ID	29387	**Status**	**Date**
Risk Area	Risikovurdering: Helse, miljø og sikkerhet (HMS)	Created	10.06.2018
Created by	Haakon Lie Hokstad	Assessment started	10.06.2018
Responsible	Haakon Lie Hokstad	Actions decided	10.06.2018
		Closed	10.06.2018

Risk Assessment:

Tensile Testing

Valid from-to date:
1/15/2018 - 6/11/2018

Location:
Trondheim

Goal / purpose
Test approx 80 PMMA specimens for the master thesis

Background
Gather material data on the specimens

Description and limitations
Tensile tests until specimen fracture. The longest test will take approx 3 minutes.

Prerequesites, assumptions and simplifications
The fracture loads will range from approx 1000 N - approx 2500 N. In most tasting cases fracture load vill be close to 1000 N.

Attachments
[Ingen registreringer]

References
[Ingen registreringer]

Summary, result and final evaluation

The summary presents an overview of hazards and incidents, in addtition to risk result for each consequence area.

Hazard: **Squeeze Danger**

Incident: **Squeezing of hands and fingers**

Consequence area: Helse Risk before actions: Risiko after actions:

Planned action	Responsible	Registered	Deadline	Status
Scattering metal	Haakon Lie Hokstad	10.06.2018	11.06.2018	Submitted

Hazard: **Scattering material**

Incident: **Could affect eyes**

Consequence area: Helse Risk before actions: Risiko after actions:

Planned action	Responsible	Registered	Deadline	Status
Squeeze danger	Haakon Lie Hokstad	10.06.2018	11.06.2018	Submitted

Final evaluation

This risk assessment was conducted by few people, some points could therefore have been missed.

Organizational units and people involved

A risk assessment may apply to one or more organizational units, and involve several people. These are lsited below.

Organizational units which this risk assessment applies to

- Institutt for maskinteknikk og produksjon

Participants

[Ingen registreringer]

Readers

[Ingen registreringer]

Others involved/stakeholders

[Ingen registreringer]

The following accept criteria have been decided for the risk area Risikovurdering: Helse, miljø og sikkerhet (HMS):

Helse	Materielle verdier	Omdømme	Ytre miljø
			

Overview of existing relevant measures which have been taken into account

The table below presents existing measures which have been take into account when assessing the likelihood and consequence of relevant incidents.

Hazard	Incident	Measures taken into account
Squeeze Danger	Squeezing of hands and fingers	
Scattering material	Could affect eyes	

Existing relevant measures with descriptions:

Protective Equipment

Safety goggles and protective shield.

Risk analysis with evaluation of likelihood and consequence

This part of the report presents detailed documentation of hazards, incidents and causes which have been evaluated. A summary of hazards and associated incidents is listed at the beginning.

The following hazards and incidents has been evaluated in this risk assessment:

- **Squeeze Danger**
  - Squeezing of hands and fingers
- **Scattering material**
  - Could affect eyes

Detailed view of hazards and incidents:

Hazard: Squeeze Danger

Incident: Squeezing of hands and fingers

Likelihood of the incident (common to all consequence areas): **Likely (3)**

Kommentar:
[Ingen registreringer]

Consequence area: Helse

Risk:

Assessed consequence: **Medium (2)**

Comment: [Ingen registreringer]

Hazard: Scattering material

Incident: Could affect eyes

Likelihood of the incident (common to all consequence areas): **Less likely (2)**

Kommentar:

[Ingen registreringer]

Consequence area: Helse

Risk:

Assessed consequence: **Very large (4)**

Comment: [Ingen registreringer]

Overview of risk mitiating actions which have been decided:

Below is an overview of risk mitigating actions, which are intended to contribute towards minimizing the likelihood and/or consequence of incidents:

- Scattering metal
- Squeeze danger

Overview of risk mitigating actions which have been decided, with description:

Scattering metal

Prepare a check list with the required safety measures noted. Look at this list before starting the test machine. List should include points as; covering shield, safety goggles, earmuffs (if necessary) etc.

Action decided by: Haakon Lie Hokstad

Responsible for execution: Haakon Lie Hokstad

Deadline for execution: 6/11/2018

Squeeze danger

Have a set of rules when entering the lab. The only way to avoid squeeze danger is by not being clumsy. This is not easily changed for a person, but some factors can increase the risk of doing mistakes. For example lack of sleep, fever, emotionally unstable, alcohol etc.. This are some factors that often makes a person negligent.

Action decided by: Haakon Lie Hokstad

Responsible for execution: Haakon Lie Hokstad

Deadline for execution: 6/11/2018

Detailed view of assessed risk for each hazard/incident before and after mitigating actions

Hazard: Squeeze Danger

Incident: Squeezing of hands and fingers

Likelihood assessment (common to all consequence areas)

Initial likelihood: Likely (3)

Reason:

Likelihood after actions: Less likely (2)

Reason:

Consequence assessments:

Consequence area: Helse ***Risk:***

Initial consequence: Medium (2)

Reason:

Consequence after actions: Large (3)

Reason:

Hazard: Scattering material

Incident: Could affect eyes

Likelihood assessment (common to all consequence areas)

Initial likelihood: Less likely (2)

Reason:

Likelihood after actions: Unlikely (1)

Reason:

Consequence assessments:

Consequence area: Helse

Risk:

Initial consequence: Very large (4)

Reason:

Consequence after actions: Very large (4)

Reason: