



Berkley INDUSTRIALCOMP®

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WHEELS, GRAVITY,
AND COMPLACENCY

Copper Theft

A SERIOUS WORK COMP ISSUE



Copper theft is a serious workers comp issue that can result in employee injury or death.

Introduction

The price of copper scrap is at an all-time high. The recent rise in the price of copper has resulted in thieves once again increasing their activity to steal it from operational equipment, storage yards, buildings and substations, communication property/ towers, and yard vaults.

History has proven that when this desirable scrap metal price rises, so does the crime associated with it. The added risk of desirability is a worthy effort at the current prices.

While copper is sometimes stolen from a spool or inventory, thieves often steal directly from components that are in service or may be placed in service, making the impacted system a hazardous environment for other people (employees). For example, operators or repair crews may be injured by live wires or ungrounded equipment, or unauthorized individuals (employees) may accidentally or unknowingly approach/encounter the newly created compromised area resulting in an injury or death.



What the Thieves are After

Copper is used in many forms and is an integral component of electrical, plumbing, and roofing systems. This provides thieves with many options for sourcing their stolen materials – regardless of the risk. Electrical wiring is the most common, however, there are many other aspects such as motor windings, switchgear panels, and most importantly grounding rods. These elements are commonly found in communication towers and facilities, exterior transformer areas, internal operational switchgear panels/ boxes, active construction sites, and drive systems of conveyor motors. Plumbing pipes for both water systems and related HVAC systems are also made of desirable copper. Roofing systems can be copper panels, raised ridge panels as well as flashing and coping components.

Copper theft can and usually does harm the reliability of electric systems as copper components are an essential part of most systems. If the theft occurs on a distribution level, it can have a direct reliability impact on users.





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How?

Typically, the items are removed hastily with improper tooling without any regard for collateral damage, power outages, residual hazards, latent hazards, or the thief's safety. This article's concern is for the risks created when an innocent employee encounters or becomes a victim of the hazard while working to fix it. Also, the unfamiliar skill set, selfless act, and lack of product knowledge by the thief usually result in more risks than typically assumed.

Hazards

Employees are exposed to new, undocumented, and unknown electrocution hazards, electrical burns, Lock Out / Tag Out practices that will not work, delayed cycling equipment stops, and over-current exposure. All of which can be deadly if encountered.

The unauthorized and criminal removal of grounding rods and bonding wires creates a severe hazard to the employee that expects them to be operational.

HVAC, plumbing, and roofing damages caused by thieves create the added hazards of internal maintenance personnel possibly working on these unfamiliar systems for full or temporary repairs before a proper technician is retained to perform the services.



Industry Prevention Practices

- Scrapyard places hold on materials.
- The scrapyard industry knows their clients and requires IDs for nontypical customer delivery personnel.
- Scrapyard calls police for suspicious materials.



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Other Prevention Tips

- Always check for any signs of tampering, odd door hinge conditions, damaged entry points to areas or equipment panels.
- Implement a pre-work procedure for grounding rods and grounding wires.
- Use a pre-start-up checklist for equipment, switchgear, and power systems. Do NOT start operational/plant equipment until all power sources have been inspected and documented.
- Exterior - Inspect for grounding rods and grounding wires presence on towers, transformers, and substations.
- Interior - If a burglary is suspected at your facility, ALWAYS check your electrical, HVAC, plumbing, and grounding components within the facility to make sure copper was not the target of the theft.
- Post signage indicating "Video Surveillance."
- Install video surveillance equipment to cover high-value target areas.
- Install signs indicating "DANGER."
- Using stamped grounding rods with your firm's name on them has been an effective deterrent.
- Paint copper materials black where possible to help reduce visibility. Not always an option, but it works well for grounding rods.
- Construction site – schedule copper components accordingly, keep secure, apply added security as needed based on area or secluded location.
- Secure area with fencing, barrier locks, hardened locks, and cages.

