

## **19 Crushed by winding machine – Inspection # 1242294**

A **53 year old male** employee was fatally injured when he was crushed by a secondary arm and the frame of a Tampella paper winding machine in a paper mill. On the day of the incident, employees working at the Tampella winding machine were in the process of winding up a parent reel with fresh paper coming out of the mill. Once the parent reel is full, the Tampella machine will slit the paper from the mill, and move the parent reel onto a secondary arm, as a new parent reel moves into place to start the winding of paper coming out of the mill. At some point during this process, the paper “snapped off” the second parent reel. The Tampella winding machine uses compressed air as an engineering control to blow the paper back onto the reel, but it did not work. Paper was still coming out of the mill at high speeds and started to build up around the winding machine. The victim and another employee went under the guards between the secondary arm and the machine frame using high pressure air hoses to manually blow the paper back onto the parent reel. As the victim was in this position, the first parent reel was removed off the machine and the secondary arm moved back to position, to accept the second parent reel, crushing the victim. During interviews it was determined that this type of “snap off” rarely occurs, but when it does employees will go underneath or reach through the guards on the sides of the Tampella machine to help blow the paper back over the parent reel. The employer did not have procedures in place for employees to follow when this type of event occurs.

### **Citation(s) as Originally Issued**

A complete inspection was conducted at the accident scene. Some of the items cited may not directly relate to the fatality.

#### **Citation 1 Item 1**

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| 29 CFR 1910.212(a)(1) | <p><b>One or more methods of machine guarding was not provided to protect the operator and other employees in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips and sparks.</b></p> <p>In that there was not adequate guarding to protect employees from leaning or reaching into the Tampella winding machine. An employee was fatally injured after being crushed between the pneumatic secondary arm and the frame of the machine.</p> |
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#### **Citation 1 Item 2**

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| 29 CFR 1910.261(k)(13)(i) | <p><b>A guardrail that complies with 29 CFR part 1910, subpart D, was not provided at broke holes.</b></p> <p>In that an unguarded broke hole was located underneath the drive roller and air shower of the Tampella winder machine. The hole was approximately 3 ½ feet wide and 23 feet long and the distance to the conveyor below the hole was approximately 10 feet.</p> |
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Photo 1 of 2 – The parent reel where the “snap off” occurred is located in the primary arms designated by the red square. The reel that had just finished was sitting on the frame rails designated by the red arrows. The yellow arrow designates a fall hazard where scrap paper would be removed by a moving conveyor located below the machine.



Photo 2 of 2 – The victim went under the guard designated by the red square, and was crushed by the secondary arm and the frame of the Tampella winding machine. There were guards designated by the red arrow in place on each side of the machine, but they did not keep employees from going under them.