

## **COMPETITION**

**Waterless Co.:** Currently manufacturing fiberglass and Vitreous China bowls. Friction press-fit trap insert. Sealant depleted with every use. Operational costs are very difficult to gauge. When more than 1 urinal is in the restroom it's impossible to gauge which urinal needs more sealant. Therefore, maintenance personnel will generally add sealant to all the urinals to prevent odors. This raises significantly the operational costs.

**Duravit:** Solid porcelain bowl. No insertable trap. Add 100 milliliters of sealant per month, which is about 3 oz. Once a year remove deposits from the ceramic siphon by pouring water down the trap "under pressure". Hearing from the market about first cost of \$400-\$600. 100 milliliters of sealant about \$2-\$3.

**Caroma:** This Australian company is well known for its protectionist tactics removing American competition from the Australian market. The system is a simple rubber membrane cartridge with a bio tablet and a down drain p-trap. This system allows urine to deposit its sediment on the system trap. The sediment will build until the trap is clogged. At this point maintenance may involve removal of the urinal. This is both costly and labor intensive, not to mention extremely messy. This system will keep your maintenance personnel very busy.

**Urimat system:** The system works with a floated trap insert and solenoid that activates every time someone uses the urinal. It will likely never come to the U.S. because of certain code requirements.

**Falcon Waterfree/ Sloan/Waterless:** Originally American Waterless Formed when two partners from Waterless went their separate ways. System has an ABS disposable cartridge trap that fits into a housing connected to the sewage. The cartridge trap is locked in position using a bayonet locking system. Operational costs are very high as cartridge life cycle is much less than advertised. Average cost of replacement cartridges are about \$40US and can be higher elsewhere.

**Kohler:** This product bears a well know name. However, Kohler really fell short with this system. They basically copied with slight modification a European counterpart know as Duravit (see above). The trap requires constant refilling and monitoring. It's the most labor intensive urinal in the market. If maintenance procedures are not followed carefully heavy clogs will be prevalent. Maintenance is both time consuming (5 to 10 minutes per urinal) and expensive.