

FIG. 7005 Roughneck® Coupling

The Fig. 7005 Roughneck Coupling is an effective and reliable way of joining plain-end or beveled end pipe. The Roughneck Coupling is ideal for use in a variety of applications including mining, process piping, manifold piping and oilfield services. The unique gripper action provides a positive pipe joint and allows for working pressure ratings up to 750 PSI (52 bar) for schedule 40 pipe.



For Listings/Approval Details and Limitations, visit our website at www.anvilint.com or contact an Anvil® Sales Representative.

MATERIAL SPECIFICATIONS

HOUSING: Ductile Iron conforming to ASTM A 536, Grade 65-45-12 or Malleable Iron conforming to ASTM A 47, Grade 32510.

BOLTS: SAE J429, Grade 5, Zinc Electroplated

HEAVY HEX NUTS: ASTM A563, Grade A, Zinc Electroplated

GRIPPERS: 2"-8" heat treated, electroplated carbon steel. 10"-16" heat treated stainless steel.

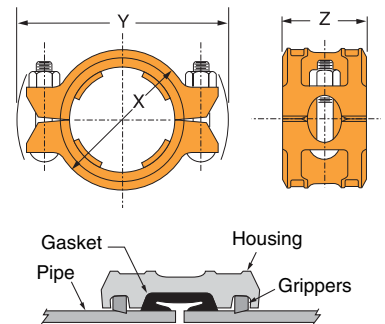
COATINGS:

- Rust inhibiting paint - Color: Orange Standard
 - 2" - 12" Hot Dipped Zinc Galvanized (Optional)
 - Other Colors Available (IE: RAL3000 and RAL9000).
- For other Coating requirements contact an Anvil Representative.

GASKET: Grade E (EPDM) or Grade T (Nitrile) Elastomers with properties as designed by ASTM D 2000 for each gasket grade.

FIGURE 7005 ROUGHNECK® COUPLING

Nominal Size	O.D.	Max. Wk. Pressure	Max. End Load	No. of Grippers	Coupling Dimensions			Coupling Bolts		Specified Torque §		Approx. Wt. Ea.
					X	Y	Z	Qty.	Size	Min.	Max.	
In./DN(mm)	In./mm	PSI/bar	Lbs./kN		In./mm	In./mm	In./mm		In./mm	Ft.-Lbs./N-m	Ft.-Lbs./N-m	Lbs./Kg
2	2.375	750	3,323	8	3¾	6¾	3½	2	5/8 x 3¼	150	190	6.6
50	60.3	51.7	14.78		95	162	89		-	203	257	3.0
2½	2.875	600	3,895	8	4¼	7½	3½	2	5/8 x 3¼	150	190	7.4
65	73.0	41.4	17.33		108	181	89		-	203	257	3.4
3	3.500	600	5,773	8	4⅞	8½	3½	2	¾ x 4½	200	250	10.5
80	88.9	41.4	25.68		124	206	89		-	271	339	4.8
4	4.500	450	7,157	8	6¾	9¾	4½	2	¾ x 4½	200	250	16.4
100	114.3	31.0	31.84		162	238	105		-	271	339	7.4
5	5.563	350	8,507	8	7½	11½	4¾	2	7/8 x 5	250	300	23.8
125	141.3	24.1	37.84		191	283	111		-	339	406	10.8
6	6.625	300	10,341	12	8¾	12½	4¾	2	1 x 6	250	300	31.7
150	168.3	20.7	46.00		222	327	111		-	339	406	14.4
8	8.625	300	17,528	12	10⅞	14½	4½	4	7/8 x 5	250	300	38.6
200	219.1	20.7	77.97		276	368	114		-	339	406	17.5
10	10.750	300	27,229	8	12½	18	5¾	4	1 x 6½	500	600	40
250	273.1	20.7	121.12		321	457	137		-	678	814	18.1
12	12.750	250	31,919	12	14⅞	20¼	5¾	4	1 x 6½	550	700	56
300	323.9	17.2	141.98		378	514	137		-	746	949	25.4
14	14.000	200	30,788	12	16¾	22½	6¼	4	1 x 6½	550	700	88
350	355.6	13.8	136.95		425	562	159		-	746	949	39.9
16	16.000	150	30,159	12	18¾	24	6¼	4	1 x 6½	550	700	95
400	406.4	10.3	134.15		476	610	159		-	746	949	43.1



Working pressure and end load are based on a properly assembled Roughneck coupling with bolts fully torqued to the above specifications, on plain-end or beveled standard wall steel pipe and Gruvlok Plain-End Fittings.

Roughneck Couplings are designed to be used on plain-end pipe and Gruvlok Plain-End Fittings only. For externally coated pipe applications, contact an Anvil Representative.

