

Information Bulletin

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Title: Defective Stitching Found In Fall Protection Harness

Date: November 7, 2006

Identifier: 2006-RL-HNF-0045

Lessons Learned Summary: Regardless of the age or type of Personal Protective Equipment (PPE) - users must always perform a pre-use check to ensure their safety. Personnel should always verify the equipment they are going to use is in proper working condition. Older equipment can be weakened by wear and tear. However, new equipment may contain manufacturer's defects.

Discussion of Activities: At an industrial facility in New Jersey, on about September 1, 2006, a worker was preparing to enter a fuel tank through a man hole. The worker was wearing a brand new fall protection retrieval harness manufactured by Gemtor Inc. While preparing to enter the tank the worker was suspended by the harness, the worker repositioned his weight to make access to the tank easier. At this time, one of the two front anchor D-rings pulled loose from the harness. It was supposed to be sewn in place during manufacturing, it was not. The worker was still protected by the fall protection cable (in the back) and the second front D-ring which is part of the retrieval system. The worker was able to get out of the entryway and no injury resulted.



Analysis: In examining the harness it was observed that a stitch pattern on the right-side of the harness was missing. It had been glued together as one part of preparing the harness during the manufacturing process. It would normally then be sewn into position for strength. The stitching process was inadvertently missed and the manufacturer's inspection was inadequate to catch the defect.

The manufacturer stated, "Our conclusion is that this is an isolated occurrence; Gemtor's acceptance rate on work in process has been greater than 99% over the past twelve months. Gemtor's policy is 100% inspection on all products."

Recommendations:

- When inspecting harnesses prior to use, compare each side to the other to verify that each is a mirror image of the other. Evaluate the stitch patterns, D-rings, degradation, and cleanliness.

- For all PPE, whether previously used or brand new, verify all components are free of defects and the equipment is in proper working order prior to use.

Cost Savings/Avoidance: Not evaluated

Work Function: Occupational Safety and Health - Personnel Protective Equipment

Hazards: Personal Injury / Exposure

Keywords: Personal Protective Equipment, Safety, Inspection, Fall Protection, Hoisting and Rigging, Harness

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