby sealing it. The seal is so designed that it is able to resist the pressure in the pipeline. As the pressure increases, the lip seals swell to seal more tightly against the pipe surface.







System ▶ TEEKAY ▶ Axilock

Axilock-S, axially restrained



Short name	TA.
Description	Axilock-S pipe coupling – axially restrained, single casing
Material	Typ I Typ IV



technical description

Teekay Axilock-S (single casing)

With its single casing, the Axilock-S is a axially restrained pipe coupling with two metallic anchor rings that impinge on the upper surface of the pipe during installation. The teeth of the anchor rings are pressed into the upper surface of the pipe, thereby preventing the two pipes from being pulled apart when subjected to pressure or a tensile load. The multichamber seal presses against the pipe which the anchor ring impinges with, against possible corrosion.

Pipe materials (see page 21)

Dimensions / casing design

Model Housing Dimension

single casing 21,3 up to 170 mm Axilock-S Axilock double casing 141,0 up to 711 mm

Material qualities

Design Fasteners

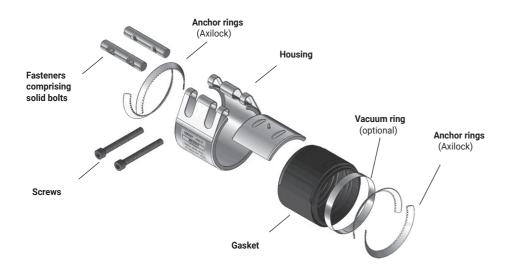
Typ I AISI 304 / 1.4301 C-steel, PTFE coated AISI 316L / 1.4404 AISI 316 / 316L Typ IV

Temperature range

Sealing material Temperature range EPDM -40 °C up to +100 °C -20 °C up to +80 °C NBR **HNBR** -20 °C up to +125 °C FKM -20 °C up to +180 °C

Technical installation information

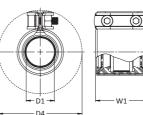
The maximum angular deviation, the permissible tolerances for the outer pipe diameter and the pipe clearance that is to be adhered to are stated on page 23 of the assembly instructions.



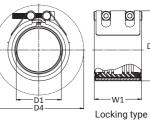
stainless steel

System ▶ TEEKAY ▶ Axilock

Measures and values







from 38,0 mm

D1 (mm)	AD tolerance (mm)		pressure ar)	Axial pull* (N)	W1 (mm)	D3 (mm)	D4 (mm)	Screw size Inbus
21,3	21,0 / 21,6	16	42	5704	45	50	77	2 x M6
26,9	26,6 / 27,3	16	42	8528	45	56	83	2 x M6
28,0	27,7 / 28,4	16	42	8994	45	57	84	2 x M6
30,0	29,7 / 30,4	16	42	9900	45	59	86	2 x M6
33,7	33,3 / 34,1	16	42	11600	45	63	90	2 x M6
35,0	34,7 / 35,4	16	42	12031	45	64	91	2 x M6
38,0	37,0 / 39,0	16	42	14069	65	67	130	2 x M8
42,4	41,4 / 43,4	16	42	16950	65	71	132	2 x M8
44,5	43,5 / 45,5	16	42	18360	65	73	134	2 x M8
48,3	47,3 / 49,3	16	42	21263	65	77	136	2 x M8
54,0	53,0 / 55,0	16	42	25463	88	87	138	2 x M8
57,0	56,0 / 58,0	16	42	27570	88	90	140	2 x M8
60,3	59,0 / 62,0	16	42	30855	88	93	143	2 x M8
63,0	62,0 / 65,0	16	42	32432	88	96	145	2 x M8
67,0	66,0 / 69,0	16	42	35271	88	100	147	2 x M8
70,0	69,0 / 72,0	16	42	36575	88	103	150	2 x M8
73,0	72,0 / 75,0	16	42	35590	88	106	152	2 x M8
76,1	75,0 / 78,0	16	42	37312	88	109	185	2 x M10
84,0	83,0 / 86,0	16	42	43627	88	118	190	2 x M10
88,9	88,0 / 91,0	16	42	44352	88	123	193	2 x M10
98,0	97,0 / 100,0	16	42	59613	88	132	200	2 x M10
101,6	100,5 / 103,5	16	42	63263	88	136	202	2 x M10
104,0	103,0 / 106,0	16	42	65779	88	138	204	2 x M10
108,0	107,0 / 110,0	16	42	69651	88	142	207	2 x M10
110,0	109,0 / 112,0	16	42	72254	88	144	208	2 x M10
114,3	113,0 / 116,0	16	42	76987	89	149	211	2 x M10
118,0	117,0 / 120,0	16	42	79864	89	154	214	2 x M10
127,0	126,0 / 129,0	16	42	87442	89	163	221	2 x M10
129,0	128,0 / 131,0	16	42	89562	89	165	223	2 x M10
133,0	132,0 / 135,0	16	42	94510	114	177	236	2 x M12
139,7	139,0 / 142,0	16	42	101205	114	184	241	2 x M12
144,0	143,0 / 146,0	13	34	104272	115	190	245	2 x M12
154,0	153,0 / 156,0	13	34	112025	115	200	253	2 x M12
159,0	158,0 / 161,0	13	34	117195	115	205	257	2 x M12
165,0	164,0 / 167,0	13	34	124068	115	211	262	2 x M12
168,3	167,0 / 170,0	13	34	126855	115	214	265	2 x M12
170,0	169,0 / 172,0	13	34	129431	115	216	266	2 x M12

The tables include the most frequent sizes. Couplings with other diameters can also be created.

