Service Pit Safety and Pit Cover Options

*What are some common mistakes operators and employees make?*

The facility operator of an oil-lube service center may believe the hazards of the workplace are simply part of the job, and for the employee, it may be the same. Why should there be “safety upgrades” if nothing has gone wrong in recent memory? Luckily, this thought is not common today, but was true just decades ago.

Today, aside from continual safety awareness and safe practice training – considered the first line of defense, many operators miss the fact that “home-grown” safety measures and devices implemented some time ago may no longer be effective or compliant.

In regard to service pit safety; loose board covers, bent and missing metal covers, nets with large holes, yellow tape, cones and caution signs may not be enough, not only to be compliant, but to be safe. OSHA is happy when a pit is either fenced off, or completely and effectively covered when not in use. This aspect of basic shop safety cannot be stressed enough.

*What are some of the simplest and most effective solutions?*

Operators often over-protect or under-protect their open pit. Some oil-lube sites install metal or fiberglass grate systems creating a surface suitable for walking as well to keep stray cars from entering the pit. The grate systems are simple yet expensive, are sectionalized into heavy stacking pieces and require precise installation alignment. Tracked systems with moving parts, wheels and slots – jam, requiring maintenance and down time.

The simplest, most effective and most economical solution is a safety net system that easily slides along a pair of cables installed on opposite sides of the pit. The strength is in the framework consisting of cable and anchors. The safety net must function to resist ware and tare, including seepage from oils and solvents, and the net must be able to withstand the impact of a falling person with minimal deflection.

Not all net systems are created equal. Nets made from high tenacity polypropylene will have acceptable deflection with safe impact absorption. Nets made from nylon material may have too much deflective stretch, potentially hitting bottom before fully absorbing an impact. A net without a sewn border will simply not last. Be cautious of inexpensive fine mesh nets; these are usually fish nets that are more of a tangle than a barrier. Cable and anchors ultimately distribute the load to the four corners of the pit. The hardware must be rated to at least twice the working load of the system.

A web net system is a hybrid with its own set of complexities that is neither a safe walk-on system or a safe fall protection system due to its limited deflection characteristics. Typically using a track that requires maintenance, web net systems are priced somewhere between grid covers and sliding nets.

Think about your purpose. Do you need a net to catch people from an accidental fall, or do you need something you can walk on or drive onto? Pit covers as well as any safety device is considered effective only when they work as intended and are habitually used by the employees.
What are the most dangerous aspects of working in the pit?

Once you are in the pit, unless you fell in, or something from a vehicle falls on you, there is no real danger. Safe shop practices that apply above the pit would also apply within the pit.

If a vehicle being serviced only covers a portion of the pit, any exposed pit openings must remain protected from a potential fall. Proper ventilation is upmost, and as with any enclosed space, an exit must always be made available.

BayNets™ – An Overview

BayNets sliding net systems add an enhanced level of safety to any vehicle service facility by protecting personnel from injury caused by accidental tripping, slipping or walking into an open pit.

The load bearing system will safely absorb the impact of personnel who accidently fall into an otherwise unprotected floor opening. The net slides on two parallel guide cables to be opened and closed by hand from either end to gain access to the maintenance pit and the underside of the vehicle. Two nets may be used within one pit to provide greater versatility with four sliding ends.

BayNets is easily adaptable to rail, bus and virtually all other commercial fleet maintenance facilities.

BayNets meet the employer’s requirement to protect employees from falls within walking and work service areas; OSHA 1910.22(c) and General Duty Clause Section 5(a)(1) for an employee safe working environment.

• Installed BayNets Safety Systems have a tensile strength of over 3 tons.
• Non-snag, easily retracted netting glides open and closed from either end of the bay. No moving parts.
• BayNets is custom designed to meet your service bay requirements including maintenance pits of any shape, size or operating configuration.

Thoughts of OSHA

The OSHA General Industry Code 1910 pretty well covers the preventive measures recommended for a safer working environment. But OSHA expects more, they expect safe common sense within the workplace. OSHA Sec.5 General Duty Clause.

The safest shops are winners because management leads by good example and good communications. A working environment where safety is policy and infractions are quickly corrected, stands tall as simply a better way to do business.