

Steeled for Safety: Picking Up Cold Rolled without Damage to Person or Product



The Challenge: Preventing the Hook from Hitting the Inner Bore

A leading steel producer in the United States. The steel producer strives to produce cold rolled coil steel to meet the demands of its customers for a high surface quality. Cold rolled material is typically coated or painted, with applications including electronic cabinetry, lighting fixtures, metal office furniture, water heaters, container manufacturers, tubing, appliances, and a variety of construction related products. Our offered gauges range from 0.011 to 0.134 inches, in widths ranging from 27 to 60 inches.

Dropped coils are, however, a danger to workers and the products themselves.

Without visual guidance, the hook from an overhead gantry crane goes down into the center bore of the roll. Contact with the bore damages the steel and requires the roll to be redone.

What You Cannot See You Cannot Stop: A Steel Producer's Incident or Hazard

Due to the lack of a safety camera, there was a crane-related incident at a temper mill. The mill erects place towers on top of coils through a process called nailing. The crane had a movable cab, but the operator could not see the hook. As a result, he accidentally drove the hook into the first tower, damaging two other towers and harming the entire worksite.

A Broader Perspective About Injuries and the Need for Greater Visibility

According to the [U.S. Bureau of Labor Statistics](#), steel workers have the sixth most dangerous occupation nationwide. The industry has 29.8 fatal work injuries per 100,000 full-time equivalent workers.

The [Occupational Safety and Health Administration \(OSHA\)](#) has further information about these fatalities. One accident report involves a "hole man," someone who takes coils of steel and utilizes slitters to cut them down, then rewinds the steel. He observed the steel as it was rewound onto a spindle after it was slitted. He was killed when he was pulled into a steel coil.



A separate report from the [New Jersey Department of Health and Safety](#) explains how a 41-year-old warehouseman at a steel cutting plant was crushed to death between two rolls of coiled steel. The steel was delivered to the plant in large coils that ranged in weight from 5,000 to 40,000 pounds and stacked in long rows on the plant floor. A 20-ton capacity overhead crane was used to move the steel inside the plant. On this day, the victim was using the crane to lift a coil that had been stacked three high. As he lifted the coil, the movement apparently dislodged one or more neighboring coils, causing one 10,000-pound coil to slip forward off the row and pin the victim against a row of coils behind him.



The Solution: Safety in Sight

In selecting the [HoistCam™ HC180](#), the customer's crane operators have been able to grab and deliver coils faster because they can see when the back foot is in or out on the coil. Operators can also easily see and read the coil IDs.



Increasing Safety Ratings by 90%

Case studies from or about users of HoistCam™ are unanimous in their emphasis on protection. One such [study](#) cites an increase in safety ratings above 90%. Respondents also credit HoistCam™ for helping them to maximize efficiency by reducing the unloading process from 9 hours to 4 hours. This is a 55%+ increase in overall productivity and efficiency.

Best Practices Conclusion: 'Zero Incidents'

"We have zero incidents since installing and using our series of HoistCam™ crane cameras," says an Electrical Planner for the steel company in this study.. Any trolley that is greater than 30 feet will need a high-end camera lens (9mm-20mm), which easily upgradable. The camera's zoom is good because the operator needs to see several places, while the programmable control unit makes it simple to switch for multiple focal points. At the press of a button, operators can focus on a specific part of a job site or lift.

The customer recommends HoistCam™ (and each particular camera) for overhead cranes, among other things.

About Netarus

[Netarus, LLC](http://www.netarus.com) is passionate about innovation and technology. The founders of Netarus have been developing the latest wireless, video, and sensor technology since 2002, and then introducing that technology to the marine, industrial, transportation, and construction industries in order to improve safety and productivity. More information is available about Netarus at <http://www.netarus.com>.



About HoistCam™

[HoistCam™](http://www.hoistcam.com) is a rapidly deployable wireless camera system that provides an operator with a direct video feed from anywhere on a job site. HoistCam™ is a rugged camera system that can be installed in seconds on the hook block of a crane to the boom tip or, at the location of the blind lift. Attached to any surface with magnets and safety lanyard, HoistCam™ improves the situational awareness of an operator and management. More information is available about HoistCam at <http://www.hoistcam.com>.



Electronic Version of Case Study

An electronic version of this case study is available at:

<https://hoistcam.com/case-studies/>