^{*} Axial pull: N ÷ 100 = t (data in tonnes) Axial pull: N ÷ 10 = kg (data in kilograms)



The stated working pressures are designed for steel pipes. The minimum wall thickness is stated in DIN 86128, Parts I and II.



The strength calculation is 1.5-fold of the working pressure in industrial applications and the 4-fold of the working pressure in shipbuilding applications as a safety reserve.





System ▶ TEEKAY ▶ Axilock

Axilock, axially restrained



Short name	TA.
Description	Axilock pipe coupling - axially restrained, double casing
Material	Typ I Typ IV



technical description

Teekay Axilock (double casing)

With its double casing, the Axilock is a axially restrained pipe coupling with two metallic anchor rings that impinge on the upper surface of the pipe during installation. The teeth of the anchor rings are pressed into the upper surface of the pipe, thereby preventing the two pipes from being pulled apart when subjected to pressure or a tensile load (please refer to the illustration below). The multichamber seal presses against the pipe, it thereby protecting both the anchor ring and the position on the pipe which the anchor ring impinges with, against possible corrosion.

Pipe materials (see page 21)

Dimensions / casing design

Modell Housing Dimension

Axilock-S single casing 21,3 up to 170 mm double casing 141 up to 711 mm Axilock

Material qualities

Design Fasteners

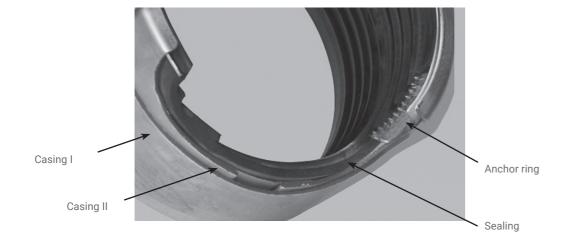
AISI 304 / 1.4301 C-steel, PTFE coated Typ I Typ IV AISI 316L / 1.4404 AISI 316 / 316L

Temperature range

Sealing material Temperature range EPDM -40 °C up to +100 °C NBR -20 °C up to +80 °C **HNBR** -20 °C up to +125 °C -20 °C up to +180 °C

Technical installation information

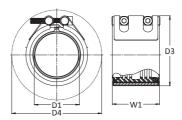
The maximum angular deviation, the permissible tolerances for the outer pipe diameter and the pipe clearance that is to be adhered to are stated on page 23 of the assembly instructions.



stainless steel

System ▶ TEEKAY ▶ Axilock





D1 (mm)	AD tolerance (mm)	Working	pressure par) 📻	Axial pull* (N)	W1 (mm)	D3 (mm)	D4 (mm)	Screw size Inbus
141,3	140,5 / 143,5	16	42	100393	116	189	244	2 x M12
144,0	143,0 / 146,0	16	42	104266	116	192	246	2 x M12
154,0	153,0 / 156,0	16	42	119251	116	202	255	2 x M12
159,0	158,0 / 161,0	16	42	127120	118	210	287	2 x M16
165,0	164,0 / 167,0	16	42	136895	118	216	292	2 x M16
168,3	167,0 / 170,0	16	42	142425	118	219	294	2 x M16
170,0	169,0 / 172,0	16	42	145317	118	221	296	2 x M16
193,7	193,0 / 196,0	16	42	188860	119	246	315	2 x M16
219,1	218,0 / 221,0	16	42	241382	120	272	337	2 x M16
222,0	221,0 / 224,0	16	42	247814	120	275	339	2 x M16
244,5	243,5 / 245,5	8,75	23	164386	120	297	358	2 x M16
267,0	266,0 / 269,0	8,75	23	196033	120	320	378	2 x M16
273,0	272,0 / 275,0	8,75	23	204943	120	326	383	2 x M16
323,9	323,0 / 326,0	7,5	19	247276	120	377	429	2 x M16
326,0	325,0 / 328,0	7,5	19	250493	120	379	431	2 x M16
355,6	354,5 / 357,5	6,0	15	238437	120	409	458	2 x M16
378,0	377,0 / 380,0	6,0	15	269423	120	431	479	2 x M16
406,4	405,0 / 408,0	6,0	15	311428	120	460	506	2 x M16
429,0	428,0 / 431,0	5,0	15	289191	120	482	527	2 x M16
457,2	456,0 / 459,0	-	2,5	164230	120	512	554	2 x M16
508,0	507,0 / 510,0	-	2,5	202753	120	563	603	2 x M16
558,8	558,0 / 561,0	-	2,5	245331	120	613	652	2 x M16
609,6	608,5 / 611,5	-	1,5	175178	120	664	701	2 x M16
660,4	659,5 / 662,5	-	1,5	205591	120	715	750	2 x M16
711,0	710,0 / 713,0	-	1,5	238437	120	766	799	2 x M16

The tables include the most frequent sizes. Couplings with other diameters can also be created.

*Axial pull: N ÷ 100 = t (data in tonnes) Axial pull: N ÷ 10 = kg (data in kilograms)



The stated working pressures are designed for steel pipes. The minimum wall thickness is stated in DIN 86128, parts I and II.



The strength calculation is 1.5-fold of the working pressure in industrial applications and the 4-fold of the working pressure in shipbuilding applications as a safety reserve.





System ▶ TEEKAY ▶ Axiflex

Axiflex, non axially restrained

TK



Short name	TK.
Description	Axiflex pipe coupling – non axially restrained
Material	Typ I Typ II Typ IV Typ V Typ VI



technical description

Teekay Axiflex (non axially restrained)

With its very distinctive progressive sealing lips, the Axiflex coupling ist suitable for installaion on pipes that have already been fixed in position and enables the pipe to expand or be displaced in the coupling. The sealing lips are pressed against the upper surface of the pipe, thereby sealing it. An increase in pressure in the pupeline results in an increase in the pressure that the seal applies to the pipe. This ensure a constant sealing at any approved pressure stage.

