



Technical Bulletin

Field Adjustment of Flowtite Pipe (Cutting and Jointing)



Check Spigot Tolerances; Adjustment Pipe Preferred



Measure and Mark the Circumference at the Intended Cut Location



Carefully Cut With A Diamond Coated Blade

Procedure:

1. Identify

Locate and stage a piece of Flowtite "Adjustment Pipe". These pipes are marked "Adjustment Pipe" around the circumference of the pipe. Adjustment pipes have outer diameters throughout that meet specified spigot tolerances making them ideal for a cut/joint procedure. Use a Flowtite Standard Coupling or dimensionally compatible flexible couplings (i.e. Straub, Teekay, Victaulic, etc.) with Non-Adjustment Pipe.

2. Measure

Check circumference and/or diameter dimensions at the intended cut location to ensure compatibility with spigot tolerance. The degree of compatibility will determine what type of coupling necessary for jointing. Mark the intended cut around the circumference of the pipe using one of the square ends as reference.

3. Cutting

Use proper eye, ear and dust protections. Support the pipe on each side of the intended cut to maintain a level cutting surface. Carefully cut the pipe along the markings with a circular saw. A diamond coated blade or fiber blade is necessary.



Bevel Cut End for Connection and Clean Cut Surface

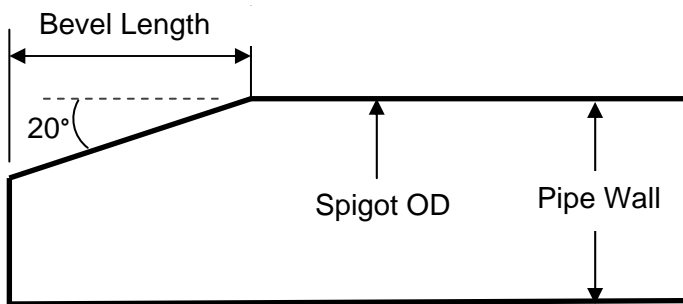


Figure 1. Spigot Bevel

DN (inches)	Pipe Spigot Minimum (inches)	Pipe Spigot Maximum (inches)	Bevel Length (inches)
12	13.150	13.189	0.25
16	17.362	17.402	0.40
18	19.449	19.488	0.50
20	21.575	21.614	0.55
24	25.748	25.787	0.65
30	31.969	32.008	0.80
36	38.268	38.307	0.80
42	44.449	44.488	0.80
48	50.748	50.787	0.80
54	57.520	57.559	0.80
60	61.575	61.614	0.80
63	64.488	64.528	0.80
72	72.402	72.441	0.80
78	80.433	80.472	0.80
84	88.465	88.504	0.80
96	96.496	96.535	0.80

Table 1. Spigot and Bevel Dimensions

4. Spigot Preparation

Ensure that the cut was properly made without damage to the pipe or any delamination of the pipe wall.

Using a grinder, bevel the spigot of the pipe as shown in *Figure 1*. The bevel lengths are shown in *Table 1*. This is done to prevent damage to the coupling gaskets during assembly.

Drawing a coupling insertion homeline around the circumference of the pipe spigot is suggested (Optional).

Thoroughly clean the pipe spigot to remove any dirt, grit, grease, etc. Inspect spigot sealing surface for possible damage. Apply a thin layer of lubricant to the spigots from the end of the pipe to the homing line. It is very important to use only the correct lubricant. Never use a petroleum based lubricant.



5. Choosing a Coupling Type

If the pipe spigot outer diameter measurement is within specifications from *Table 1*, then either a Flowtite standard fiberglass coupling or a flexible steel coupling may be used. If the measurement falls outside of these tolerances then a flexible steel coupling must be used. The cutting and preparation procedure for using either of these types of couplings is the same.

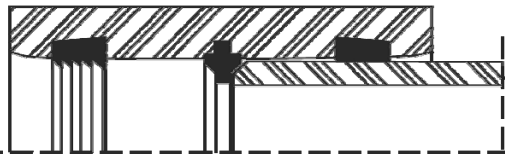


Diagram 1. *Flowtite Standard Fiberglass Coupling*

Flowtite Fiberglass Coupling – *Diagram 1* show the cross section of the Flowtite standard fiberglass coupling.

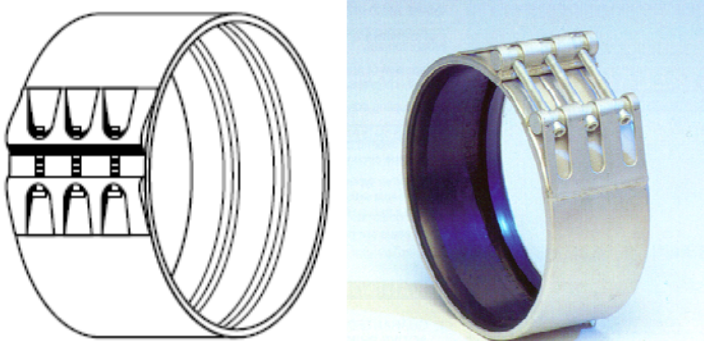


Diagram 2. *Flexible Steel Couplings*

Flexible/Mechanical Steel Couplings – ***Flexible steel couplings are a preferred method of jointing pipes of different material and/or different diameter.***

The manufacturer of the flexible steel coupling will dictate compatibility. A sample of flexible steel specification is available in *Figure 2*. These types of couplings are typically used on ductile iron pipes; therefore they offer higher OD tolerance allowances. It is also advised that the Flowtite Manufacturer be consulted regarding application of these third party components.

