## **JCM Selection Guide to Repair Fittings**

PRODUCT	NUMBER & TYPE	APPLICATION, SIZES AND INFORMATION
	<ul> <li>101 Universal Clamp Coupling - Standard Range</li> <li>108 Sewer Clamp</li> <li>102 Universal Clamp Coupling - Extended Range</li> <li>121 Gas Repair Clamp</li> </ul>	Most popular and economical clamp provides a full circumferential seal and wide range. Sizes 1-1/2" - 12".  This multi-band clamp provides a full circumferential seal and offers extended range, heavy duty design and extra safety factor in larger sizes. Sizes 4"- 60".  This popular and economical clamp provides a full circumferential seal permanently repairing cast iron and steel gas service lines. Sizes 2" - 12".
	<ul> <li>103 Tapped Universal Clamp Coupling - Standard Range</li> <li>104 Tapped Universal Clamp Coupling - Extended Range</li> <li>123 Gas Service Clamp</li> </ul>	Repair clamps with tapped outlets are recommended for replacement of pulled out corporation stops and in applications where pipe reinforcement is necessary. Taps 3/4" - 2".
	<ul> <li>131 All Stainless Steel Univ. Clamp Coupling - Std. Range</li> <li>132 All Stainless Steel Univ. Clamp Coupling -Extd. Range</li> </ul>	All stainless version of the popular single band clamp provides a full circumferential seal and wide range. Sizes 1-1/2" - 12".  This all stainless multi-band clamp provides a full circumferential seal and offers extended range, heavy duty design and extra safety factor in larger sizes. Sizes 4" - 60".
	151 All Stainless Gas Repair Clamp	All Stainless Steel construction provides extra corrosion resistance for permanent repair of cast iron and steel gas service lines.
	<ul> <li>133 All Stainless Tapped Univ. Clamp Cplg Standard Range</li> <li>134 All Stainless Tapped U. C. C Extended Range</li> <li>153 All Stainless Gas Service Clamp</li> </ul>	All stainless repair clamps with tapped outlets are recommended for replacement of pulled out corporation stops and in applications where pipe reinforcement is necessary. Taps 3/4" - 2".
	105 Collar Leak Clamp  135 All Stainless Collar Leak Clamp	This specialty clamp provides a quick, simple means of repairing solvent weld PVC pipe joints. Pressure pipe sizes 2" - 8". Plastic Irrigation Pipe sizes 4" - 15".
	<ul> <li>161 All Stainless Steel Fabricated Lug Clamp</li> <li>162 All SS Fab Lug Extd Range</li> <li>163 Tapped All Stainless Steel Fabricated Lug Clamp</li> <li>168 All SS Fab Lug Lightweight Clamp</li> <li>169 All SS Fab Lug Lightweight Clamp Extd Range</li> </ul>	All stainless steel fabricated repair clamp provides full circumferential seal and wide range. All stainless construction is suitable for hot, acidic or corrosive environments. Sizes 2" - 12".  168 and 169 All stainless steel fabricated lug Lightweight Clamp for Sewer and Slip Lining applications.