Pipe materials (see page 21)

Dimensions

21,3 up to 4.200 mm

Material qualities

Design	Housing	Fasteners	Coating
Тур І	AISI 304 / 1.4301	carbon steel, PTFE coated	-
Typ II	AISI 304 / 1.4301	AISI 316 / 316L	_
Typ IV	AISI 316L / 1.4404	AISI 316 / 316L	_
T 17	A constitution of the cons	Control of the DTEE Control	Dill

Typ V tensile carbon steel carbon steel, PTFE coated Rilsan / PVC / Epoxi / zinced fyp VI tensile carbon steel AISI 316 / 316L Rilsan / PVC / Epoxi / zinced

Range of application for Type V and Type VI with high pressure levels and aggressive ground conditions.

Special materials

The housing and the fasteners are also available in materials 1.4462 or 1.4539 upon request.

Temperature range

 Sealing material
 Temperature range

 EPDM
 -40 °C up to +100 °C

 NBR
 -20 °C up to +80 °C

 HNBR
 -20 °C up to +125 °C

 FKM
 -20 °C up to +180 °C

Technical installation information

The maximum angular deviation, the permissible tolerances for the outer pipe diameter and the pipe clearance that is to be adhered to are stated on page 23 of the assembly instructions.

10

The minium clearance between the ends of the pipes can result in the rubber seal being sucked into the pipeline when subjected to negative pressure. A vacuum ring can be additionally ordered as an option in order to prevent this.



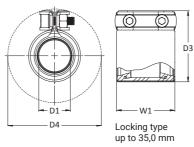


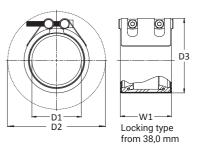
A centre web can prevent the coupling from wandering along the pipe when subjected to strong vibrations or length modifications.

stainless steel

System ▶ TEEKAY ▶ Axiflex







D1 (mm)	AD tolerance (mm)	Available with the following working pressures (bar)	W1 (mm)	D3 (mm)	D4 (mm)	Screw size Inbus
21,3	21,0 / 21,6	16 / 25 / 40	45	50	77	2 x M6
26,9	26,6 / 27,3	16 / 25 / 40	45	56	83	2 x M6
28,0	27,7 / 28,4	16 / 25 / 40	45	57	84	2 x M6
30,0	29,7 / 30,4	16 / 25 / 40	45	59	86	2 x M6
33,7	33,3 / 34,1	16 / 25 / 40	45	63	90	2 x M6
35,0	34,7 / 35,4	16 / 25 / 40	45	64	91	2 x M6
38,0	37,0 / 39,0	16 / 25 / 40	65	57	70	2 x M8
42,4	41,4 / 43,4	16 / 25 / 40	65	63	75	2 x M8
44,5	43,5 / 45,5	16 / 25 / 40	65	65	77	2 x M8
48,3	47,0 / 50,0	16 / 25 / 40	85	70	87	2 x M8
54,0	52,5 / 55,5	16 / 25 / 40	85	74	93	2 x M8
57,0	55,5 / 58,5	16 / 25 / 40	85	77	96	2 x M8
60,3	59,0 / 62,0	16 / 25 / 40	85	80	99	2 x M8
63,0	62,0 / 65,0	16 / 25 / 40	85	83	102	2 x M8
73,0	71,5 / 74,5	16 / 25 / 40	85	93	112	2 x M8
76,1	74,0 / 78,0	16 / 25 / 40	85	96	115	2 x M8
82,5	80,5 / 84,5	16 / 25 / 40	85	103	122	2 x M8
84,0	82,0 / 86,0	16 / 25 / 40	85	104	123	2 x M8
88,9	87,0 / 91,0	16 / 25 / 40	85	109	128	2 x M8
98,0	96,0 / 100,0	16 / 25 / 40	85	118	137	2 x M8
101,6	100,0 / 104,0	16 / 25 / 40	85	122	141	2 x M8
104,0	102,0 / 106,0	16 / 25 / 40	85	124	143	2 x M8
108,0	106,0 / 110,0	16 / 25 / 40	85	128	147	2 x M8
110,0	108,0 / 112,0	16 / 25 / 40	85	130	149	2 x M8
114,3	112,0 / 116,0	16 / 25 / 40	85	134	153	2 x M8
88,9	87,0 / 91,0	16 / 25 / 40	110	111	133	2 x M10
101,6	100,0 / 104,0	16 / 25 / 40	110	124	146	2 x M10
104,0	102,0 / 106,0	16 / 25 / 40	110	126	148	2 x M10
108,0	106,0 / 110,0	16 / 25 / 40	110	130	152	2 x M10
110,0	108,0 / 112,0	16 / 25 / 40	110	132	154	2 x M10
114,3	112,0 / 116,0	16 / 25 / 40	110	136	158	2 x M10
129,0	127,0 / 131,0	16 / 25 / 40	110	151	173	2 x M10
133,0	131,0 / 135,0	16 / 25 / 40	110	155	177	2 x M10
139,7	138,0 / 142,0	16 / 25 / 40	110	162	184	2 x M10
154,0	151,0 / 156,0	16	110	176	198	2 x M10
159,0	156,0 / 161,0	16	110	181	203	2 x M10
168,3	165,0 / 170,0	16	110	190	212	2 x M10
170,0	167,0 / 172,0	16	110	192	214	2 x M10
219,1	216,0 / 222,0	16	110	242	263	2 x M10
222,0	218,0 / 224,0	16	110	244	266	2 x M10
267,0	264,0 / 270,0	16	110	289	311	2 x M10
273,0	270,0 / 276,0	16	110	295	317	2 x M10
323,9	321,0 / 327,0	10	110	346	368	2 x M10

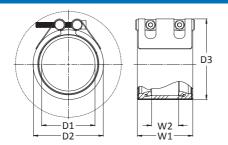
11

The tables include the most frequent sizes. Couplings with other diameters can also be created.



