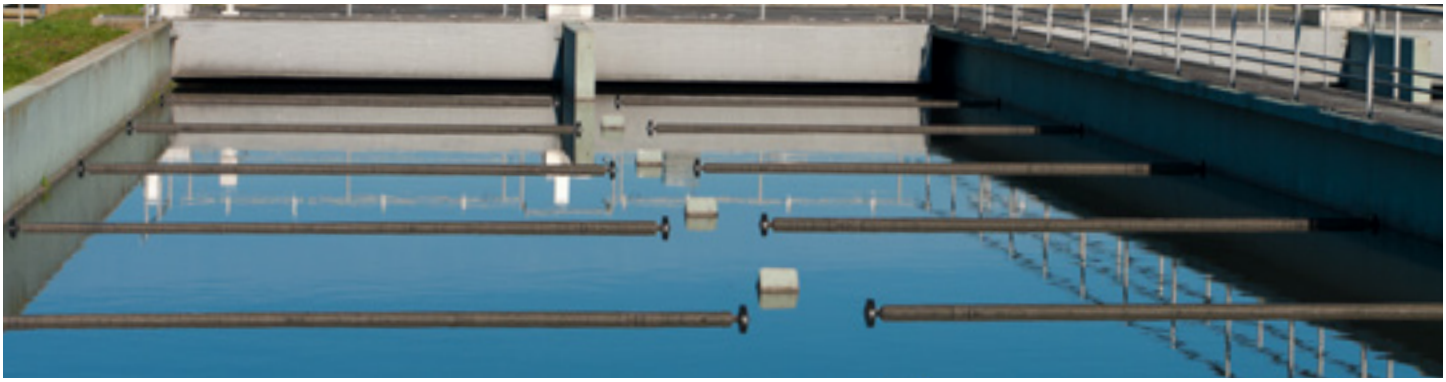

Polycarbonate Proving the Answer For Water and Wastewater Applications

INTEGRA GENESIS 24X24X10 ENCLOSURE A PERFECT FIT

Polycarbonate is the up-and-coming material for electronics enclosures in the water distribution and wastewater treatment industries—particularly since Integra Enclosures introduced its largest polycarbonate enclosure to date—the Genesis 24X24X10.

Just Right for Remote Sites

A leading control systems integrator and maker of remote terminal, or telemetry, units (RTUs) for the water and wastewater industries has adopted the Genesis 24X24X10 as its go-to enclosure. That's not only because of the roominess of the box, but more important, the durable, easy-to-work-with properties of polycarbonate, says Steve Anderson, Vice President and Eastern Regional Sales Manager of Integra Enclosures.

The RTUs—some located outdoors, others in sheds and other structures—consist of programmable logic controllers (PLCs), which control and monitor equipment at remote sites. They monitor tank levels and pump flow of water distribution systems, as well as lift stations, which move wastewater to treatment plants, from lower to higher elevations.

The units acquire data from the equipment and transmit it back to a facility's central supervisory control and data acquisition (SCADA) system. Facility operators and personnel retrieve the data via office computers, laptops, cell phones or tablets, and receive email or phone alerts when equipment malfunctions. This enables them to correct problems before a plant has to be closed.

The Advantages of Polycarbonate

Integra's customer had been using fiberglass, stainless steel and aluminum enclosures. Anderson said, "They came to us, saying that 'fiberglass doesn't like UV (ultraviolet radiation from the sun),' and that stainless steel and aluminum were expensive."

Over time, sunlight causes fiberglass to splinter. Polycarbonate, comparable in price to fiberglass, resists UV well.

And when it comes to drilling holes to accommodate wires, polycarbonate also beats fiberglass. "One of the beauties of polycarbonate is that it's easy and safe to drill and you can modify the enclosures out in the field," explains Anderson.

When drilled, fiberglass splinters, irritates skin and creates dust that is harmful to breathe.

Lightweight, But Sturdy and Ample

Stainless steel's weight was another reason Integra's customer switched to polycarbonate. While it took two technicians to install RTUs housed in steel enclosures, polycarbonate-enclosed RTUs are light enough for one-man installation. And though lighter than stainless steel, polycarbonate is more durable.

While it took two technicians to install RTUs housed in steel enclosures, polycarbonate-enclosed RTUs are light enough for one-man installation.

Anderson adds that Integra's Genesis 24x24x10 model is ideal for the application—large enough for the PLC as well as a backup battery, which some units include. And it has extra space to house the system's antenna, which can transmit through polycarbonate.

The antenna housed inside the enclosure is about a fifth the cost of external antennas and eliminates the need for an additional hole to be drilled—making the RTU less vulnerable to the elements.

And, says Anderson, it has one extra, unintended advantage: It makes the RTUs less attractive to thieves and vandals. "When you have an antenna on the outside of a box, you're advertising that there's something expensive inside that they might want to take."

ABOUT INTEGRA ENCLOSURES

Integra manufactures and markets thermoplastic enclosures designed for use in construction, water treatment, utility, telecommunication, instrumentation, remote monitoring, energy and other applications requiring enclosures that are non-corrosive, non-conductive, easy to install/modify and competitively priced.

7750 Tyler Blvd. Mentor Ohio, 44060 | T 440.269.4966 | F 440.269.4977