

Evolution

Magnetek Material Handling

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Magnetek's a beacon in the night for The Port Condo and Marina

Automation provides the solution for the nation's first residential and dry-dock storage facility.

Boat owners in Fort Lauderdale will be cruising in paradise once The Port Condominiums and Marina are complete this Fall! In an effort to capitalize on the limited



The Port Condominiums and Marina is a major draw for water lovers. It's close to the ocean, downtown and airport.

space and high demand for boat storage in the area, Fort Lauderdale-based developer Everglades LLC designed the nation's first residential and dry dock storage condominiums. The 129-unit luxury residence and marina, one of the very last waterfront opportunities of its kind in the area, is a major draw for water lovers. The Port Condominiums will offer residents upscale amenities and spacious floor plans. In addition, the owners will have the option to purchase an adjacent "boat condo" for their vessel. The boat condo is a climate controlled, concrete dry storage marina,

designed to withstand a Category 4 hurricane.

What else is so special about this development? The marina's unique bridge crane with boat cradle and racking system. It can accommodate 125 boats, up to 52 feet in length and up to 35,000 pounds. The Port's system will lift one boat at a time, either manually or automatically from the water, through an automated boat wash, to selected storage locations and back. When boat owners are "ready to cruise" they can call ahead to the adjacent marina, and in just minutes, their boats will be fueled and in the water.

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Coming Soon!

Monitor your IMPULSE drive wirelessly from your PC

Monitor your drive's status from the comfort of your chair with Magnetek's Electromotive Systems IMPULSE® LINK 4.1 Wireless Diagnostic System. The Windows-based, interactive drive software and hardware package allows you to efficiently program, monitor and troubleshoot your IMPULSE® G+/VG+ Series 2 and 3 Drives. Set to release in Winter 2005, you can provide your customers with improved overall service with this advanced diagnostics system. It allows you to service your own equipment more quickly and easily.

- Program, monitor and troubleshoot IMPULSE Drives from your desk, the plant floor or another location.
- E-mail parameter files, modified constants, and DataLogger files for troubleshooting assistance.
- The software will provide you with full drive parameter descriptions and troubleshooting assistance. No need to search for your manual.

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Automation—Port Condo and Marina

Storage Capacity is an Issue

Developing the boat storage and loading/unloading system for The Port Condominium and Marina wasn't always smooth sailing. Everglades' original plan relied on a forklift truck to place and remove boats from predetermined slips. The slips had to be spaced far enough apart to allow the trucks to maneuver between them. The wide aisles required for forklift truck travel resulted in a great deal of wasted space. This method would only allow for storage of approximately 80 boats. Everglades needed another method to increase boat storage capacity.

Bridge Crane with Rack System Provides Solution

Everglades contacted Maffett Architecture & Engineering, and in a joint effort with Crane America Services and Magnetek, designed the unique bridge crane with boat cradle and racking system. It's similar to the heavy-duty bridge crane lift systems used to load cargo containers. Maffett Architecture & Engineering designed the boat cradle, while Crane America Services designed the crane. Magnetek designed all the controls and automation software plus performed installation and start-up services needed to move and store boats in the marina.

The new automated marina storage retrieval design eliminates the need for forklift trucks to pass through the aisles, allowing boats to be placed closer together, reducing the amount of floor space needed for storage. Now up to 125 boats can be stored or moved in and out of the facility quickly and easily.

The automated boat storage facility contains an overhead crane that travels down an aisle between rack structures. It will manually or automatically lift one boat at a time from the water and through a wash station, then to a selected storage location, i.e. its "boat condo." The crane also moves boats from their berths to the water. They are stored in racks, perpendicular to the aisle, inside an enclosed building. It's positioned partly over the water where there is one pier location for boat pickup and dropoff.

Magnetek Designs a State-of-the-Art Manual and Automated Control System

Crane America Services contacted Magnetek, the premier provider of innovative power control and delivery solutions to the material handling industry, to design the manual and automated control

Port Marina Control System

Electromotive IMPULSE®-VG+ Series 2 Vector Drive—controls the hoist motion

Electromotive IMPULSE®-G+ Series 2 Adjustable Frequency Drives—controls the bridge, trolley and rotate motions

Telemotive *telePilot*™ Hand-held Radio Transmitter—provides manual backup control of the hoist, trolley, bridge and rotate functions of the crane

Electromotive Systems' Runway and Trolley Festoon—power and control signal wiring between the control enclosure and the crane

A Programmable Logic Controller (PLC)—main controller of the crane system

Human Machine Interface (HMI)—touch screen interface used to enter data and receive feedback and fault information

system for the project. A team from Magnetek, considered to be some of the top development and application engineers in the industry, met with Everglades, Maffett and Crane America Services. After extensive interviews regarding system needs and functions, as well as analysis of drawings, technical data and the sequence of operation, the team developed and proposed a control solution that met their needs and budget. This same team then designed the complete system and programmed the software automating the entire storage-retrieval process. The team then supervised in-house testing and performed the field startup at The Port, ensuring the system met required specifications and functionality.

At Magnetek, customers are not passed from one department to another. As in The Port

Marina project, a dedicated team of engineers is assigned to each project, handling all the details and making sure all specifications are met within budget and timeline. It's that kind of personal attention, coupled with second-to-none industry application expertise, that sets Magnetek Material Handling apart.

Increased Storage Capacity and Retrieval Efficiency

By eliminating the need for forklift trucks to pass through the aisles, the slips at The Port Marina could be placed closer together, almost doubling the storage capacity. According to David Strait, Magnetek's Southeast Regional Sales Representative who was integrally involved in The Port Marina project, many customers have found that automating their storage and retrieval process has increased efficiency and better utilization of space.

Magnetek's sales representatives can provide the automation expertise and guidance you need to achieve maximum performance from your material handling system. They work in

conjunction with our Engineered Systems and Solutions Group to help identify, select and implement the best mix of motion control technologies and leading-edge product offerings available for a specific application. The Port Marina's bridge crane system is just one example of how automation can improve productivity and efficiency. Call your local Magnetek Sales Representative, or our Engineered Systems and Solutions Group today at 1-800-288-8178.



This test boat enters the 70-foot channel in the floor of the building, will proceed through an automated boat wash and then will be tucked away into a berth as high as the seventeenth floor!