System ▶ TEEKAY ▶ Axiflex

Axiflex, non axially restrained

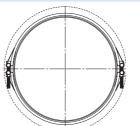


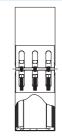
System ▶ TEEKAY ▶ Axiflex

Measures and values

There is a change to the number of the fasteners as from a diameter of 1400 mm.

This number can vary between 2 and 6 fasteners, depending on the diameter.





As from a coupling width of 210 mm, there is an increase in the number of bolts in the locking mechanism. Please refer to the table for the exact number.

Pipe diame- ter nominal	D1 pipe-AD Available sample sizes coupling widths (mm)						Available with the following working pressures (bar)	D2 coupling size= D1 (mm) + following value	D3 overall height of the coupling AD = D1 (mm) + following value	Number of screws	Maximum permitted pipe tolerance +/-	Pipe diam ter nomin		
				140	210	310	410							
150	154,0	159,0	168,3	•				16 / 25 / 40	80	22	44	2	2,5	150
200	204,0	206,0	219,1	•	•			16 / 25 / 40	80 / 120	22 / 42	44 / 72	2/2/3	3/3	200
250	254,0	256,0	273,0	•	•			16 / 25 / 40	80 / 120	22 / 42	44 / 72	2/2/3	3/3	250
300	304,0	306,0	323,9	•	•	•	•	16 / 25 / 40	80 / 120 / 220 / 320	28 / 42 / 42 / 42	58 / 72 / <mark>72</mark> / 72	2/2/3/4/6	4/5/5/5	300
350	355,6	368,0	376,0	•	•	•	•	16 / 25 / 40	80 / 120 / <mark>220</mark> / 320	28 / 42 / 42 / 42	58 / 72 / <mark>72</mark> / 72	2/2/3/4/6	4/5/5/5	350
400	406,4	419,0	427,0	•	•	•	•	10 / 16 / 25	80 / 120 / <mark>220</mark> / 320	28 / 42 / 42 / 42	58 / 72 / <mark>72</mark> / 72	2/2/3/4/6	4/5/5/5	400
450	457,0	480,0	504,0	•	•	•	•	10 / 16 / 25	80 / 120 / 220 / 320	28 / 42 / 42 / 42	58 / 72 / <mark>72</mark> / 72	2/2/3/4/6	4/5/5/5	450
500	508,0	521,0	530,0	•	•	•	•	10 / 16 / 25	80 / 120 / <mark>220</mark> / 320	28 / 42 / 42 / 42	58 / 72 / <mark>72</mark> / 72	2/2/3/4/6	4/5/5/5	500
600	609,6	622,0	616,0	•	•	•	•	10 / 16 / 25	80 / 120 / 220 / 320	28 / 42 / 42 / 42	58 / 72 / <mark>72</mark> / 72	2/2/3/4/6	4/6/6/6	600
700	711,2	720,0	718,0	•	•	•	•	10 / 16 / 25	80 / 120 / <mark>220</mark> / 320	28 / 42 / 42 / 42	58 / 72 / <mark>72</mark> / 72	2/3/4/6	4/6/6/6	700
800	812,8	820,0	842,0	•	•	•	•	10 / 16 / 25	80 / 120 / 220 / 320	28 / 42 / 42 / 42	58 / 72 / <mark>72</mark> / 72	2/3/4/6	4/6/6/6	800
900	914,4	920,0	924,0	•	•	•	•	6 / 10 / 16	80 / 120 / <mark>220</mark> / 320	28 / 42 / 42 / 42	58 / 72 / <mark>72</mark> / 72	2/3/4/6	4/6/6/6	900
1000	1016,0	1020,0	1026,0	•	•	•	•	6 / 10 / 16	80 / 120 / 220 / 320	28 / 42 / 42 / 42	58 / 72 / <mark>72</mark> / 72	2/3/4/6	4/6/6/6	1000
1100	1099,0	1116,0	1052,0	•	•	•	•	6 / 10 / 16	80 / 120 / <mark>220</mark> / 320	28 / 42 / 42 / 42	58 / 72 / <mark>72</mark> / 72	2/3/4/6	4/6/6/6	1100
1200	1216,0	1256,0	1229,0	•	•	•	•	6 / 10 / 16	80 / 120 / 220 / 320	28 / 42 / 42 / 42	58 / <mark>72 / 72</mark> / 72	2/3/4/6	4/6/6/6	1200
1300	1350,0	1320,0	1376,0		•	•	•	6 / 10 / 16	120 / 220 / 320	42 / 42 / 42	102 / 102 / 102	6/8/12	10 / 10 / 10	1300
1400	1412,0	1480,0	1434,0		•	•	•	6/10/16	120 / 220 / 320	42 / 42 / 42	102 / 102 / 102	6/8/12	10 / 10 / 10	1400
1500	1535,0	1516,0	1499,0		•	•	•	2,5 / 6 / 10	120 / 220 / 320	42 / <mark>42</mark> / 42	102 / 102 / 102	6/8/12	10 / 10 / 10	1500
1600	1620,0	1660,0	1638,0		•	•	•	2,5 / 6 / 10	120 / 220 / 320	42 / <mark>42</mark> / 42	102 / 102 / 102	6/8/12	10 / 10 / 10	1600
1700	1720,0	1735,0	1760,0		•	•	•	2,5 / 6 / 10	120 / 220 / 320	42 / 42 / 42	102 / 102 / 102	6/8/12	10 / 10 / 10	1700
1800	1820,0	1842,0	1880,0		•	•	•	2,5 / 6 / 10	120 / 220 / 320	42 / <mark>42</mark> / 42	102 / 102 / 102	6/8/12	10 / 10 / 10	1800
1900	1920,0	1942,0	1968,0		•	•	•	2,5 / 6 / 10	120 / 220 / 320	42 / <mark>42</mark> / 42	102 / 102 / 102	12 / 16 / 24	10 / 10 / 10	1900
2000	2020,0	2078,0	2046,0		•	•	•	2,5 / 6 / 10	120 / 220 / 320	42 / 42 / 42	102 / 102 / 102	12 / 16 / 24	10 / 10 / 10	2000
2100	2120,0	2160,0	2147,0		•	•	•	2,5 / 6	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	12 / 16 / 24	10 / 10 / 20	2100
2200	2200,0	2249,0	2220,0		•	•	•	2,5 / 6	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	12 / 16 / 24	10 / 10 / 20	2200
2300	2300,0	2340,0	2360,0		•	•	•	2,5 / 6	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	12 / 16 / 24	10 / 10 / 20	2300
2400	2400,0	2452,0	2420,0		•	•	•	2,5 / 6	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	12 / 16 / 24	10 / 10 / 20	2400
2500	2500,0	2540,0	2555,0		•	•	•	2,5 / 6	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	12 / 16 / 24	10 / 10 / 20	2500
2600	2600,0	2640,0	2657,0		•	•	•	2,5 / 6	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	12 / 16 / 24	10 / 10 / 20	2600
2700	2700,0	2740,0	2770,0		•	•	•	2,5 / 5	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	12 / 16 / 24	10 / 10 / 20	2700
2800	2800,0	2861,0	2880,0		•	•	•	2,5 / 5	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	12 / 16 / 24	10 / 10 / 20	2800
2900	2900,0	2999,0	2950,0		•	•	•	2,5 / 5	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	12 / 16 / 24	10 / 10 / 20	2900
3000	3000,0	3060,0	3100,0		•	•	•	2,5 / 5	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	12 / <mark>16</mark> / 24	10 / 10 / 20	3000
3200	3200,0	3220,0	3255,0		•	•	•	2,5 / 5	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	12 / 16 / 24	10 / 10 / 20	3200
3400	3400,0	3420,0	3460,0		•	•	•	2,5 / 4	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	12 / 16 / 24	10 / 10 / 20	3400
3600	3600,0	3620,0	3640,0		•	•	•	2,5 / 4	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	18 / <mark>24</mark> / 36	10 / 10 / 20	3600
3800	3800,0	3830,0	3870,0		•	•	•	2,5 / 4	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	18 / <mark>24</mark> / 36	10 / 10 / 20	3800
4000	4000,0	4040,0	4080,0		•	•	•	2,5 / 4	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	18 / 24 / 36	10 / 10 / 20	4000
4200	4200,0	4250,0	4290,0		•	•	•	2,5	120 / 220 / 320	102 / 102 / 102	102 / 102 / 102	18 / <mark>24</mark> / 36	10 / 10 / 20	4200

