ESSENTIAL 29: Powered Industrial Truck Safety



Key Takeaways:
– Learning about powered industrial trucks, in addition to understanding the most common industry types and their purpose in the workplace.
– Observing workplace, vehicle based, and operator influenced conditions that may contribute to PIT-related accidents.
– Understanding the preoperational, operational and load handling requirements for PITs and corresponding safe operating practices.
– Recognizing how proper maintenance, refueling and recharging of PITs contribute to the safety of all employees.
– Learning the components of a comprehensive safety training program.

Course Description
Safety professionals agree, work with industrial trucks and similar vehicles present issues of serious liability and concerns that must be mitigated through workforce training and testing for competency. Automobiles are dangerous, and transportation accidents on the job kill employees everyday. The unique utility of these vehicles creates special risks. Commonly, they are used for tasks in work environments that are already considered high-risk, so they add to the list of cautions on worksites for many different professions.

The American Society of Mechanical Engineers defines a powered industrial truck (PIT) as a mobile, power-propelled truck that can carry, push, pull, lift, or stack materials, and includes vehicles commonly known as forklifts, pallet trucks, rider trucks, fork-trucks, or lift-trucks. Vehicles excluded from this definition are ones used for earth moving and over-the-road hauling.

There are many conditions and situations in the workplace present potential hazards when and where PITs are operated. Basic instructions for keeping safe when working with and around powered industrial trucks (PITs) include:

Obstructions In all directions, workers must watch for obstructions. All contact with overhead obstructions can damage building systems and the load, or cause tip overs. Avoid driving over an obstruction as it can result in a ‘tip over.’ Speed bumps and railroad tracks that cannot be avoided should be crossed slowly and at a 45 degree angle to allow one front wheel at a time to roll over the obstruction, for example Pedestrian Traffic Employees must be alert for

pedestrians and workers, always giving pedestrians the right of way. Whenever driving, employees should drive slowly and sound the horn whenever traveling where vision is obstructed (i.e. approaching blind corners). Employees never should allow coworkers to stand or pass beneath an elevated load. It is important for avoiding dangerous scenarios to make eye contact with pedestrians when possible and signal intentions clearly. Follow these guidelines to help prevent accidents: – Always yield to pedestrians – Everywhere vision is obstructed, drive slowly and sound horn – Always use a spotter for blind spots – Keep a clear view in the direction of travel – Never allow anyone to pass beneath an elevated load – Always make eye contact and signal intentions Plant/Site safety managers need to provide measures to minimize accidents, including: – Pedestrian walkways that have permanent railings or other protective barriers – Pedestrian walkway lining on the floor if barriers cannot be used – Sufficient walking space on at least one side, if pedestrians must use equipment aisles – For blind aisle intersections, convex mirrors – Traffic control signs – Grades and ramps Drive “forks upgrade” when loaded to prevent tip over and the danger of the load falling off. Drive “forks downgrade”, when empty, to prevent tip over. Do not turn or drive diagonally on a ramp. All pallet trucks need to be walked “forks downgrade” regardless of whether loaded or empty or the direction of travel. Loading Docks In the case that you are operating on a loading dock, observe posted speed limits, watch for others and be aware of the dock’s edge, which should be painted for improved visibility. Additional caution is required for wet or slippery conditions. Ensure that dock plates are properly secured, in good condition, and meet the required load capacity. Enclosed/Hazardous Areas Watch for exhaust and carbon monoxide build up when operating an internal combustion powered PIT in an enclosed area like a trailer. In certain hazardous locations, only designated PITs can be used. OSHA standards make these designations and employers are responsible for following them. Slippery Conditions Any spill of oil, grease, water, or other substance can cause the PIT to skid. Tip overs can be caused from ice, snow, mud, and gravel creating an uneven surface. Resist crossing slippery or uneven areas, and drive slowly if you can’t; report these conditions and warn others. PIT operators need to be aware of conditions in their workplace. Being conscious of pedestrian traffic is especially important as it is a constant, but unpredictable, factor. Due to the dynamics of the workplace, operators, pedestrians and plant safety managers have a shared responsibility to keep pedestrians safe in the workplace.