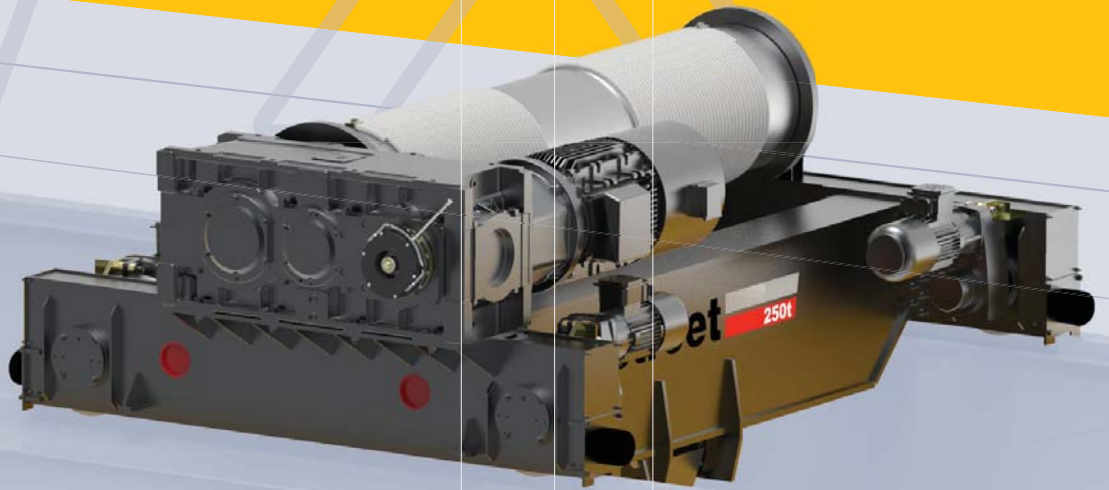


# WALKHOIST



**Street**

FOR THE MOST DEMANDING LIFTING APPLICATIONS



**Street**

# Where the latest innovation meets traditional heavy-duty engineering.

“For the truly heavy-duty hoisting applications we combine robust mechanical design and advanced control systems to set new standards for reliable and efficient performance”

...The smart measure for high endurance hoists in intensive process applications is lifetime cost of ownership. With VX technology we provide application specific solutions, engineered to last longer and cost less, due to reduced downtime and maintenance. Not only is less service and maintenance required, it is also easier and quicker to perform by virtue of our open plan construction and scrupulous attention to design details.



# VX HOIST: Proven in the most demanding applications.

Street Crane has more than seven decades of experience designing and manufacturing hoists for the more extreme applications. The Street VX hoist is a product of that pedigree and it epitomises the special performance levels we can offer those customers who have the most exacting requirements. VX hoist is a modular concept which uses pre-engineered components in both standard and customised formats to provide high-performance and high-reliability for a very wide range of demanding applications. VX hoist provides the solution to applications where one or more of the following is required:

## VX Application Range

- Capacities up to 250 tonnes (275 US Tons).
- Duty classifications up to ISO M8/CMAA CLASS F.
- Super-fast hoisting speeds.
- Super-high lifts.
- Increased factors of safety.
- Arduous environments.
- Additional safety and operating equipment.
- Special hoist format/construction.
- Special hoist constructions.



## VX HOIST: When productivity and safety are the priority.

In contrast to standard hoists the VX hoist is an open winch of exceptionally rugged design with all components in accessible open plan for ease and speed of service and maintenance.





**Street** 30 t

U.S. DIMENSION  
OVERALL CLEAR  
20' 0" - 24'  
8' 6" - 10' 0"

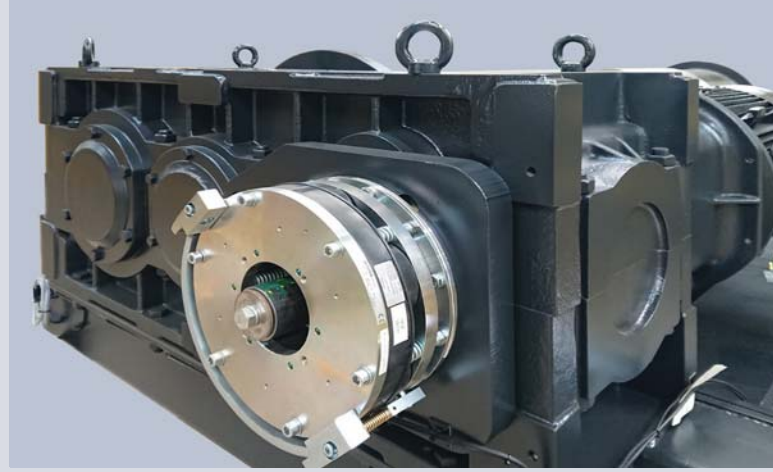




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# VX HOIST: Features & Benefits.