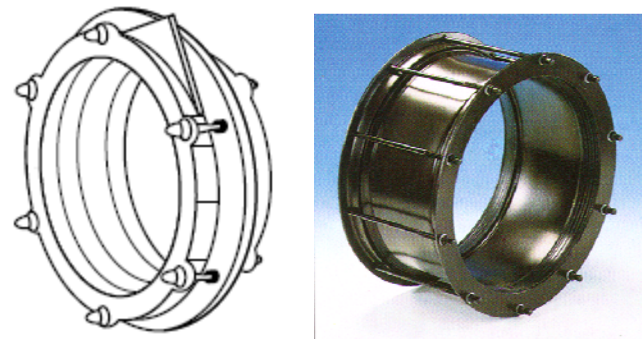


Diagram 3. *Dual Bolt Mechanical Coupling*

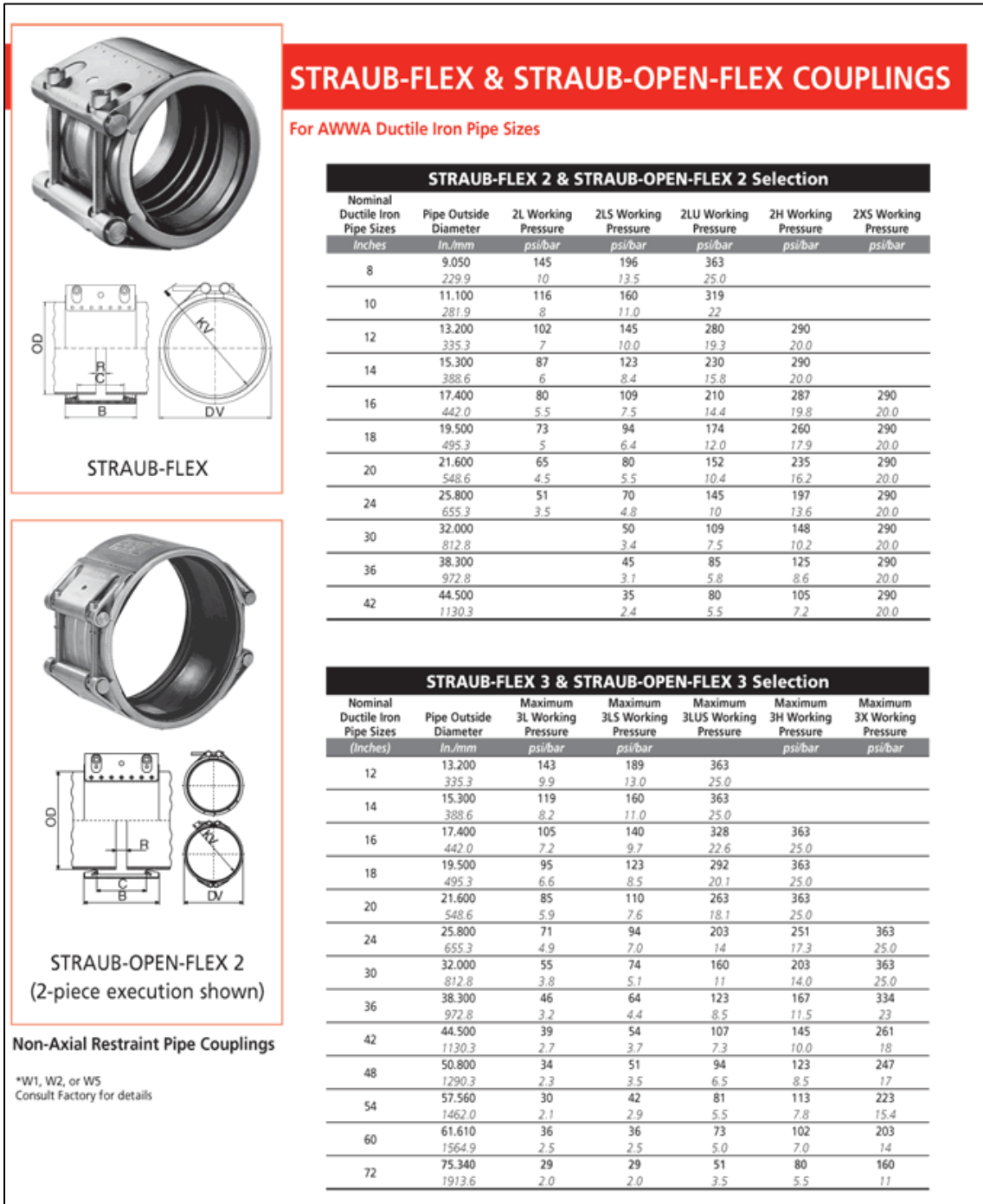


Figure 2. Sample of Flexible Steel Coupling Manufacturers Specifications