

[by Bill Moses](#)

The electrical power pedestal has evolved over the years into more than just shore power for boats. The power pedestal is rapidly becoming a “utility pedestal,” which includes metered power, TV, telephone, Internet, water hose bibs, sometimes with water meters, and other utility hook-ups like in-slip sewer pumpout service. For the convenience of the boating public, some manufacturers now offer all these amenities. Also, a wide variety of electrical services, from standard 30-amp, 120-volt power all the way up to 200-amp, 480-volt three-phase power, are available. These changes have been driven by the demands of the yacht owners. Larger vessels with more amenities on-board require more support from dockside facilities.

### All-in-one



Power pedestal enclosures for marinas are manufactured using a variety of materials from lightweight composites to marine grade aluminum and stainless steel. The type of materials

used represents a design choice by the manufacturer, and while there are certainly benefits to each type of material, the marina owner shouldn't base his or her selection on the housing alone. It's what's inside that counts.

Electrical power pedestal manufacturers that desire to provide full-service to boaters are always competing for the approval of the marina owners and therefore, the boating public. Part of the challenge faced by the pedestal manufacturer is to provide all the services desired, while still conforming to applicable codes. For example, when power and water are supplied in the same pedestal, adequate separation needs to be accomplished. The same thing is true when a facility has electrical services of different voltages and systems. Power and communication circuitry must be adequately separated. Some megayacht pedestals are built to supply different voltage systems and in some cases, single-phase and three-phase power are supplied within the same pedestal. All of these items can be supplied with a properly designed and UL listed power pedestal.

### **What to consider**

When shopping for a pedestal manufacturer, marinas should consider the manufacturer's overall capabilities. With the increasing demand for adequate power for large slips, the actual supply of power to the marina becomes a big part of the equation. Power is generally supplied to the docks through the use of one or more marina substations and distribution equipment. The marina sub-station is a unitized piece of equipment with a weatherproof enclosure built of corrosion resistant materials. Inside is a primary section with the appropriately sized transformer and a secondary section with a built-in panel board including main and branch circuit breakers for power distribution to the boat slips.

Transformers and enclosures today must comply with current codes and be specifically approved for marine use. With the increased load demand by the larger yachts, sub-stations are also required to keep voltage drop to manageable levels, typically within 3 to 5 percent. Voltage drop is the amount of voltage that is lost due to the resistance of the electrical conductors that supply power to the pedestals.

Some pedestal manufacturers offer marina sub-station equipment as part of their overall service and also include electrical design and engineering (depending on the location of the project). Coordination between the electrical designer and the manufacturers of the pedestals and substations is critical to provide the most cost-effective solution to the marina owner. When these services can be provided through a common source, the marina owner often benefits.

### Metering

The electronic age has also influenced the evolution of the power pedestal. Available today are remote metering systems that transmit readings for electrical and/or water usage directly to the office computer for billing. This technology is now wireless, whereas in the past, some systems could remotely read the meters by transmitting the signal over the power lines. Several manufacturers tried that methodology with limited success mostly due to dependability issues. With the newer wireless capability, remote meter reading is simplified and more dependable.

### The future



Product development will continue to evolve, and manufacturers will continue to satisfy the dreams and demands of the marina and the boaters: dreams, such as remote control of all amenities at the utility pedestal, pay per view cable TV and vessel security, including fire, theft and bilge alarms. For guest moorage, marinas may offer customers pay at the slip options, so they can select and pay for the level of services they require anytime day or night (by selecting their options and paying with a credit card right at the slip). Surveillance will also be enhanced in the future with the help of remotely controlled cameras mounted on top of the electrical pedestals. The cameras could be controlled from the office for security of the whole dock or for specific vessels. Pedestal lighting is also changing with the use of very long lasting and energy efficient LED lights. Some manufacturers are on the leading edge of pedestal development for

marinas, moving away from simple utility and into integrated design that will complement the marina itself.

*Bill Moses has been involved in the marina industry for more than 40 years with a strong expertise in the field of marina utility design and wiring. Recently, Moses joined Accmar Equipment Co. in Miami, Fla., as director of outside sales for North America. He can be reached via e-mail at [billm@accmarequipment.com](mailto:billm@accmarequipment.com) or by phone at 360/403-5119.*

## **New Products**

Accmar Equipment Co. introduces the Mega Power Pedestal, designed to accommodate larger vessels. Compactly mounted in a high quality marine grade aluminum casing with 1/8" wall thickness, the powder-coated, watertight pedestal measures 45" in height and is designed with removable front and back access panels. Like all Accmar pedestals, this unit is built according to strict UL guidelines.

**Accmar Equipment Co.**