The stated working pressures are designed for steel pipes. The minimum wall thickness is stated in DIN 86128, parts I and II.



The strength calculation is 1.5-fold of the working pressure in industrial applications.





System ▶ TEEKAY ▶ Plastlock

Plastlock pipe coupling, axially restrained

TAPL



Short name	TAPL
Description	Plastlock pipe couplings for plastic pipes – axially restrained
Material	Typ I Typ II Typ IV



technical description

Plastlock pipe coupling - axially restrained

The Plastlock pipe coupling makes it possible to connect plain end plastic pipes in the simplest way. The pipe coupling has a dynamical axial anchoring system that prevents the pipes from being pulled apart. This makes the adhering, welding or flanging or the use of pipe inserts unnecessary, as long as the SDR value (Standard-Dimension-Ratio) is adhered to.

Due to their properties, plastic materials tend to move and shift when burdened. By absorbing the material within the anchoring mechanism, the Plastlock pipe coupling converts this to a positive retention force. The anchoring system that is provided with three anchor rings, increases the tensile strength if the pressure should be increased within the pipeline. The anchor rings rotate on the pipe when subjected to a high degree of axial load, it thereby achieving a larger supporting surface, instead of it being pressed deeper into the surface of the pipe.

Pipe materials (see page 21)

Dimensions

25,0 up to 315 mm

Material qualities

 Design
 Housing
 Fasteners

 Typ I
 AISI 304 / 1.4301
 C-steel, PTFE coated

 Typ II
 AISI 304 / 1.4301
 AISI 316 / 316L

 Typ IV
 AISI 316L / 1.4404
 AISI 316 / 316L

Temperature range

 Sealing material
 Temperature range

 EPDM
 -40 °C up to +100 °C

 NBR
 -20 °C up to +80 °C

 HNBR
 -20 °C up to +125 °C

 FKM
 -20 °C up to +180 °C

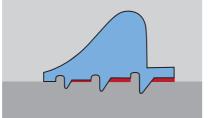
Technical information on the assembly

The maximum angular deviations, the permissible tolerances of the outer diameter of the pipe and the pipe clearances that are to be adhered to for example, are stated in the assembly instructions.

14

For assembly information and sample installations, please refer to our assembly instructions.





