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Rental Solutions

Case Study - Temporary Fire Protection
Boston, Massachusetts
Rental

Temporary fire protection system keeps long-term care hospital facility online

Xylem delivers temporary fire pump system in tight time frame

A health care facility's fire protection infrastructure is arguably the most critical of its life safety systems. Facility managers rely on it to detect and suppress smoke and fire, evacuate occupants quickly, alert emergency personnel and maintain local code compliance – all at the same time.

Retrofitting or upgrading the fire protection system of an existing facility is not uncommon due to a rise in safety awareness and code regulations governing commercial and industrial fire safety standards, but it can pose several challenges. A temporary fire protection solution that integrates with an existing pumping system helps ensure continuity and compliance.

The Challenge

Hebrew SeniorLife, a senior care organization affiliated with Harvard Medical School, is an integrated, eight-site health care, housing, research and teaching system that serves thousands of seniors in the Greater Boston area and beyond. In August 2020, the organization's Hebrew Rehabilitation Center, an acute long-term care hospital facility located in Boston's Roslindale neighborhood, needed to undergo fire system upgrades as part of an overall revitalization project at the long-term care campus.

In order to update the hospital's existing fire protection equipment, a temporary fire pump system was needed to maintain safety and meet fire codes during construction. Per building codes, the center could not have occupancy if a temporary fire system was not in place during the mechanical upgrades.

Design specifications dictated that the temporary system handle a flow of 1,250 gallons per minute (GPM) with 70 PSI of inlet pressure and 160 PSI of outlet pressure. The system also needed to automatically activate upon pressure drop.

The Xylem Solution

Local fire protection contractor Superior Fire Protection, Inc., reached out to Xylem to develop a temporary fire protection solution with a relatively quick turnaround.

Godwin HL200M 6-inch diesel-driven temporary fire pump providing temporary fire protection at Hebrew SeniorLife.

Customer: Superior Fire Protection (Hebrew SeniorLife)

Challenge: An acute long-term care hospital facility in Roslindale, Massachusetts, needed a temporary fire protection solution during upgrades to its existing fire protection system.

Xylem Solution: Godwin HL200M 6" diesel temporary fire pump running off the Primeguard 2 automatic pressure controller, which programs the pump run and adjusts speed based on pressure conditions.

Results: The temporary fire protection system was in place for one month without incident.

"When it comes to mechanical upgrades, the availability of new equipment and long lead times can make it hard for contractors to pin down a construction schedule," said Andrew Culver, an outside sales representative for Xylem.

With over 3,000 pumps in the Xylem Rental Services fleet in 40 metropolitan locations across the United States, pumps are readily available and often installed the same day as requested.

After assessing the situation, Xylem identified the Godwin HL200M pump as the best solution. Xylem engineers designed the system with a Godwin HL200M 6-inch diesel-driven pump, which offers flow rates up to 2,540 GPM and has the capability to handle discharge pressures of 139 PSI. A pressure reducing valve was installed on the inlet to control street pressure, and a Godwin PrimeGuard 2 automatic pressure controller was added to activate the pump in case of a drop in pressure. The PrimeGuard 2, which programs the pump to run only when needed, eliminated the need for expensive, onsite personnel to monitor pumps manually.

Within two weeks of the contractor contacting Xylem Rental Solutions, a temporary fire protection solution was delivered, installed, tested and brought online. The temporary fire protection system remained in place for four weeks during permament system upgrades without incident.

"Having fire protection equipment that other rental companies likely wouldn't have allows Xylem to turn around jobs pretty quickly," said Darrin Ruiz, a senior applications engineer with Xylem.

The temporary fire protection system remained in place for four weeks during permanent system upgrades.

Hospital connection points for the Godwin HL200 6-inch diesel-driven fire pump.

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