# Laundry Worker Killed by Metal Ring



A laundry worker was killed instantly when he was struck by a piece of metal ejected from a water extractor machine. He was one of about 75 workers covering a day and an evening shift. Laundry was received in bags, sorted, washed, dried, ironed, folded and packed in this laundry plant.

Newer washing machines in use had wash, rinse and spin cycles. Older machines just washed, rinsed and drained water. The laundry was then transferred to a centrifugal extractor machine to spin away excess water before drying. This machine had a five-foot (1.5-meter) diameter drum about 2.5 feet (.75 meters) deep. The hinged lid was raised and lowered hydraulically. The machine was locked when the timer was set, and was supposed to shut off automatically if it went off balance. The extractor reached a speed of 750 revolutions per minute.

The victim had put a half-load into such a centrifugal extractor shortly before he was killed. He shut the top and set the timer. He was waiting for the machine to finish its five-minute spin cycle and two-minute brake cycle. A hinge on the lid snapped. The lid flew off, breaking a pipe and gouging a cinder wall. A metal ring on the drum split and the pieces became airborne. One piece of metal struck and killed the worker. Pieces of the machine were found 50 yards (45 meters) away from the machine.

The machine continued to spin until a co-worker turned it off with the timer switch.

**What went wrong to cause this fatal incident?**

Investigators found the machine had not been inspected and maintained. Lubrication was about the only maintenance that had been done regularly. Two shock absorbers were missing from the machine. Other possible factors were metal fatigue from years of use, broken spot welds and an unbalanced load.

*A schedule of preventive maintenance in your facility can help you avoid tragedies such as this one. Make sure equipment is in good running order at all times. When essential replacement parts are no longer available from the manufacturer, replace the machine. You should learn safe use of the equipment, including correct loading to keep it in balance.*