Braked hoist gearbox

## Capacities and duty classifications

The modular concept of the VX hoist enables us to provide standard solutions from pre-engineered components for an extremely wide range of capacity and duty combinations which fully meet the requirements of international standards including ISO, EN, BS, FEM, HMI, UL and CSA.

## True vertical lift (zero hook drift)

The VX hoist drum is double scrolled (left and right) to provide a zero hook drift throughout the hook stroke for more accurate load positioning. This arrangement also ensures equal distribution of the load on the crane bridge or supporting structure.

## Braked hoist gearbox

This important feature provides significantly enhanced safety, reliability and maintainability compared to a hoist with motor mounted brakes. The hoist brake holds the load even if the hoist motor is removed or if the hoist motor coupling, motor connection or motor shaft were to fail. This design also results in lower operating temperatures in the hoist motor because the heat generated by the brake does not soak into the motor.

## Extended hoist drum and rope life

The pulley/drum ratio and hoist rope diameter are designed to increase the life cycle of these components in accordance with the hoist classification. Double scrolling provides balanced rope reeving which extends rope and drum life and also enhances safety.

## Hand brake release facility

This basic feature which is not standard on most competitor hoists can be invaluable in the event of a breakdown or power cut.

## High performance hoist motors

VX motors are class F or H and selected to perfectly suit the application so are typically rated at 60% ED with overheating protection and IP55 enclosures.

## Heavy duty hoist gearbox

All gears are hardened and ground, fully enclosed and submerged in an oil bath. The gearbox has a gear inspection cover and a motor coupling inspection facility.

## Safe load cut off device

A capacity restrictor prevents the operator inadvertently overloading the hoist.



### Closed loop variable speed drive (VFD) on hoisting and lowering

Speeds are varied by means of a frequency inverter in “closed loop” with a motor encoder which provides a high safety level through continuous speed monitoring. As standard this system provides the facility to programme hoisting and lowering speeds as well as acceleration and deceleration to suit your application. Gentle acceleration reduces the loading of mechanisms and improves productivity, hoist life and safety.

### Electrical braking

Electrical braking of the hoist motor is standard with VX which significantly reduces wear on the mechanical hoist brake linings.

## Programmable speed possibilities

### Micro-speeds

A benefit of closed loop monitoring is the possible to programme extremely slow micro-speeds for hoisting and lowering which enhances safety when positioning fragile or potentially hazardous loads. Maximum fast to slow speed ratios of 10:1 are standard on all models but the options of 20:1 or even slower are available.

### Ramp and hold or preset speeds hoist and trolley

The standard control setting is ‘ramp and hold’ for infinitely variable speeds on both hoist and trolley. Two position controls allow the operator to start in micro-speed and ramp up towards full speed with the ability to hold any speed in between. Alternatively the standard controls can simply be set for two pre-set speeds. Multiple speed options are also available.



VFD programming tool

### No load express lift

This option provides a very economical way to increase productivity by significantly increasing hoisting and lowering speeds when there is no load on the hook.

### Load dependent speed (LDS)

LDS provides optimum efficiency/minimum cycle time with automatic and incremental increase in hoisting and lowering speeds for medium, small and zero load. Heavy loads must be handled at slower speeds to maintain safety.

### Dual wound hoist motor possibility

VX hoists are available with dual wound hoist motors below 30kW which provides an economical two speed solution.





Speeds, acceleration and electrical braking to suit your application



## Safety critical information you need to know

# VX HOIST: Condition monitoring options

### Design Working Period (DWP) monitor

This device provides continuous monitoring of the remaining Design Working Period which is calculated from the magnitude and duration of every lift, plus a record of operating statistics. This information helps owners and authorised service technicians ensure the equipment is safe for use. Data can be accessed on the hoist or with the optional Wi-Fi module via a mobile phone, tablet or laptop.

### Remote Condition Monitor (RCM)

RCM is a top-of-the-range aid to ensuring the highest levels of safety. This fully remote monitoring system gathers safety related data and operating statistics from sensors and controllers and stores them in the Cloud. The crane owner or authorised service technician can view and monitor data at the crane site or remote from the site

at any time. Safety alerts are automatically emailed to designated persons.

#### In either case, monitored data includes:

- Remaining design working period.
- Load spectrum.
- Work cycles.
- Total hours run.
- Motor starts.
- Attempted overloads.









