

Hydraulic sample extruder – finger laceration

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What happened?

Whilst using a hydraulic sample extruder in a laboratory, the technician caught and injured his finger between the Shelby tube and extruder ram while trying to stabilise the dolly.

The incident resulted in a lost workday case.

What were the causes? What went wrong?

The investigation identified the following contributing factors:

- Training – insufficient task training and competence assessment.
- Supervision – ineffective supervision.
- Risk Assessment – the task risk assessment did not consider the equipment limits and functions or advances in technology, therefore not all the hazards and associated risks were identified or controlled.
- Design – the sample extruder design is dated and does not consider human factors or ergonomics.
- Line of Fire – the technician placed his hand between the moving hydraulic sample extruder ram and Shelby tube.

Lessons learned

- Employee training and competence assessment, together with the appropriate level of supervision, is essential.
- Risk assessments and work instructions should be current and periodically reviewed to take account of new information, changes in technology and legislation.
- A standardised hydraulic sample extruder design / type and use would be central to the reduction of incidents of this sort.

Actions

- Improved employee training, competence management and supervision requirements.

IOGP Life Saving Rules:



Line of fire

- Reviewed and revised equipment and task risk assessments.
- Improved signage and labelling, start/stop controls and added guard for moving parts / shear point.
- Standardised hydraulic sample extruder design / type and use across the company.
- Develop common operating procedures for this equipment.

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