Inspecting Hose Assemblies Keeps Personnel and Equipment Safe

By Phil Kimble

A vacation on a cruise ship is full of fun and adventure. Exploring exotic ports of call, making new friends, eating more food than you ever thought possible and lots of entertainment is just part of the experience. With nearly one crew member for every two passengers, the level of service and attention to detail is unparalleled. It is a whole new world.

However, there is another, practically unseen, world on a cruise ship. When a ship comes back to its port of origin, there are only a few hours between the current passengers disembarking and the arrival of new guests. Hundreds of staterooms have to be thoroughly cleaned. Huge amounts of luggage must be unloaded while the luggage of the arriving guests must be loaded and delivered to the appropriate room. Tons of food, water, beverages and other supplies must be loaded and properly stowed. All of this is orchestrated and choreographed with the precision of a Broadway musical. In addition to loading the creature comfort items, diesel fuel is loaded either from the dock or from a barge in the harbor. Thousands of gallons of diesel are pumped into the fuel tanks of a ship after every trip. Big diesels, some with as many as 14 cylinders and pistons the size of 55-gallon drums, power the ship.

The Coast Guard has very strict rules and regulations about hoses going from shore to ship and ship to ship. Fuel loading hoses, and many other "over water" hoses, must have the fittings built into the hose or the hose must have permanently attached couplings. Personnel aboard the ship receive the fuel hose through a doorway in the side of the ship and connect the hose to a pipe that fills the tanks. The compartment where the fuel hose is connected is small. Because it is relatively close to the water and near the engine room, it is a sealed compartment. The assigned crew is to stay at this post during the entire loading process, disconnect the hose when loading is complete, and seal the door back up when the loading hose is back on the barge.

In one instance, the crew members assigned this task had been through the process many times without an incident. Because they knew the routine so well, they decided during a recent refueling to connect the hose to the tank fill pipe, and then attend to some other business. They thought they knew exactly how long the fuel loading process took and would be back in plenty of time.

The crew on the fuel barge was unaware that the hose connecting the barge to the ship was damaged while in storage. When the barge began loading fuel onto the ship, the damaged hose began to leak near its connection to the fuel tank. Even though the leak was small, the diesel fuel began collecting in the compartment. When the crew members returned and opened the door to the fuel-filling compartment, many gallons of diesel fuel rushed by them. The fuel found its way to the engine compartment coming in contact with hot pipes then bursting into flames. Luckily, no one was injured and the fire did not damage any equipment.

Although it took only a few minutes to put out the fire, thick heavy smoke permeated the entire ship. The damage cost the cruise line millions of dollars in revenue because the ship was out of service for almost a year.

To avoid potential harm to personnel and equipment, Dixon stresses the importance of inspecting all hose assemblies prior to each use. Worn out fittings, attachment devices, hose and accessory items must be replaced. Retaining devices (safety devices) such as clips, cables or chains must be used. Continually educate your employees about the proper use, care and potential hazards of hose assemblies. Take advantage of Dixon's free Hose Assembly Safety Program and the follow-up training seminar to aid you in setting up your own inspection program. If you have any questions about applications, use or assemblies, call Dixon at 1-800-355-1991.