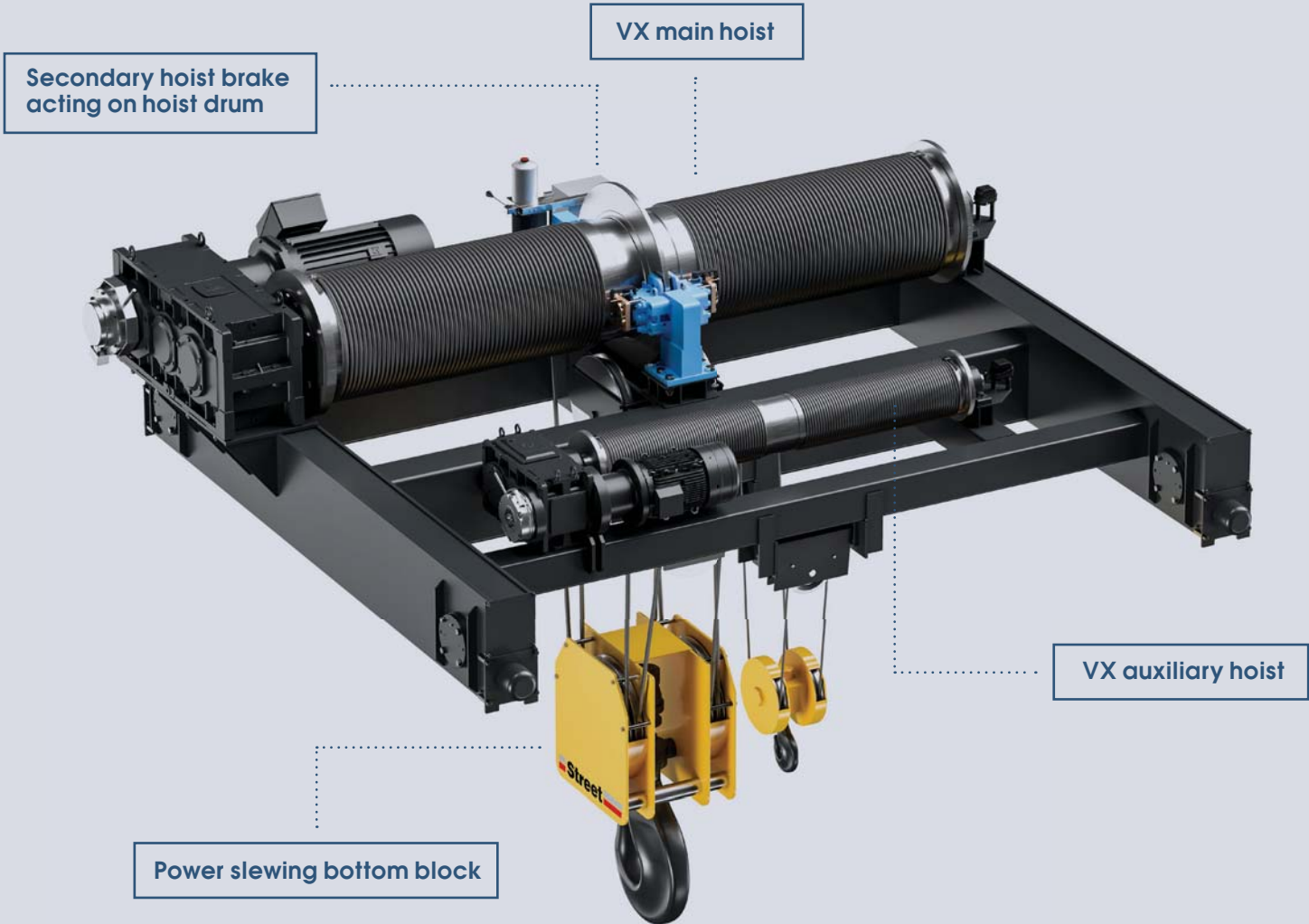
## VX HOIST: Precisely customised to your application.

Some hoisting applications in process industries or where potentially hazardous or complex loads are being handled necessitate genuinely bespoke solutions. Special processes often require the integration of additional equipment or features. Some examples of loads classified as hazardous include liquid metal and many of the lifts required in nuclear facilities. To meet these and other exacting requirements VX hoists can be engineered with a wide range of optional safety devices and special performance features including:

