Non-Pop Lids

The SWS Non-Pop Lid is a high tech molded polymer replacement lid for conventional cast-iron lids in utility valve boxes. The Non-Pop lid has numerous features designed into the lid to solve problems inherent in the cast-iron lids, to enhance utility operation, and to SAVE MONEY!

Consider the following problems and solutions:

1. **Problem** - Displaced valve box lids - this means lids which have been knocked out of their box by traffic

or vandals, and which have left an open hole and a loose piece of cast iron exposed to traffic. This is extremely hazardous, and potentially life threatening to the public.

Solution - SWS Non-Pop Lid. These lids have an elastomeric lock which slips through the lid-seat flange, and then opens up to provide a restraint to movement of the lid. Traffic can never dislocate a Non-Pop Lid, and they are extremely vandal resistant. A special tool is required for their removal.



2. **Problem** - Dirt and water accumulating over the valve, making valve actuation difficult or impossible without cleaning the hole. This is a nuisance at the least, but can be disastrous in the event of a broken service line, earthquake, fire, or other emergency requiring immediate action.

Solution - SWS Non-Pop Lid. These lids have an elastomeric seal, which is located directly beneath the top flange, and which prevents dirt and water from going down the valve box. In the event of gas pressure from below, the lid will allow venting, while still maintaining its dirt and water seal.



3. **Problem** - Maintenance confusion regarding ownership or function of the buried Valve. Especially in items of emergency, it is easy for the wrong valve to be actuated, and the right valve to be overlooked.

Solution - SWS Non-Pop Lid. Each Lid has identifying printing on its top to identify whether it is water, gas, or other service. Also, if ordered, it is possible to have the utility name on the lid. The feature most useful for operations is the attached identification plate. Located on the underside of the lid is a plate which can be filled in by the utility. This information includes (a) ownership, (b) valve size, (c) operation instructions, and (d) further description. Vital information can be identified, such as, type of wrench required, direction and number of turns for actuation, and direction of flow. In addition, the plate can be color coded. Blue is for water, Yellow is for gas. Other colors are available for additional utilities. No more mistakes of actuating the wrong valve.



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4. **Problem** - Lost Valve Box. During new construction and grading, it is easy to cover valve boxes and lose them. When re-paving a street, it is common to pave over a box, and then have difficulty finding it afterward. Many man-hours, and even costly surveying may be required to relocate the box.

Solution - SWS Non-Pop Lid. Each lid can be equipped with a passive FM Antenna, which allows rapid location with a tuned electronic locator. The antennas are available in frequencies specific for water, gas, wastewater, or other service.

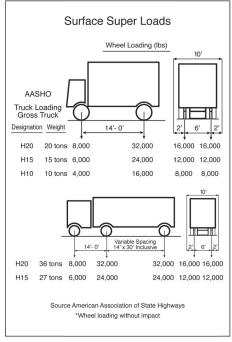
5. **Problem** - Bees and spiders entering and nesting in valve box. Besides being anuisance, this can become hazardous to maintenance and operations personnel. In areas where killers bees are located, this is a serious threat.



Solution - SWS Non-Pop Lid. The same seal which prevents entry of dirt and water also keeps out bees and insects. The valve box will be clean when the lid is removed. No surprises!

6. **Problem** - Excessive cost of utility operation. Increasing labor cost, coupled with greater maintenance requirements as utilities age, generally increases the cost of operation with time. Additionally, many maintenance functions require expensive equipment which must be replaced periodically. Having to repeatedly clean out valve boxes before the valve can be exercised, is an avoidable waste of maintenance personnel time.

Solution - SWS Non-Pop Lid. Though the initial cost of this multi-function lid is somewhat greater then cast iron, due to the many features of the lid, utilities who have annual valve maintenance programs find that the additional cost is saved within a very short period of time. After that, the Non-Pop Lid represents a long-term savings. When the Non-Pop Lids are used throughout the utility system, the savings become dramatic.



Truck Wheel Loadings used to represent Concentrated Super-Loads on Buried Cast Iron Sod Pipe

Materials & Characteristics

The body of the Non-Pop Lids is made of an ABS/ Polycarbonate Alloy. This material has extremely high impact strength and good wear resistance. Designed for loads of 20,000 lbs (H20) and greater, and temperature ranges of -40 degrees Fahrenheit to +220 degrees. This premium material is intended for long service life.

The seals on these lids are all made from low durometer thermoplastic elastomer. This allows flexibility over the same temperature range as the body qualification, and good chemical and ozone resistance.

The materials of construction are the same of those found in industrial grade power tool housings. In these applications the products must be capable of withstanding dropping, scrapping, and severe abuse. In the Non-Pop Lids the materials will also withstand the abuse which is typical of their use. There are no limitations with regard to where they can be used. Direct sunlight. Hot environments. Cold environments. Heavy traffic. All are typical areas where the SWS Non-Pop Lids will excel in your systems!