CREATING A BRIDGE FOR PROGRESS

STANCOR PUMPS WERE UTILIZED TO ASSIST CONSTRUCTION OF THE NEW TAPPAN ZEE BRIDGE AND PROTECT THE ENVIRONMENT.
The expression “water under the bridge” describes an inability to change something that has occurred in the past. However, the New NY Bridge project—overseeing a $3.98 billion budget to replace the 3.1-mile Tappan Zee Bridge across the Hudson River—couldn’t afford to make mistakes when moving the water under the bridge.

So Tappan Zee Constructors, LLC (TZC), a consortium of Fluor Enterprises, Inc., American Bridge Company, Granite Construction Northeast, Inc. and Traylor Bros. Inc., which is responsible for the design and construction of the project, turned to Stancor pumps.

The application challenges were larger than merely supporting construction of the twin spans that replace the existing bridge, which was originally built in 1955 and serves more than 138,000 vehicles per day. Extensive measures were also put in place when construction began in late 2013 to protect the environment during the process.

This is where Stancor’s ability to customize a solution made all of the difference. Stancor P-70-HH Series pumps, which are rated at 30 HP and can pump up to 430 GPM or generate up to 165 psi, were relied upon to move Hudson River water so the concrete in the main span tower pylons cured properly. Wedge wire screens, which are designed with specially shaped, 5mm openings were added to the pumps’ intakes to prevent fish, eggs and larvae from being drawn into the pump during this critical operation.

The value-added product was able to simultaneously: 1) reliably run cooling water 150 feet into the air at a flow rate that would maintain the integrity of the structural concrete and 2) protect river life by ensuring the Hudson River water temperature never rose by more than three degrees and fish weren’t threatened.

“A project of this size has a unique amount of challenges,” said Martir Ortez, TZC Field Engineer for the New NY Bridge project. “Stancor’s willingness to collaborate on all aspects of the pumps—including power supplies, flow rate and head pressure—allowed us to develop a comprehensive set of solutions.

“Stancor was always there when we needed a recommendation. That is invaluable when you need to stay on time and on budget.”

More than 50 pumps were supplied by Stancor to assist in a variety of operations that were encompassed in such a complex project. After all, there is a lot to do when you are using hundreds of thousands of cubic yards of concrete and nearly 200 million pounds of steel.

“At Stancor, we excel when the job requires something beyond the catalog,” said Paul Hauck, Stancor director of field service. “It is rewarding to work as part of team that is attempting to do something as monumental as this project—for its impact on millions of people that will rely on this bridge and the environment.”

When completed, the new bridge will have the ability to support more lanes, a pedestrian and bicycle path and even a proposed mass-transit system. That’s progress. And Stancor helped the team get there by staying out of hot water.