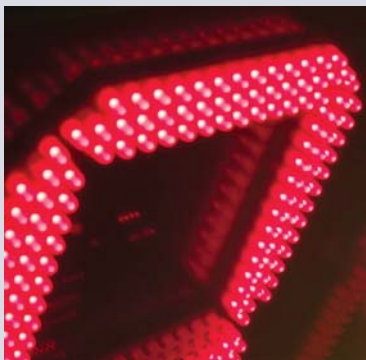
### VX Safety and Performance Features

- Second hoist brake mounted on the hoist motor to ensure safety in the event of primary hoist brake failure.
- Second brake acting on the hoist drum which is applied automatically in the event of over-speed, to ensure safety in the event of failure of any component in the hoist transmission prior to the hoist drum.
- Mechanically fail safe load arrestor based on the worm and wheel principle, which also provides independent over-speed and overload protection with optional load recovery capability for nuclear applications.
- Regenerative braking systems on variable frequency drives.
- Safety rated controls to EN13849 Category 3 PLd for lifting potentially hazardous loads.
- Bottom block operated over-hoisting limit switch in addition to the standard rotary limit switch.
- Load Dependent Speed (LDS) see page 8.
- No Load Express Lift see page 8.
- Safe torque off on variable frequency hoist.
- Remote Control with optional LCD status display.
- Micro-speed hoisting and lowering.
- Anti-sway control (prevents traverse movement causing hook swing).
- Twin hoists roped into a single bottom block and hook for super high lifts.
- Slack-rope detection and prevention.
- Ramshorn hook.
- Multiple hooks or lifting points roped from a single hoist drum to ensure a perfectly level load throughout the hook stroke.
- Power slewing hook.
- Power slewing mechanism in the hoist frame.
- Integrated load grabbing devices.
- Digital load indication.
- Load summation and overload protection for multiple hoists.
- Design Working Period (DWP) monitor with Wi-Fi module see page 10.
- Full remote condition monitoring (RCM) of safety related data, operating statistics remaining DWP etc see page 10.
- Maintenance platform.
- Motor heaters for hoist and trolley.
- Stainless steel electrical enclosure.
- Lighting in electrical enclosure.
- Design for use in non standard ambient temperatures  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ .
- Ventilation of electrical enclosure.
- Electrical enclosure heaters.
- Electrical enclosure cooling units.
- Forced ventilated motors.
- Anti derailment system on trolley.
- Base mounted fixed versions (no trolley).
- Monorail versions.
- Weather covers.

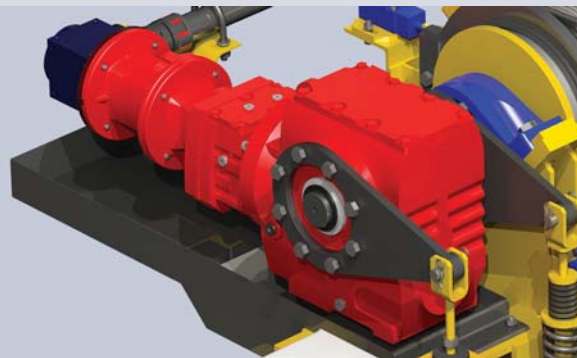




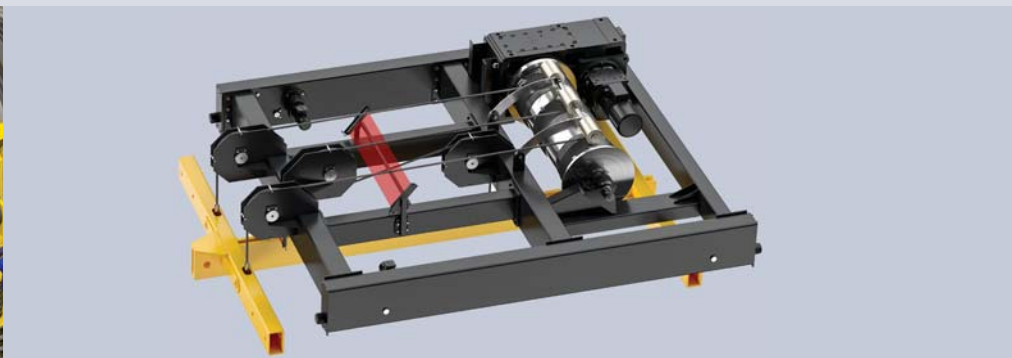
Digital load readout



Category 3 safety rated controls



Load arrestor/optional load recovery



Single hoist drum/multi-point lifting



## VX HOIST: Applications.

VX hoists are providing high endurance solutions worldwide in a vast range of applications including metals manufacture, steel and aluminium coil handling, process industries, military, nuclear, waste to energy, power generation and many more.







For more information on process integrated cranes and VX hoists please see our crane brochure 'Taking up the Challenge' or visit our website: [www.streetcrane.co.uk](http://www.streetcrane.co.uk) or [www.streetcrane.com](http://www.streetcrane.com)

*VX hoists are application specific, therefore the information in this brochure is not binding in detail with regard to specific proposals/applications unless confirmed in writing by the company.*



[www.streetcrane.co.uk](http://www.streetcrane.co.uk)

**Street**

**Street Crane Company Limited**, Chapel-en-le-Frith, High Peak, SK23 0PH, United Kingdom.  
Email: [admin@streetcrane.co.uk](mailto:admin@streetcrane.co.uk) Web: [www.streetcrane.co.uk](http://www.streetcrane.co.uk)  
Telephone: +44 (0) 1298 812456 Fax: +44 (0) 1298 814945



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