

The Beginning of: **BACKFLOW**

n 1943 during World War II, a supply ship was discovered to have harbor water in its potable water tanks. An investigation revealed that this was caused by a cross-connection between the city water supply and the harbor water.

There were more than twenty incidents along the West Coast from 1942 to 1945. Later, this warm water was used to supply water to a new spa called Bimini Baths. After all, in Europe it was the height of luxury to soak in warm mineral baths. The bath operated for a while and then they decided to connect to the LA Public Water Distribution System.

Aug 21, 1933

Norman P. Slane arrived at site to conduct a CCC survey for the LA DWP and to install a water meter. LA DWP had created a Cross Connection Control Group a few years earlier because of problems at LA Harbor with ships and fire system water. They had installed many check valves. Norman Slane met with an engineer at Bimini Baths, Orien Kersey Entriken. Slane explained the need for CCC and told Entriken to install two check valves (4 for high hazard). They both agreed they weren't good enough. Entriken began to tinker in his basement. He started with the existing product but soon realized he needed something more.

The president of Bimini Baths, Frank Carlton, came down to the basement to discuss the check valve expenditure. Entriken explained the need for a backflow prevention product. He showed Carlton some of his ideas he had tinkered with. Carlton saw some potential and need for a backflow prevention product and formed E. C. Service Company (Entriken Carlton Service Company).

They combined check valves, vacuum breakers, and siphon bellows (a form of superior pressure device which opened on backpressure – similar to dual check with atmospheric vent). They had limited success and in 1941 approached an engineer at Cal Tech in Southern California, Leonard Snyder, to help develop a better product.

Their first attempt was the EC5 which had three check valves, a vacuum breaker installed between CV1 and CV2 and a relief valve on the outlet. This was a vertical installation. It was too big and unreliable and they went back to the drawing board.



Patent for the MODEL 6

In 1945, they applied for a patent for the Model 6 and it was awarded in 1950. The Model 6 had the novel concept of using the reduced pressure principle instead of backpressure. In 1945, E.C. Service Company with Entriken, Carlton, and Snyder moved next to a plumbing wholesaler named Lohman Brothers.

Salesman Dave Guinn of Lohman Brothers saw the new EC3 and EC6 and started selling them in Southern California. Dave quit Lohman Brothers and went to work with E.C. Service Company as a partner. Entriken, Carlton, Snyder, and Guinn formed:

<u>Backflow</u> + <u>Engineering</u> + <u>Equipment</u> + <u>Company</u> = BEECO

This model was mainly sold for service protection. On the other side of town in 1939, an engineer named Don Griswold began making pressure control valves with a diaphragm valve that was pilot activated. This new company was CLA-VAL. CLA-VAL had a salesman named Hamilton Pierce who saw BEECO and their activity with the Model 6. In the late 1940s, he began lining up pilot controlled diaphragm valves with relief valves to compete with BEECO. However, he had a problem with reliability. When later tested, they found it did not stop backflow 20% of the time; and they finally copied the BEECO idea and made a similar RP assembly.

As time passed, other companies got into the backflow market like Febco, Watts and Wilkins. BEECO sold their company to Hersey and it became known as Hersey/BEECO.

BEECO + MIFAB

In 2007, Hersey sold it's BEECO division to MIFAB under president and owner, Michael Whiteside. BEECO started to redesign and modernize the entire backflow line. In 2008, MIFAB hired former President of Watts, Paul Lacourciere, to lead the BEECO division. Today, the MIFAB/BEECO engineers continue to work on a new future design as they once again become a leader in the backflow market.



Products of: **BEECO**



BARRACUDA 20

The Barracuda 20 Double Check Valve Assembly is designed to prevent non-health hazard pollutants from entering the potable water supply system caused by backpressure and/or backsiphonage conditions.



FRIENDLY REDUCED PRESSURE ZONE BACKFLOW PREVENTER VALVE

The Friendly Reduced Pressure Zone Backflow Preventer is designed to stop the reverse of flow of a liquid into a potable water system. The proper installation of a backflow preventer must be done by a certified expert under local codes and guidelines to assure the protection of the drinking water system.



BARRACUDA 40

The Barracuda 40 Double Check Valve Assembly is designed to prevent non-health hazard pollutants from entering the potable water supply system caused by backpressure and/or backsiphonage conditions. Only designed for the waterwork, plumbing, and irrigation markets only.



FRIENDLY DOUBLE CHECK BACKFLOW PREVENTER VALVE

The Friendly Double Check Backflow Preventer Valve is designed to stop the reverse of flow of a liquid into a potable water system. The proper installation of a backflow preventer must be done by a certified expert under local codes and guidelines to assure the protection of the drinking water system.

ABOUT • MIFAB

Established in 1982, MIFAB is a Chicago-based manufacturer of commercial plumbing products. MIFAB'S logical, function driven product lines replace confusion with simplicity and offer all the features required by today's building practices- without the unnecessary duplication.

MIFAB can provide you with the quality, engineered plumbing and drainage solutions you need. We have over 6,000 products that were designed with innovation to save time and material cost; providing higher quality cast stainless steel drains and cleanouts for the same cost as the industry standard nickel bronze.

Access Doors • Backwater Valves • **BEECO** • C-PORT Roof Pipe Supports • Fabricated Stainless Steel Drains
Fixture Carriers • Floor & Area Drains • Floor & Wall Cleanouts • Floor Sinks • Grease, Oil & Specialty Interceptors
Roof Drains • Trap Seal Primers & Water Hammer Arrestors • Trench Drains • Wall & Ground Hydrants

Learn more: www.mifab.com