As port facilities age, the support structures on which they were built deteriorate. In this case, Five Star Products offered a solution favoring rehabilitation over demolition/reconstruction, allowing the Nashville Wharf to remain largely operational throughout the critical repair process.

Port of New Orleans
Nashville Wharf Rehabilitation
New Orleans, LA

Products:
Five Star® PileForm™ F
Five Star® Underwater Grout
Five Star® Splash Zone™
The Challenge
Gradual deterioration of piles holding up a wharf deck at the Port of New Orleans, a deep-draft multipurpose port on Louisiana’s Lower Mississippi River, lead to structural collapse of certain portions. Consequently, the ports sub-structure was inspected and it was determined measures needed to be taken to shore up structural pile supports.

The project called for the contractor to install new piles in collapsed areas and to rehabilitate 5,000 additional piles. The piles that were rehabilitated consisted of a mixture of H-piles, round concrete piles, and round timber piles. Five Star Products’ pile jacket restoration system was chosen for the application.

Five Star® Solution
In addition to custom manufacturing 5,000 Five Star® PileForm™ F FRP Pile Rehabilitation Jackets, Five Star® UW High Strength Grout and Five Star® Splash Zone™ were used as fill and capping material, respectively.

New to pile repair procedures, materials, and processes, Cycle Construction was provided with on-site and in-depth technical training and support by Five Star Products’ marine Field Representative and General Manager.

Spending the entire first week of the project working on-site with the contractor, and returning numerous times throughout the project, this level of support was crucial to the job’s success.

Given the magnitude of this project and the nature of this TWIC card regulated port facility, constant communication between Five Star Products and Cycle Construction was essential in order to continually meet production scheduling and delivery needs.

While Five Star Products’ reasonable pricing was a factor, a larger concern was manufacturing capacity. During the summer months of 2018, while the Mississippi River was low, contractor Cycle Construction was placing and filling 100-150 jackets per 6 day work week! The jackets ranged from 22”-28” I.D. and 8’ to 18’ in length.

Cycle Construction appreciated Five Star Products’ dedication to customer support, and all shared in the success of this completed MRO project.

Five Star® PileForm™ F
FRP Pile Rehabilitation Jackets
Five Star® PileForm™ F fiberglass reinforced plastic (FRP) pile rehabilitation jackets meet and exceed marine engineering specifications for use in hostile marine environments where exposure to ice, floating debris, chemical pollution, oils, acids, salt water and where tidal action may occur. Five Star® PileForm™ F jackets are available in thicknesses of 1/8” nominal to 1/2” minimum. Jackets can be translucent, in lengths from 1 to 25’, and pigmented or gel coated to any specified color.

• Custom shapes and sizes
• Use around timber, steel and concrete piles
• Lightweight for ease of maneuvering and installation by divers
• Excellent solvent and chemical resistance
• High abrasion and impact resistance
• Corrosion resistant

FIVE STAR® SERVICES
• Design-A-Spec™ engineering specification assistance
• Pre-placement meetings
• On-call center with experienced engineering and technical support
• Field support representatives for on-site consultation

For worldwide availability, additional product information and technical support, contact your local Five Star® licensee, distributor, local sales representative, or you may call the Five Star Products’ Engineering and Technical Service Center at 1-800-243-2206.