Anchoring mechanism.
The form of the anchor rings enables the plastic to be absorved instead of an incision having to be made in it.

stainless steel

System ▶ TEEKAY ▶ Repair coupling

Repair coupling, non axially restrained

KDE



Short name	TKRE
Description	Repair coupling – hinged
Material	Typ I Typ II Typ IV Typ V Typ VI



technical description

Repair coupling - hinged

The repair couplings are ideal for all applications, with which a permanent repair is required under pipeline pressure. The coupling is openend using a hinge, enabling it to be comfortably positioned over the leak. It is so designed that all of the parts are fixed in place and can therefore not be lost.

Pipe materials (see page 21)

Dimensions

48,3 up to 3.000 mm

Material qualities

Design	Housing	Fasteners	Coating
Typ I	AISI 304 / 1.4301	carbon steel, PTFE coated	-
Typ II	AISI 304 / 1.4301	AISI 316 / 316L	_
Typ IV	AISI 316L / DIN 1.4404	AISI 316 / 316L	-
Typ V	tensile carbon steel	carbon steel PTFF coated	Rilsan / PVC /

yp V tensile carbon steel carbon steel, PTFE coated Rilsan / PVC / Epoxi / zinced yp VI tensile carbon steel AISI 316 / 316L Rilsan / PVC / Epoxi / zinced

Range of application for Type V and Type VI with high pressure levels and aggressive ground conditions.

Special materials

The housing and the fasteners are also available in materials 1.4462 or 1.4539 upon request.

Temperature range

Sealing material	Temperature range
EPDM	-40 °C up to +100 °C
NBR	-20 °C up to + 80 °C
HNBR	-20 °C up to +125 °C
Viton	-20 °C up to +250 °C

Technical information on the assembly

The maximum angular deviation, the permissible tolerances for the outer pipe diameter and the pipe clearance that is to be adhered to are stated on page 23 of the assembly instructions.

Please refer to page 23 of our assembly instructions for instructions and installaion examples.



