

19 December 2010
Issue Number 0210

Major Lost Time Accident / Contact with Moving Machinery

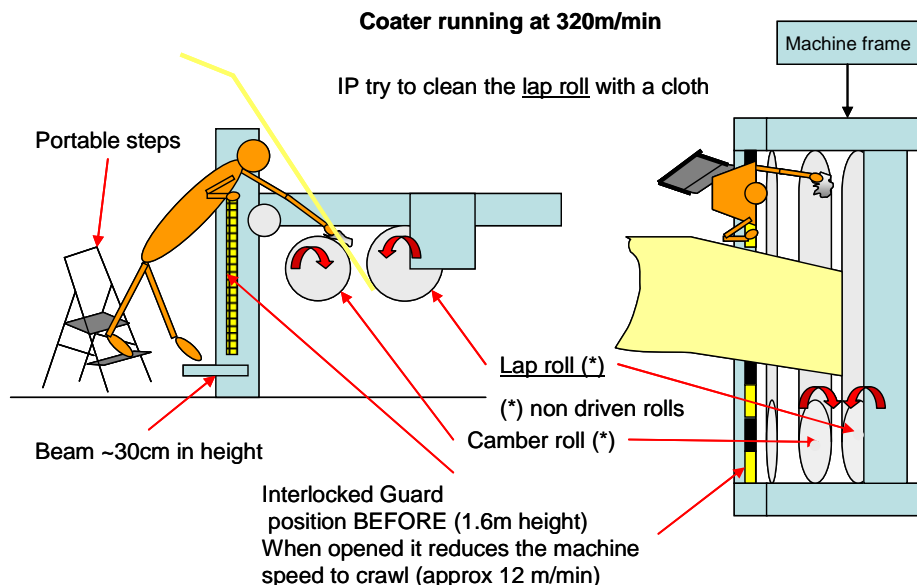
On Friday 15 October 2010, a 51 year old coater man, with 17 years working experience in the paper industry, fractured his left arm and hand, while attempting to clean a lap roll whilst the machine was in a running condition. **Potentially the consequences could have been fatal.**

Background information

The incident occurred on a coater machine, where part of the process involves paper coming into contact with 'coating rolls', which are covered in mix. Under normal running conditions rolls get dirty due to the proximity to the coating rolls. For commercial reasons, sprays are not practical as this would cause splashing to the paper and effect quality. When the machine runs at speed it is easier to remove coating mix from the rolls whilst they are turning – these are not drive rolls, therefore reduction in the machine speed reduces tension, which eventually will stop the rolls from turning. There is an interlocked guard in front of the rollers, which reduces the machine speed to crawl (approx 12 m/min) when opened to allow access for cleaning.

Description

In an attempt to clean a 'dirty' roll, the injured person stood on an elevated machine frame beam in order to lean over an interlocked guard to clean the lap roll with a cloth whilst the machine was in a running condition. The cloth became entangled and the IP's arm momentarily was pulled into the gap between the adjacent (non driven) camber roll. He immediately pulled his arm free and got help.



Immediate Actions:

An immediate root cause analysis was undertaken following the accident, and the following immediate actions were implemented

- The coater remained shut all day until modifications (extensions) to the guard were complete to ensure that there is no way to reach over and defeat the guard. Modifications were also made to Coating Head 2 which has a similar interlocked guarding arrangement.



Guard after modification

- Instructions were issued to all crews that the machine must be STOPPED in the interim for cleaning tasks until a full assessment and suitable SSOW are agreed.

Additional actions:

- Full assessment review / roll cleaning on coaters + new SSOW
- Managers has been asked (per shift) to review work practices being undertaken when it is required to access to an internal part of an equipment, with or without a tool, even from the outside of the equipment

To be considered:

- Design of processes should be challenged to suppress or minimize and make safer any manual operations like cleaning, feeding etc.... (positioning of equipments, protections against dirty, automation, design of guarding...)
- Guards should prevent any crossing using available devices or equipments (bars, beams, steps, portable steps, ...)
- Risk assessment must cover all tasks supporting operations (cleaning, maintenance etc....)
- Procedures must be fully documented with workable, clear and agreed SSOW
- Managers should pay attention to practices implemented by operators, especially when they contradict the standards, and act appropriately.

CPI Additional Advice:

It is good industry practice for all companies to ensure that:

- A thorough 'task related' risk assessment is undertaken to identify **ALL** those tasks, including the infrequently performed ones, which could *potentially* involve a machine intervention. Include predictive human error types e.g. operator omitted plan in error, or omitted plan deliberately. Ask what the worst foreseeable outcome would be if things went wrong, and what could you do reduce the error or improve the recovery of a situation.
- Training arrangements are reviewed to ensure that all operators are fully trained and competent to complete the tasks expected of them.
- Any manual intervention is strictly controlled by an agreed SSOW and that measures are in place to monitor compliance.

Please note: None of the above CPI actions for consideration, implies or confirms that these were contributory factors to the incident. They are merely pointers for companies to consider. Investigations are still ongoing and until completed the only factual information available has been supplied by the company in the details of the incident.