

# Terminating & Test Reducers & Inserts

## Reducers

The repair of terminating and test reducers may be required to perform tests of the secondary containment systems when required by regulations.

Many materials have been used to close the interstice between the secondary containment pipe and the primary pipe. In the early 1990's Total Containment used reducers "borrowed" from the waste water industry. These reducers were not tested or rated for fueling applications and unilaterally failed. As the industry matured better materials became known, however, most of the improved materials also fail in time. The terminating and test reducers are not considered an integral part of the piping system by UL and may or may not carry a listing. These products are often removed after installation. In some communities, the regulatory community required that they be cut off and discarded after the initial installation was completed and tested.

Diversified Products offers a complete line of split terminating and test reducers for the repair of failed products. These reducers may be installed without interruption of the operating system and may be tested after installation generally within one hour of installation. Diversified's line of new reducers has been retooled with a thick wall that offers 10 psig Rated and 35 Psig rated reducers depending on the clamps provided. For these standard reducers a molded in air test valve is available. Specify -A if an air test valve is to be installed at the factory. The split repair products use the same molds, thus many of the new split reducers have a significantly thicker wall than those previously offered.

Reducers are prefixed with UR or URZ. The Z designation indicates that the part is split at the factory before shipping.

### Standard Size Reducer for FRP Installations

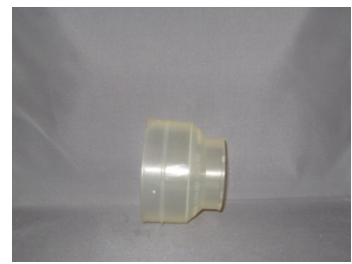
Diversified offers reducers by secondary pipe size with the capability of manufacturing any primary size encountered. While diversified offers Industrial sizes to 14" the split repair products are normally limited to 6" FRP, 4" FRP and 3" FRP Secondary sizes. The following graphics depict stock standard sizes, however custom sizes are available for any pipe encountered.



UR(Z) 6.7 x 3.5



UR(Z) 4.5 x 3.5



UR(Z) 3.5 x 2.4

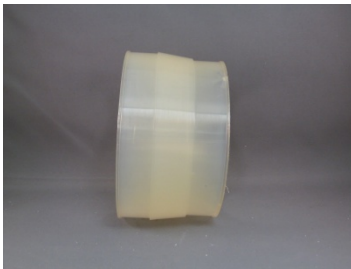
### Standard Stock Sizes for FRP Installations

6.7 to 6.7	4.5 to 3.5	3.5 to 3.0
6.7 to 5.0	4.5 to 2.4	3.5 to 2.4
6.7 to 4.5	4.5 to 1.4	3.5 to 1.4
6.7 to 3.5		

### Ameron LCX Sizes

Ameron LCX Pipe is manufactured to for three sizes. A custom size is also available for Smith applications.

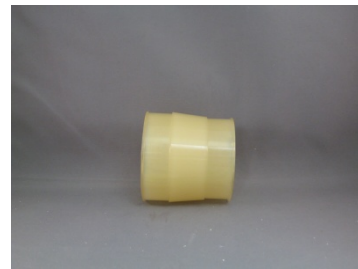
### Ameron LCX Reducers



UR(Z) 4.8x4.5



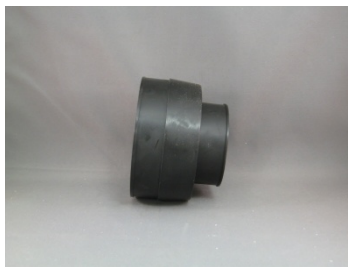
UR(Z) 3.8x3.5



UR(Z) 2.7x2.4

### Custom Reducer for Smith Pipe

(Alcryn version shown)



RA 3.8x2.4

## Eccentric Reducers

Most double wall fiberglass installations are installed without centralizers. In these instances the primary pipe most often sags to the bottom of the secondary creating a difficult to seal offset configuration. Diversified offers eccentric reducers to assist in sealing and testing these installations. In addition to the 6.7x4.5, 4.5x3.5 and 3.5x2.4 configurations, a 3.5x3.0 reducer that will seal to a Smith terminating adaptor. These reducers include a ½" port for bonding crossover tubing or for installing a test assembly. The ½" port when left open allows a drain back feature to the piping interstice, thus eliminating the need to remove the reducer after installation.