The repair coupling is suitable for permanent

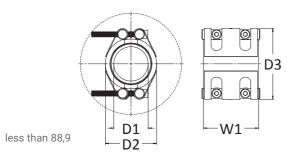
15



System ▶ TEEKAY ▶ Repair coupling

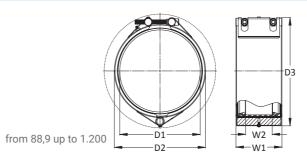
Repair coupling, non axially restrained

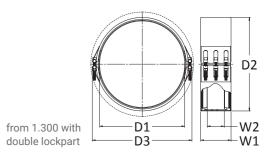
TKRE



Systeme ▶ TEEKAY ▶ Repair coupling

Measures and values





	Pipe diameter nominal	Available coupling widths (mm) Available with the following working pressure (bar)				D3 overall height of the coupling AD = D1 (mm) + following value	Number of screws	Maximum permitted pipe tolerance +/-	Pipe diameter nominal						
		85	110	140	210	310	410								
	40	•						16 / 25 / 40	42		20	58	4	2	40
	50	•						16 / 25 / 40	42		20	58	4	2	50
	75		•					16 / 25 / 40	67		22	66	2	2	75
	100		•					16 / 25 / 40	67		22	66	2	2	100
	150		•	•				16 / 25 / 40	67 / 80		22 / 28	66 / 88	2/2	2,5 / 2,5	150
	200		•	•	•			16 / 25 / 40	67 / 80 / 120		22 / 28 / 42	66 / 88 / 102	2/2/2	3/3/3	200
	250		•	•	•			16 / 25 / 40	67 / 80 / 120		22 / 28 / 42	66 / 88 / 102	2/2/2	3/3/3	250
	300		•	•	•	•	•	10 / 16 / 25	67 / 80 / 120 / <mark>220</mark> / 320		22 / 28 / 42 / 42 / 42	66 / 88 / 102 / 102 / 102	2/2/2/4/6	3/4/4/4/4	300
	350			•	•	•	•	10 / 16 / 25	80 / 120 / 220 / 320		28 / 42 / 42 / 42	88 / 102 / 102 / 102	2/3/4/6	4/4/4/4	350
	400			•	•	•	•	10 / 16 / 25	80 / 120 / 220 / 320		28 / 42 / 42 / 42	88 / 102 / 102 / 102	2/3/4/6	4/4/4/4	400
	450			•	•	•	•	10 / 16 / 25	80 / 120 / 220 / 320		28 / 42 / 42 / 42	88 / 102 / 102 / 102	2/3/4/6	4/4/4/4	450
5	500			•	•	•	•	6/10/16	80 / 120 / 220 / 320		28 / 42 / 42 / 42	88 / 102 / 102 / 102	2/3/4/6	4/4/4/4	500
	600			•	•	•	•	6/10/16	80 / 120 / 220 / 320		28 / 42 / 42 / 42	88 / 102 / 102 / 102	2/3/4/6	4/5/5/5	600
	700			•	•	•	•	6 / 10 / 16	80 / 120 / 220 / 320		28 / 42 / 42 / 42	88 / 102 / 102 / 102	2/3/4/6	4/5/5/5	700
	800			•	•	•	•	6/10/16	80 / 120 / 220 / 320		28 / 42 / 42 / 42	88 / 102 / 102 / 102	2/3/4/6	4/5/5/5	800
	900			•	•	•	•	2,5 / 6 / 10	80 / 120 / <mark>220</mark> / 320		28 / 42 / 42 / 42	88 / 102 / 1 <mark>02</mark> / 102	2/3/4/6	4/5/5/5	900
	1000			•	•	•	•	2,5 / 6 / 10	80 / 120 / 220 / 320		28 / 42 / 42 / 42	88 / 102 / 102 / 102	2/3/4/6	4/5/5/5	1000
	1100			•	•	•	•	2,5 / 6 / 10	80 / 120 / 220 / 320		28 / 42 / 42 / 42	88 / 102 / 102 / 102	2/3/4/6	4/5/5/5	1100
	1200			•	•	•	•	2,5 / 6 / 10	80 / 120 / 220 / 320		28 / 42 / 42 / 42	88 / 102 / 102 / 102	2/3/4/6	4/5/5/5	1200
	1300			•	•	•	•	2,5 / 6	80 / 120 / <mark>220</mark> / 320		28 / 42 / 42 / 42	88 / 102 / 1 <mark>02</mark> / 102	4/6/8/12	4/6/6/6	1300
	1400			•	•	•	•	2,5 / 6	80 / 120 / 220 / 320		28 / 42 / 42 / 42	88 / 102 / 102 / 102	4/6/8/12	4/6/6/6	1400
	1500			•	•	•	•	2,5 / 6	80 / 120 / <mark>220</mark> / 320		28 / 42 / 42 / 42	88 / 102 / 1 <mark>02</mark> / 102	4/6/8/12	4/6/6/6	1500
	1600				•	•	•	2,5 / 6	120 / <mark>220</mark> / 320		42 / 42 / 42	102 / 102 / 102	4/6/8/12	6/6/6	1600
	1700				•	•	•	2,5 / 6	120 / <mark>220</mark> / 320		42 / 42 / 42	102 / 102 / 102	4/6/8/12	6/6/6	1700
	1800				•	•	•	2,5 / 6	120 / <mark>220</mark> / 320		42 / 42 / 42	102 / 102 / 102	4/6/8/12	6/6/6	1800
	1900				•	•	•	2,5 / 6	120 / <mark>220</mark> / 320		42 / 42 / 42	102 / 102 / 102	4/6/8/12	6/6/6	1900
	2000				•	•	•	2,5 / 6	120 / <mark>220</mark> / 320		42 / 42 / 42	102 / 102 / 102	4/6/8/12	6/6/6	2000
	2100				•	•	•	2,5	120 / <mark>220</mark> / 320		42 / 42 / 102	102 / 102 / 102	4/6/8/24	6/6/6	2100
	2200				•	•	•	2,5	120 / 220 / 320		42 / 42 / 102	102 / 102 / 102	12 / 16 / 24	6/6/6	2200
	2300				•	•	•	2,5	120 / 220 / 320		42 / 42 / 102	102 / 102 / 102	12 / 16 / 24	6/6/6	2300
	2400				•	•	•	2,5	120 / 220 / 320		42 / 42 / 102	102 / 102 / 102	12 / 16 / 24	6/6/6	2400
	2500				•	•	•	2,5	120 / 220 / 320		42 / <mark>42</mark> / 102	102 / 102 / 102	12 / 16 / 24	12 / 12 / 12	2500
	2600				•	•	•	2,5	120 / 220 / 320		42 / 42 / 102	102 / 102 / 102	12 / 16 / 24	12 / 12 / 12	2600
	2700				•	•	•	2,5	120 / 220 / 320		42 / 42 / 102	102 / 102 / 102	12 / 16 / 24	12 / 12 / 12	2700
	2800				•	•	•	2,5	120 / 220 / 320		42 / 42 / 102	102 / 102 / 102	12 / 16 / 24	12 / 12 / 12	2800
	2900				•	•	•	2,5	120 / 220 / 320		42 / 42 / 102	102 / 102 / 102	12 / 16 / 24	12 / 12 / 12	2900
	3000				•	•	•	2,5	120 / 220 / 320		42 / 42 / 102	102 / 102 / 102	12 / 16 / 24	12 / 12 / 12	3000

The stated working pressures are designed for steel pipes. The minimum wall thickness is stated in DIN 86128, parts I and II.

The strength calculation is 1.5-fold of the working pressure in industrial applications.





System ▶ TEEKAY ▶ Flex stepped coupling

Stepped coupling, non axially restrained

TKST



Short name	TKST						
Description	Stepped coupling						
Material	Тур I	Typ II	Typ IV	Typ V	Typ VI		



technical description

Teekay-Axiflex-stepped coupling

The Teekay stepped coupling is the problem solver on every construction site. The most diverse materials and pipe diameters can be joined together. This high capability provides it with a large local savings potential.

Typical examples of use

- joining steel and plastic pipes or concrete to GRP pipes.
- repair of old pipelines within the DIN range with new ISO dimensions.
- shaft connections.

Pipe materials (see page 21)

Dimensions

48,3 up to 3000 mm

Also available with a 40 mm increment as from a diameter nominal of 600.

Material qualities

Design	Housing	Fasteners	Coating
Typ I	AISI 304 / 1.4301	carbon steel, PTFE coated	-
Typ II	AISI 304 / 1.4301	AISI 316 / 316L	-
Tvp IV	AISI 316L / 1.4404	AISI 316 / 316L	_

Typ V Typ VI tensile carbon steel carbon steel, PTFE coated Rilsan / PVC / Epoxi / zinced Rilsan / PVC / Epoxi / zinced tensile carbon steel AISI 316 / 316L

Range of application for Type V and Type VI with high pressure levels and aggressive ground conditions.

Temperature range

Temperature range -40 °C up to +100 °C Sealing material EPDM

Technical installation information

The maximum angular deviation, the permissible tolerances for the outer pipe diameter and the pipe clearance that is to be adhered to are stated on page 23 of the assembly instructions.



18

Cross-section of the sealing profile in a stepped coupling.

