



## LTI – Zurich Laboratory – Cut on head

<b>Number</b>	2022-17	<b>Date</b>	15.12.2022
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**Summary:** On November 30<sup>th</sup>, the Injured Person started some repair works on an the electrolysis machine in HZI Zurich Laboratory.

As a part of the activity, IP needed to bore 4 holes on a metal panel with a drill.

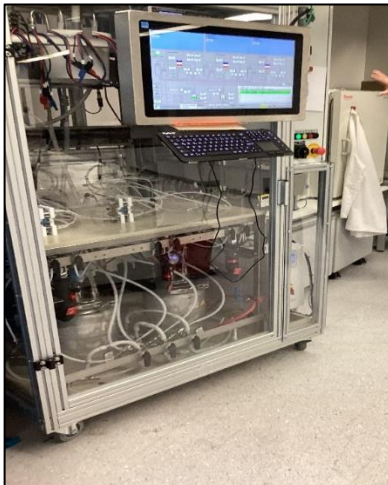
He placed the metal panel on the ground and, standing up with his weight on the drill, he began drilling.

Suddenly the drill bit broke causing the IP to lose his balance and hit his head on a sharp edge of the electrolyser's frame.

### Outcomes:

IP suffered a cut on his head which required medical attention. The physician applied 6 steri-streps on the wound and recommended 5-days rest to IP.

### Incident Classification: LTI



Picture 1 - Electrolysis test bench (overview)



Picture 2 - Position of IP during the drilling (simulation)



Picture 3 - Metal frame with sharp edges.

### Root Causes and Contributory Factors

- Lack of Procedure (activity not covered in Risk Assessment)
- Lack of Risk Perception (IP didn't perceive the risk of falling forward and hit his head)
- Work Preparation (the activity started without a previous proper organization, adopting a wrong posture, and not taking in consideration ergonomic aspects).

### Lesson Learned

- Provide the necessary materials and equipment (i.e. a work bench) to be used for such activities (as drilling and other maintenance works) ensuring correct posture.
- Risk assessment to be revised. Maintenance activities on electrolyser to be included. Relevant risks and mitigations to be considered. Ergonomic aspect to be considered as well.
- Sharp edges protection to be provided, where applicable.



Every Lesson Learned is an opportunity to avoid recurrences.  
What have you done to avoid a similar incident on your project?

