CASE STUDY: HUMAN IMPACT OF VISUAL AID TECHNOLOGIES WITH STEEL FACILITIES

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Ratings by 90% of Case Study

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

The Challenge
Preventing the Hook from Hitting the Inner Bore

The Solution
Safety in Sight

Best Practices
Conclusion ‘Zero Incidents’

A Broader Perspective
About Injuries and the Need for Greater Visibility

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

Increasing Safety
Ratings by 90%

Electronic Version of Case Study

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Techniques used to aid crane operators.

This case study discusses the techniques used, establishes some best practices and discusses the return on investment in a reduction of time and decrease in incidents.

This project was tested, rolled out and evaluated over several years.
Steeled for Safety

Picking Up Cold Rolled without Damage to Person or Product
A Broader Perspective
About Injuries and the Need for Greater Visibility

According to the U.S. Bureau of Labor Statistics, steel workers have the 6th most dangerous occupation nationwide.

The industry has 29.8 fatal work injuries per 100,000 full-time equivalent workers.
The Challenge
Preventing the Hook from Hitting the Inner Bore.

- 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.
- Gauges range from 0.011 to 0.134 inches, in widths ranging from 27 to 60 inches.

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The Challenge (Continued)

Preventing the Hook from Hitting the Inner Bore.

● 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.
The mill erects towers on top of coils through a process called nailing. Due to the lack of a safety camera, there was a crane-related incident at a temper mill. As a result, he accidentally drove the hook into the first tower, damaging two other towers and harming the entire worksite. The crane operator could not see the hook.
The customer’s crane operators have been able to grab and deliver coils faster.

They can see when the back foot is in or out on the coil.

Operators can also easily see and read the coil IDs.

In selecting the Cab Camera System

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Increasing Safety Ratings by 90%

Case studies from or about users of crane-mounted cameras are unanimous in their emphasis on protection. One such study cites an increase in safety ratings above 90% 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.

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Best Practices Conclusion

‘Zero Incident’

"We have zero incidents since installing and using our series of 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),
Best Practices Conclusion
‘Zero Incident’

“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.
Recommendations

Crane mounted wireless camera system recommendations

- Provide operator with a direct video feed from anywhere on a job site.
- A rugged camera system that can be installed in seconds.
- Attached to any surface with magnets and safety lanyard.

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Case Study

Full case study available online:

https://www.hoistcam.com/sfs