

Submersible Pumps: The Modern, Sensible Approach

Originally used in Europe, submersible wastewater pumps were first introduced into the U.S. market in the mid 1950's. They became popular in the early 1960's when a guide rail system was developed to lift pumps out of well pits for easy maintenance and repair. This ended the dirty, and sometimes dangerous, task of sending people into the sewage or wet pit. Submersibles are now the dominant type of pump in the municipal lift station market. They are used primarily for wet-pit sewage lift stations and for industrial sump or process effluent applications. Submersibles offer the following advantages:

- Low initial cost - They involve only one pit, and less auxiliary equipment is required than for dry well/wet well installations.
- Low operating costs
- Safe and quiet installations
- Minimal unsightly, above-ground equipment
- Reliable operation over a long service life

A submersible lift station includes not only the pump-motor unit, but sophisticated, electrical and mechanical controls, piping and a wet well with an access frame and cover. Submersible pumps are also widely used to handle suspended solids effectively and efficiently. SWPA's members manufacture submersibles that handle 2-1/4" and larger solids and have a minimum 3" discharge. It is estimated that SWPA's member pump companies manufacture and sell more than 75% of these pumps in the United States.