Off-Loading Iron From Trucks – Fall Protection vs. Material Handling Hazards

The Safety and Health Department has received several calls in recent months regarding project owner or general contractor safety requirements that mandate Ironworkers to use fall protection while off-loading iron from flat-bed trucks. Our experience over many decades tells us that fall protection is not the primary safety hazard when performing this activity, but rather hoisting, rigging and material handling activities.

The International Association fully supports project safety policies that are designed to protect our members from fall hazards, and we insist on strict compliance. However, requiring the use of fall arrest systems on either flat-bed trailers, or attached to the overhead crane load-block raises many safety concerns that must be addressed. Avoiding hazards during this activity requires the skill of qualified riggers who are trained to recognize potential hazards and perform this activity in a safe manner.

The International Association is not aware of any incident trends relating to Ironworkers falling from flat-bed trailers while off-loading structural steel members. Incident trends indicate that material handing hazards are the root cause, not falls. Special consideration must be given to shifting loads during transport, boom deflection and shifting loads during hoisting, limited space on job sites, and recognition that flat-bed trailers are not suitable for fall arrest systems.

The Ironworker Qualified Rigger Program offered through the National Training Fund at Local Union training facilities helps to ensure that all Ironworkers performing this activity of installing hoisting slings and off-loading structural members can safety perform this activity. It is important for this work activity to be performed under the direct supervision of a competent person, who has been designated by the employer and given the authority to intervene, and stop any unsafe acts or conditions.
Toon Tethering…the New “Tie-off”? – Jeff Norris, Canadian Safety Coordinator

On many projects today, owners and general contractors are requiring “tool tethers” in the contract safety specifications as a method to protect site personnel from falling objects on the worksite. This has created many calls to the Safety and Health Department in the United States and to me in Canada. We all want to prevent any tool from dropping during steel erections activities. However, members have expressed concerns regarding entanglement risks when using multiple lanyards attached to spud wrenches, bull-pins, and beaters. Connecting structural steel certainly highlights this concern. The systematic tethering and securing of hand tools has traditionally been regarded as sufficiently covered though mechanisms such as “exclusion zones” and other “damage limitation” practices.

Arguably, the best approach to prevent falling tool hazards in the United States may be to follow the existing OSHA 1926.759(b) standard that states: “The controlling contractor shall bar other construction processes below steel erection unless overhead protection for the employees below is provided.” Falling tools and objects continues to be one of the major causes of workplace fatalities and has been an area of focus by our industry.

Reasons to “Stop the Drop”

1. When dropped, tools and equipment do not typically fall straight down into exclusion zones but can be blown, bounce and ricochet significant and unpredictable horizontal distances.
2. Regulations are changing, and specific safety standards directives now state that, when working at height, dropped tools must be eliminated as far as is practical. It is no longer sufficient to merely manage or limit injury potential.
3. In addition to fatalities and personal injury consequences, incidents involving falling tools and objects often result in costly project delays and litigation.

We want to make every efforts to prevent falling object hazards to our members throughout the United States and Canada. A tripartite approach to the “Countdown to Zero Fatalities and Injuries” requires communication and collaboration between project owners, contractors, and the Ironworkers Union. Together, we can work toward the development of best industry practices to “Stop the Drop”. In some workplace applications the use of “tool tethers” may be the best approach. In other situations, “tool tethers” may not be the best form or method of protection, and could create unnecessary hazards to Ironworkers using them. When considering the use of “tool tethers”, it is important to evaluate the workplace activity hazard and determine the proper safety equipment, just like any other safety equipment that Ironworkers commonly use during the steel erection process.