



KROESCHELL PROJECT CASE STUDY:

181 W. Madison Domestic Water Booster Pump Upgrades

THE CHALLENGE:

When the staff of a 50-story commercial Class A trophy building in the heart of downtown Chicago grew tired of maintaining their inefficient constant speed domestic water booster pump system, they called on Kroeschell's engineers. At any given time, the old system was operating at least one 60HP pump at 100% to keep up with building demand. It was not energy efficient and was regularly in need of repairs and service.

THE SOLUTION:

Kroeschell's engineering and project management staff:

- Evaluated the existing system, building usage, and site logistics
- Engineered an appropriate solution
- Specified an appropriate replacement pump system, and
- Self-performed the demolition and installation scope

This was a turnkey project for Kroeschell: our plumbing group acted as general contractor coordinating the various trade activities required to complete the installation.

The outdated pumps were removed and the new system of three 60-HP pumps with variable frequency drives was installed. The actual replacement work was completed over the course of a single weekend so that the building would be back in operation by start of business on Monday morning. In order to complete the work in this time frame, we forwent draining the entire 50-story water distribution. We coordinated a pipe freeze on the discharge of the existing pump package.

THE RESULTS:

The upgrades, including installation of the new Bell & Gossett triplex pressure booster pump system with variable frequency drives, resulted in the building achieving higher energy efficiency.



PROJECT OVERVIEW:

Location: Chicago, IL

Project Scope:

- Installed a triplex pressure booster system for a 50-story high rise under tight time constraints.
- New system contributed to higher energy efficiency.
- Building Size: +950,000 SF

Customer Profile:

Our customer, 181 West Madison Street, is a skyscraper located in heart of downtown Chicago, IL . Built in 1990, the building is 680 feet tall and contains 50 floors. It is a 5-Star Worldwide complex with state-of-the-art executive conference and wellness centers, on-site dining and premier areas. The high-rise has received a LEED® Gold certification - the premier mark of distinction in green building, and is ENERGY STAR® rated.

CONTACTS:

Mike Evensen

O: (312) 649-7978 :: M: (773) 322-6044

Mike.Evensen@kroeschell.com

KROESCHELL

Established 1879

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