

From Manual to Electric...

How the Street Cranexpress team modernised a client's lifting equipment in a listed building.

Client: Southern Water

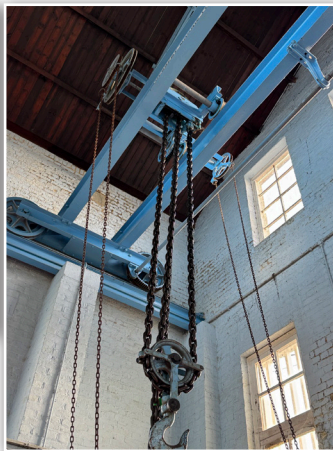
Project Type: Full Crane Modernisation

Equipment Installed: Street 10t SWL ZX10 Special Gauge (True Vertical Lift)

Project Overview

One of our clients operated a fully manual crane as part of their operations. While the crane remained functional, its manual operation led to slow performance and, moreover, placed significant strain on operators.

Following discussions with the Street Cranexpress team, it was determined that a full modernisation would best meet long-term needs. As a result, converting the crane from manual to electric operation was judged to be the most suitable solution.



The Challenge

The original crane was manually operated, including the chain hoist and long-travel gear. This created several operational limitations:

- Slow lifting and travel speeds
- Increased physical effort for operators
- Reduced operational efficiency
- Ongoing strain and fatigue concerns

In addition to these performance limitations, the installation environment introduced significant technical constraints. The crane was housed in a listed building, meaning:

- The structural fabric of the building could not be disturbed
- Roof access was restricted, preventing the use of a mobile crane
- The working area was extremely tight, limiting installation and load testing space

These factors required careful planning, bespoke design, and innovative on-site solutions.

Scope of Works

Following preliminary calculations and design work, the Street Cranexpress team subsequently carried out a complete upgrade of the lifting system.

The modernisation included:

- Removal of the old manual chain hoist and manual long-travel gear
- Installation of a new cross-travel rail
- Installation of a new wire rope hoist
- Installation of new long-travel drive motors and cabling
- Installation of a new festoon system
- Installation of a new main control panel and associated wiring
- Commissioning of a Variable Speed Drive (VSD) for long travel
- Installation of a new radio control system
- Full load testing and commissioning

At the heart of the upgrade was the installation of a Street 10t SWL ZX10 Special Gauge electric wire rope hoist, providing true vertical lift and significantly improved operational performance.

Engineering Solutions & Site Constraints

Due to the building's listed status, we therefore had to take particular care not to disturb its fabric while carrying out our work. To overcome this, scaffolding was installed to provide safe access and facilitate lifting operations without disturbing the building.

Load testing also had to be carefully planned and executed within the confined space, demonstrating the team's adaptability and technical expertise.

Project Timeline

Planning Phase: 1–2 weeks

Design Phase: 1–2 weeks

Installation & Testing: 2 weeks

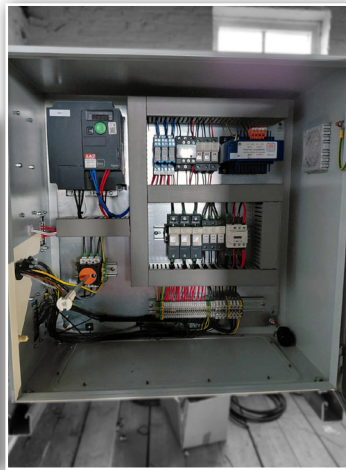
Objectives & Outcomes

From the client's perspective, the primary objective was clear: to modernise the crane and convert it to electric drive for improved performance and usability.

From Street Cranexpress' perspective, the project aimed to deliver a seamless and efficient modernisation, demonstrate our bespoke engineering capabilities, and execute a technically challenging installation within strict structural constraints.

The completed system now provides:

- Electrically driven, smooth lifting and travelling operation
- Reduced operator fatigue
- Increased lifting speed and efficiency
- Enhanced control through radio operation
- Modern, reliable components throughout



Project Reflection

James Salter, Project Manager, commented:

“This really demonstrates our capabilities for bespoke modernisation projects, not only for our front-end design and planning, but also for our site installation and commissioning. It had many challenges which helped us identify how to better deliver future projects of this nature.”

Demonstrating Bespoke Capabilities

This was not a standard overhead crane upgrade. The combination of a fully manual legacy system, a special-order hoist, tight working conditions in a listed building environment made this a uniquely challenging modernisation.

- The successful delivery of this project highlights Street Cranexpress' ability to:
- Design fully bespoke lifting solutions
- Work within heritage and restricted structures
- Manage complex installations safely and efficiently
- Deliver complete turnkey modernisation projects

For clients operating ageing manual equipment, particularly in sensitive or constrained environments, this project stands as a strong example of what is possible through expert consultation, detailed engineering design, and precise on-site execution. If you'd like to find out how we can help you with modernisation of your lifting equipment, get in touch with our friendly UK-based team who will be happy to help you.