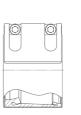
stainless steel

System ▶ TEEKAY ▶ Flex stepped coupling

Measures and values





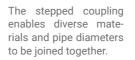


Pipe-AD (mm)	Available coupling widths (mm)			vidths	Maximum increment (mm)	Working pressures are available in following stages(PN)	Number of screws	Screw size Inbus
	85 110 140 210							
48,3 - 82,5	•				+5	16	2	M8
83,0 - 99,0		•			+12	16	2	M10
100,0 - 150,0		•			+15	16	2	M10
151,0 - 200,0		•	•		+15 / +20	16 / 16	2/2	M10 / 16
201,0 - 286.0		•	•		+15 / +25 / +25	16 / 16 / 16	2/2/3	M10 / 16 / 16
287,0 - 326,0		•			+15	10	2	M10
287,0 - 349,0			•	•	+25 / +25	16 / 16	2/3	M16 / 16
350,0 - 453,0			•	•	+25 / +25	16 / 16	2/3	M16 / 16
454,0 - 950,0			•	•	+25 / +25	10 / 16 / 10/ 16	2/3	M16 / 16
951,0 - 1150,0			•	•	+25 / +25	6 / 6	2/3	M16 / 16
1151,0 - 1650,0				•	+25	2,5 / 6	6	M16
1651,0 - 2050,0				•	+25	2,5 / 5	6	M16
2051,0 - 2450,0				•	+25	2,5 / 4	12	M16
2451,0 - 2850,0				•	+25	2,5 / 3	12	M16
2851,0 - 3050,0				•	+25	2/3	12	M16

Also available with a 40 mm increment as from a diameter nominal of 600.



You will find assembly/disassembly videos on our website.





19

Mounted stepped coupling





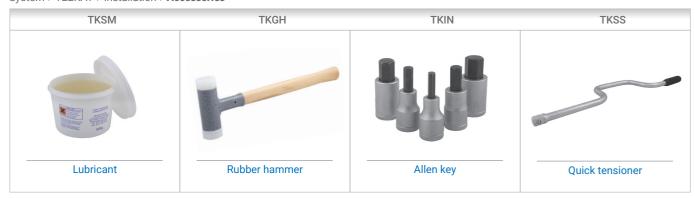
System ▶ TEEKAY ▶ Installation ▶ Fittings



System ▶ TEEKAY ▶ Installation ▶ Fittings

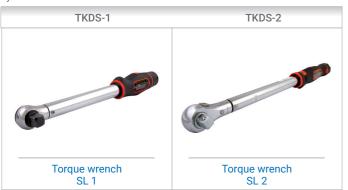


System ▶ TEEKAY ▶ Installation ▶ Accessories



20

System ▶ TEEKAY ▶ Installation ▶ Accessories





in special lengths

Pipe materials

Axilock

The Teekay Axilock pipe couplings were originally designed for the joining of metal pipes.

Other pipe materials such as hard plastic or GRP can also be connected with it as long as a supporting ring has been inserted in the pipe.

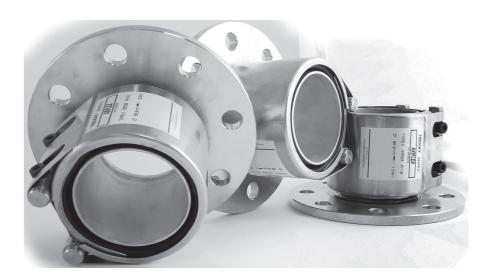
Tensile forces can only be absorbed to a certain extend however.

Axiflex

Teekay Axiflex pipe couplings have been designed for the joining of the following pipe materials:

carbon steel I stainless steel I cast I concrete I asbestos cement I GRP and composite fibre.





21



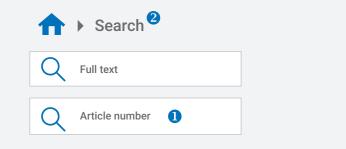
Retrieving and downloading the technical data and current stock levels



The fastest and most direct way is by using our abbreviated article designations 1. After you have entered a term in the Search box 2 on our website, you are directly forwarded to the article without you having to use the navigation.

You are able to see the current stock level under "stocks and pricing" 3 If you are logged into our myheco customer portal, you can also see the prices here.

You will find the technical data under "measures and values". A technical datasheet can be downloaded at the end of the table 4.



Short names TA. Axilock-S TA. Axilock TK. Axiflex TKBO Elbow, 90° TK45 Elbow, 45° TKFL Flange adapter TAPL Plastlock TKRK Reducer, concentric TKEX Reducer, excentric TKRE Repair coupling TKST Teekay stepped coupling TKTR T-piece equal T-piece reduced You will find all of the short names at www.heco.de/en/interesting-facts.

You will find assembly/disassembly videos on our website www.heco.de/en

23

22















heco gmbh Am Eisengraben 5 75196 Remchingen Phone +49 7232 36 55-0 va@heco.de www.heco.de heco gmbh NL Berlin Köpenicker Straße 19-20 12524 Berlin Phone +49 30 68 838 143-0 berlin@heco.de www.heco.de

heco gmbh NL Bielefeld Opferfeldstraße 29 32130 Enger Phone +49 5224 68590-0 bielefeld@heco.de www.heco.de heco gmbh NL Frankfurt Senefelderstraße 1K 63110 Rodgau Phone +49 6106 28 522-0 frankfurt@heco.de www.heco.de

heco gmbh NL Nürnberg Pretzfelder Straße 15 90425 Nürnberg Phone +49 911 93 772-0 nuernberg@heco.de www.heco.de heco Sp. z o. o. Al. Jerozolimskie 427 05 800 Pruszków Phone +48 22 7530 720 heco@heco.pl www.heco.pl

heco nerez s.r.o. Technická 15 616 00 Brno Phone +420 547 216 198 kontakt@heco-nerez.cz www.heco-nerez.cz

EN-0000/1023 www.heco.de/en