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	171 Universal Clamp Coupling - Removeable Lug - Standard Range	Universal Clamp Coupling with unique feature of <b>removeable</b> lug. Lug slides off to accommodate installations in rockbound soils, narrow piping galleries and other limited space installation applications. Sizes 1-1/2" - 12"
	172 Universal Clamp Coupling - Removeable Lug - Extended Range	Multi-band clamp provide full circumferential seal and the <b>removeable</b> lug feature. Heavy duty design and extra safety factor in large sizes. Sizes 4" - 60"
(C)	106 Bell Joint Leak Clamp for IPS PVC	A bell joint repair clamp specifically for rubber joint IPS size plastic pipe. Clamp also fits solvent weld joints and many standard steel pipe threaded couplings. Sizes 4" - 8".
	143 Bell Joint Leak Clamps for Ductile Iron, Cast Iron, C-900 PVC Pipe	Bell joint clamps for leaking caulk and rubber joints on cast iron, ductile iron and C-900/905 PVC Pipe. Sizes 4" - 12" are cast ductile fittings, 14" and larger are fabricated.  Sizes 14" and larger are fabricated steel which can accommodate application specific requirements including space limitations, oversized bells, out of round pipe, etc.
	108 Universal Clamp Coupling for Sewer Pipe	A full circumferential clamp coupling to join and repair various types of sewer pipe, single and multi-band versions. Sizes 4" - 48".
	138 All Stainless Steel Univ. Clamp Cplg. for Sewer Pipe	All stainless full circumferential clamp coupling to join and repair sewer pipe, single and multi-band versions.  Sizes 4" - 48".
	110 Patch Clamp	Fast, economical repair clamps to permanently repair pinholes, punctures or splits in steel pipe. Sizes 1/2" - 24".
	111 Full-Repair Clamp	Fully gasketed repair clamp. Especially recommended for repairs to heavily damaged pipe and pipe with reduced diameter due to corrosion. Steel Sizes 1/2" - 2".
	112 Heavy Duty Patch Clamp - Single Band	Heavy duty single band patch clamp for repairing pinholes, punctures or splits. Sizes 1-1/2" - 12".
	113 Heavy Duty Patch Clamp - Multi-Band	Heavy duty multi-band clamp offers increased performance and range in repairing pinholes, punctures and splits. Sizes 10" and larger.
	114 Mechanical Joint Repair Sleeve	A special repair sleeve for sealing over split or leaking cast iron bells, A/C couplings and welded couplings. Sizes 4" and larger.
	116 Repair Sleeve for Concrete Steel Cylinder Pipe	A high pressure, reinforcing repair sleeve for repairing holes, punctures and splits in concrete steel cylinder pipe. Especially recommended for heavily damaged and larger sizes of pipe.

## **JCM Universal Clamp Couplings Selection**

Standard repair clamps in the industry require bolt torque ranges between 60 - 85 ft. lbs. of torque. Some advise not to exceed 75 ft. lbs. of torque due to excessive lug deformation. Difficult installations involving pipe offset or deflection often require more torque to assure proper clamp conformation to the pipe and high gasket compression. Larger pipe sizes and pipelines with higher working pressures also require higher torque capability. JCM Universal Clamp Couplings have bolt torque capability in excess of 100 ft. lbs. on 5/8" bolts and 150 ft. lbs. on 3/4" bolts. These higher torque value capabilities allow JCM Universal Clamp Couplings to go beyond the "standard installation".

As an added PLUS, JCM Universal Clamp Couplings come standard with a thicker gasket in all but the smallest sizes. This heavy 1/4" thick gasket was introduced to the industry to provide for better performance on heavily damaged and pitted pipe. However, it had been available in only 10" and 12" clamp sizes. In JCM clamps this heavier gasket is standard in all sizes 3" and larger. Combined with the *high bolt torque capability*, the heavy gasket feature means more clamp capability under extreme conditions.

## Width Selection - 101, 102, 171, 172 Universal Clamp Couplings

JCM Universal Clamp Couplings are available in a great many widths. Because these clamps utilize a heavier gasket and bolting arrangement than most comparable clamps, when you use JCM Universal Clamp Couplings significant savings are possible. The following general recommendations are offered to assist you in taking advantage of the design benefits of these clamps. Specific circumstance may require widths other than these general recommendations.

6" Width: Best and most economical width to repair most beam breaks and to connect pipe in sizes

4" and smaller. Short length with thicker gasket give outstanding deflection capability.

Recommend 2" of gasket on both sides of the break.

7-1/2" Width: Best for Asbestos Cement coupling replacements, beam breaks and connection of pipe in

sizes 6" and larger.

12" Width: Best for longer breaks, repairs on working pressure above 150 PSI and for larger sizes of

pipe.

15, 18, 24, 30"

and longer widths: Best for long splits and heavily damaged pipe. For best performance the separation

between pipe ends should be no more than 1/4". If the space is larger, or a large hole is being repaired, use a sheet of stainless steel over the hole under the gasket or a spacer to

fill gap between pipe ends.