

890 MISCELLANEOUS UTILITIES

890 09 BUILDING HOUSING MISCELLANEOUS UTILITY PLANT (SF)

This code is used in cases where any of the miscellaneous utilities components are or must be enclosed in a building. No planning criteria are available.

890 10 ACETYLENE PLANT (EA)

890 11 ACETYLENE DISTRIBUTION SYSTEM (LF)

Generally the generation of acetylene is a function of private industry. Where commercial sources are nonexistent or of poor quality, a generating plant may be built. The quantity of acetylene required and the siting of an acetylene plant within safety criteria are determined by an engineering study. A typical acetylene generator building has an approximate gross area of 2,200 square feet.

890 15 NITROGEN PLANT (EA)

A nitrogen plant is required for the provision of large quantities of nitrogen for special applications. Nitrogen is used where an inert gas is required. It prevents oxidation in welding and soldering. It prevents spoilage of perishable supplies by displacing air in special storage facilities. Nitrogen is also used in the quick freezing of food. Nitrogen is provided by commercial sources where available. A requirement for a nitrogen plant shall be determined by a special study. Nitrogen and oxygen are by-products of each other, so preliminary guidance may be taken from oxygen plant criteria. See 141 87 Liquid Oxygen Facility, and 890 30 Industrial Oxygen Plant.

890 20 COMPRESSED AIR PLANT (EA)

890 21 COMPRESSED AIR DISTRIBUTION SYSTEM (LF)

Compressed air is used by the Navy in numerous applications, such as for pneumatic tools, laundry equipment, instrumentation and control equipment, and in hospitals and laboratories. If the requirement is sufficiently large at an installation, a central compressed air plant and distribution system should be installed. A careful analysis of all compressed air operating requirements is necessary to determine the capacity and pressure of the distribution system. Usually, compressed air is distributed at 100 to 125 psig from a central system for general purpose needs. Special, high pressure systems are required for ordnance plants, ammunition depots, catapults, and submarine facilities.

890 25 CARBON DIOXIDE PLANT (EA)

A carbon dioxide plant at a Naval activity provides space for the storage and transfer of carbon dioxide. The space contains a storage tank and a

distribution system used for refilling carbon dioxide fire extinguishers and the like. The space required will approximate 1,200 to 2,000 square feet.

890 27 ICEMAKING PLANT (TN)

No planning criteria are currently available.

890 30 INDUSTRIAL OXYGEN PLANT (EA)

890 31 OXYGEN DISTRIBUTION SYSTEM (LF)

Industrial oxygen is obtained from private industry where feasible. Where oxygen must be produced, it is obtained by breakdown of air into oxygen and nitrogen. Nitrogen is a by-product.

Breathing oxygen is handled separately from industrial oxygen because of more stringent purity requirements. See Category Code 141 87 Liquid Oxygen Facilities for breathing oxygen.

890 42 AIR CONDITIONING PLANT (5 to 25 TONS) (TN)

890 45 VALVE HOUSE OR OTHER SHED/SHELTER (SF)

890 46 UTILITY TUNNEL (LF)

No planning criteria for Category Codes 890 42 through 890 46 are currently available. Each facility requires individual justification.

890 50 ENERGY MONITORING AND CONTROL SYSTEM (EA)

This facility is an automated control network designed to monitor and reduce energy consumption at shore installations. The system consists of a central computer, remote sensor equipment, automated utility controls at buildings to be serviced, and data transmission links. In large building complexes, there may be secondary operator terminals at several locations with data links to the central computer. One network may service the entire installation, a group of selected buildings, or there may be more than one network at a given installation. One system usually controls the following building services.

- Heating and air conditioning
- Hot water, chilled water and steam
- Air and gasses
- Electrical power and lighting
- Emergency power generation

In addition to utility control, the system can be designed to perform other functions such as:

- Fire alarm and smoke management
- Security
- Voice communications

Data collection for energy cost accounting
Equipment performance monitoring and alarms
Equipment maintenance management

890 56 WEIGHING FACILITY (EA)

890 77 STORAGE FOR UTILITY SYSTEMS (READY ISSUE/SHOP STORES/MISC.) (SF)

No planning criteria for Category Codes 890 50 through 890 77 are currently available. Each facility requires individual justification.