Not recommended for use on steel pipe with a hardness greater than 150 Brinell, Stainless Steel, plastic, HDPE, cast iron or other brittle pipe.

Not recommended for pipe schedule transitioning

Suitable for schedule 10 steel pipe, for pressure ratings see Technical Data section of the Gruvlok Catalog.

*Bolt torque ratings shown must be applied at installation.

For additional details see "Coupling Data Chart Notes" in the Introduction Section of the Gruvlok Catalog.
 § - For additional Bolt Torque information, see the Technical Data Section of the Gruvlok Catalog.
 See Installation & Assembly directions on next page.
 Not for use in copper or PVC systems.

PROJECT INFORMATION

APPROVAL STAMP

Project:	<input type="checkbox"/> Approved
Address:	<input type="checkbox"/> Approved as noted
Contractor:	<input type="checkbox"/> Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	

FIG. 7005

Roughneck® Coupling

1 PIPE PREPARATION—Make certain the pipe ends are free of indentations, projections, weld splatter, or other imperfections which could prevent proper sealing of the gasket.

2 PIPE MARKING—Mark each pipe at a distance from the pipe end according to the pipe run size. See Image 1 and the chart.

3 CHECK & LUBRICATE GASKET—Check the gasket color code to verify that the gasket grade is properly suited for the intended service. Apply a thin coating of Gruvlok Lubricant to the gasket lips and the exterior surface of the gasket and slip the gasket over one pipe. See Image 2. Make sure the gasket does not overhang the pipe end.

Pipe Size <i>In./DN(mm)</i>	Distance from pipe end mark <i>In./mm</i>	Bolt Torque	
		Min. <i>Ft.-Lbs./N-m</i>	Max. <i>Ft.-Lbs./N-m</i>
2 - 2½ <i>50-65</i>	1 <i>25.4</i>	150 <i>203</i>	190 <i>257</i>
3 - 4 <i>80-100</i>	1 <i>25.4</i>	200 <i>271</i>	250 <i>339</i>
5 - 8 <i>125-200</i>	1¼ <i>31.8</i>	250 <i>339</i>	300 <i>406</i>
10 <i>250</i>	1¾ <i>44.5</i>	500 <i>678</i>	600 <i>814</i>
12 <i>300</i>	1¾ <i>44.5</i>	550 <i>746</i>	700 <i>949</i>
14 - 16 <i>350-400</i>	1¾ <i>44.5</i>	550 <i>746</i>	700 <i>949</i>

4 PIPE ALIGNMENT—Align the second pipe and while holding the pipe in the butted position slide the gasket back over the second pipe end. The gasket should be equally spaced between the lines scribed on each pipe.

5 HOUSING—Place each half of the Roughneck coupling over the gasket, making sure that the tongue on one housing half is aligned with the recess on the other housing half. See Image 3.

6 TIGHTEN NUTS—Tighten the nuts alternately and uniformly until the required bolt torque is reached. See Image 4 and chart for bolt torque.

7 REINSTALLATION—Reinstallation after a disassembly will require that the threads on the bolt and in the nut are clean and lubricated with a light oil.

NOTE: Torque requirements must be met and housing halves must be assembled with equal gaps between bolt pads.

Image 1



Image 2



Image 3

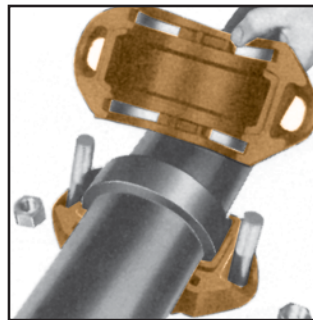
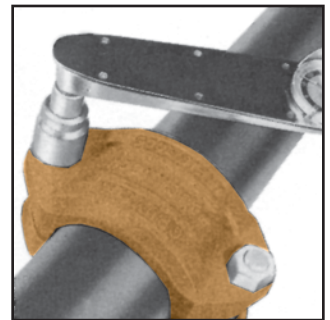


Image 4



Working pressure and end load are based on a properly assembled Roughneck coupling with bolts fully torqued to the above specifications, on plain-end or beveled standard wall steel pipe and Gruvlok Plain-End Fittings.

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Not recommended for use on steel pipe with a hardness greater than 150 Brinell, plastic, HDPE, cast iron or other brittle pipe.

Re-Installation: The 7005 roughneck coupling may be re-installed following a quick visual inspection of the gripper and pipe ends. Any damage on the gripper and/or pipe ends may compromise the integrity of the joint and it is advised that the coupling and/or individual gripper be replaced and the pipe end cut back to where they are free from damage.

*Bolt torque ratings shown must be applied at installation.

