

Warning! There are No Shortcuts to Safety

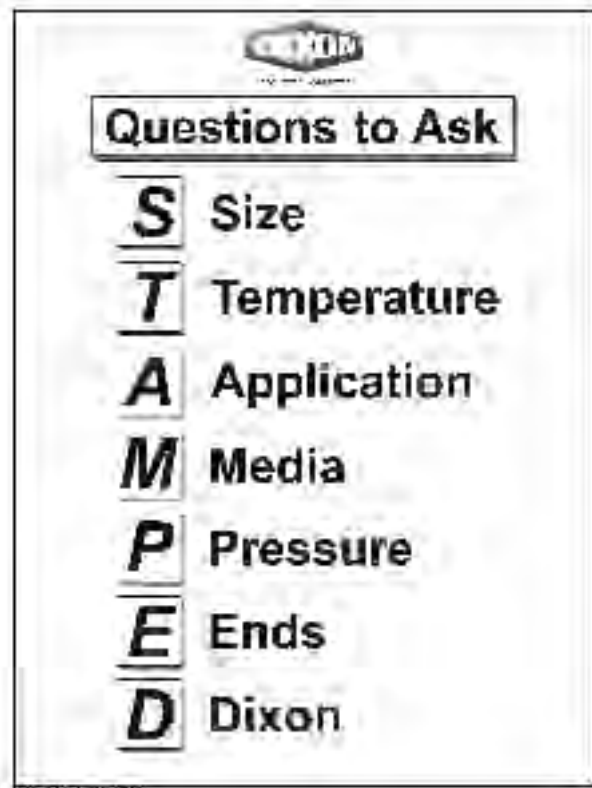
BY PHIL KIMBLE

No matter how stern the warning, we are sometimes blind to the consequences. Even with a manufacturer's warning, productivity is often of greater importance than safety. Until someone gets severely injured.

A typical petroleum distribution center uses the same hose assemblies to load all of its products. When the loading process is complete, the hose is uncoupled from the pump and a cleaning plug, otherwise known as a "pig," is inserted into one end. The end is then capped and slightly pressurized with air. The air pressure makes the "pig" travel the length of the assembly and come out the other end. This removes any residual product from the interior of the hose to prevent contamination of the next product to be loaded.

One such distribution center decided that it would use aluminum cam and groove couplings in its loading hoses. Because they are lightweight and easy to connect, it was thought that they would speed up the load-clean-load cycle. During the first "pigging" attempt, the cleaning plug got stuck at the fitting at the far end. The first course of action was to increase air pressure. After a major increase in pressure, the "pig" did exit the hose, but at a velocity that would allow it to leap tall buildings in a single bound. Another course of action was needed. It was decided to bore out the fittings to allow easier passage.

These "improved" assemblies were put into service, but all was not going as planned. Even with the improved passageway, the "pig" still lodged in the fitting unless the pressure was increased to levels far beyond what anyone anticipated would be necessary. The couplings were also breaking frequently. During a routine visit by the distributor salesman, the rea-



son for his increased sales of aluminum cam and groove couplings was uncovered.

The salesman contacted the coupling manufacturer. Together they met with the plant manager and safety director. Even after a stern written warning from the coupling manufacturer detailing potential catastrophic events, bored out aluminum cam and groove couplings remained in service. The plant manager's rationale was that these couplings made the job easier for his workers and only one fitting broke when it was dropped on the concrete floor. The one that broke while loading product did result in a spill, but it was not deemed significant enough to change the process.

Later, during a routine "pigging" operation, a worker from another department inadvertently walked into the area just as the assembly was pressurized. The worker was only a few feet away when the "pig" slammed into the fitting making it explode like a grenade. He received multiple shrapnel wounds, and the hose whipped, striking his head, breaking his jaw, and puncturing one eardrum. He was in a coma for almost a month and spent the next four months in the hospital.

When manufacturers issue warnings about their products, they do it for a purpose. Disregarding those warnings can lead to catastrophic, even deadly, results. "Keep it safe" by heeding manufacturers' notices and warnings. They know their products better than anyone. ■