UR(Z) 6.7x4.5E



UR(Z) 4.5x3.5E



UR(Z) 3.5x3.0E



UR(Z) 3.5x2.4E



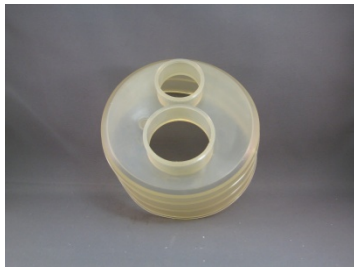
Reducers Looped Together  
with ½" Tubing



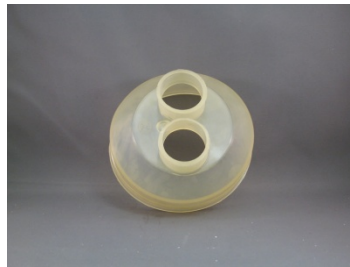
Reducer with Adapter  
and Test Assembly

### Multi Ported Reducers

Diversified offers two multi-ported reducers. They are intended to be used on 4" FRP. One is sized for 4" FRP and reducer to two 1" ports. The 1" ports may be inserted for 3/4" lines or other custom applications. The second reducer has a larger 4" port 4.9" (may be used on 4" FRP) and has a 1 1/4" port and a 1" port. These may be inserted also to accommodate a wide range of rigid, flex and copper pipes. The 4" reducer may be inserted down to 3" for those applications where dual lines have been run in 3" secondary containment.



UR(Z) 4.9x1.9x1.4



UR(Z) 4.5x1.4x1.4

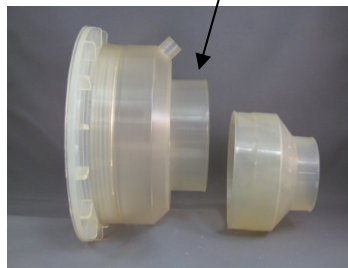
### Nested Reducers

Some reducers need to be nested over the band clamping area of other terminating fittings where room was not allowed for these applications. DPM offers two such reducers for 3" and 4" FRP applications. These reducers have had the secondary size enlarged so as to fit over standard 3" and 4" band clamping surfaces. The following nesting features are available when required.

Band Clamp Area



UR(Z) 4.8x4.5 nested over a 4" reducer on a penetration fitting



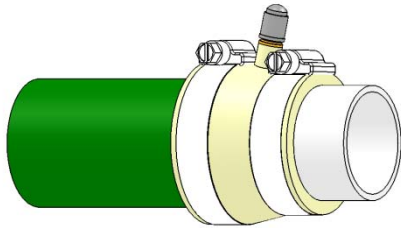
Typical TCI repair with nested reducer



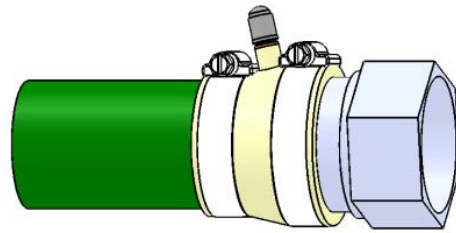
UR(Z) 3.9x2.1 nested over a 3" reducer on a penetration fitting

## Coaxial Reducers

The flex pipe manufacturers offered a multitude of sizes requiring terminating the coaxial secondary to the primary. Diversified offers a large selection of these reducers. In addition to the wide range of flex pipes encountered both currently and of previous manufacture, many terminating fittings are needed to reach from the secondary pipe to the tailpiece of the fitting terminating the primary pipe. Check with the factory with the specific size you require.



Terminating secondary  
to primary



Terminating secondary  
to fitting

## Inserts

Diversified offers a complete line of inserts to assist in sealing those awkward applications. Inserts are prefixed with UI or UIZ. The Z designation indicates that the part is spilt at the factory before shipping. If the size you require is not listed, contact the factory for any custom application.



DPM's family of stock inserts

Insert Standard Stock Sizes

<b>6.7 Series</b>	<b>5.0 Series</b>	<b>4.8 Series</b>	<b>4.5 Series</b>	<b>3.5 Series</b>	<b>2.4 Series</b>	<b>1.4 Series</b>
6.7xPlug	5.0x4.5	4.8x4.5	4.5xPlug	3.5xPlug	2.4xPlug	1.4xPlug
6.7x6.0	5.0x3.9	4.8x3.8	4.5x3.5	3.5x3.2	2.4x2.0	1.4x1.2
6.7x5.2	5.0x3.5	4.8x3.5		3.5x3.0	2.4x1.9	1.4x1.1
6.7x5.0				3.5x2.9	2.4x1.8	1.4x.9
				3.5x2.7	2.4x1.7	1.4x.8
				3.5x2.5	2.4x1.4	1.4x.6
				3.5x2.4	2.4x1.1	1.4xPlug
				3.5x2.2	2.4x.9	
				3.5x2.0		
				3.5x1.9		
				3.5x1.8		
				3.5x1.7		
				3.5x1.4		
				3.5x1.4		