## **Engineering Bulletin 3-99**

Subject: Installation and care instructions for the new Teflon encapsulated square gaskets for Tiona Betts Full Opening Manholes

Part Numbers: 3513TS (20"), 3567TS (10"), 3657TS (16"), 3907TS (24"), 3078TS (20" Special)

Date: 5/24/99

Betts Industries now offers Teflon encapsulated silicon gaskets for all Tiona full opening manholes. The Teflon encapsulated gasket will provide a more effective seal than the woven white non-asbestos with Teflon suspensoid and offers superior chemical compatibility compared to Buna, Viton, or Hypalon. The Teflon encapsulated gasket has a suggested maximum temperature of 375 °F.

The following procedures must be followed to ensure the best results.

Installation:

Before installing a gasket, all surfaces which contact the gasket must be smooth and free of sharp edges, burrs and deep scratches. Inspect the collar's sealing edge and repair any nicks or burrs. Inspect the underside of the gasket channel and remove any weld spatter or burrs. Deburr leading edges of gasket channel. The radial weld seam on the inside of the gasket channel must be ground smooth and flush with the surface of the channel. Installation tools should <u>not</u> be used to install the gasket.



## **Engineering Bulletin 3-99 (continued)**

## **Operation:**

The Teflon, which is the clear outer shell, offers chemical compatibility but does not spring back after being compressed. The silicon, which is the orange core, offers resilience to the Teflon and holds its shape, but will not react well to some chemicals.

- The gasket may not seal to its full capability immediately after installation. If this happens, tighten the manhole lid and let sit for several hours so the gasket takes an initial set. After this initial set is achieved, the gasket should seal like an elastomer gasket on subsequent open/close cycles.
- As it is used, the gasket will develop a groove where the collar seals. As the manhole lid is closed, shift the cover back and forth slightly to ensure the collar is seated in the original groove.
- Care should be taken not to nick or damage the Teflon shell. If the Teflon is damaged, the gasket may not seal properly or the shell may no longer protect the silicon core from exposure to chemicals.