

STUDENT REPORT

How can a large manufacturing company maintain or increase safety awareness on the shop floor in an everyday situation?

A Master Thesis, written in the fourth semester of Risk and Safety Management at Aalborg University in Esbjerg

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Preface

This is a master thesis of the master's program Risk and Safety Management at Aalborg University, Esbjerg.

The purpose of this thesis is to make recommendations for large manufactories so that they can undertake further measures to make employees more aware of the risks and thus increase and maintain safety awareness.

The author of this thesis worked within the framework of risk assessment, risk management, Risk communication, and Health and Safety risk management.

This report was developed to study the safety awareness at a manufactory and what the causes are of incidents at the work floor.

The target group of this report are the people and professionals who have an interest in the causes of incidents and safety awareness.

The following guidelines will apply for this report:

- Citations in this report are in cursive and marked with citation marks.
- References will be presented in APA style.

Executive summary

The master thesis aims to research how safety awareness is in a large manufactory. The thesis explores the causes of the incident at a workplace and how to increase safety awareness at the shopfloor of the manufactory. The thesis includes qualitative studies, such as case study research, theoretical research, multiple literature reviews, and interviews.

The approach for this report is based on risk management and risk assessment studies. This is achieved by taking the following problem question as the basis for the analysis: "How can a large manufacturing company maintain or increase safety awareness on the shop floor in an everyday situation?".

Accidents at work represent a significant social challenge. In Denmark, around 40.000 employees have occupational accidents every year. The number of reported occupational accidents is largely unchanged in the period 2013-2018 (Arbejdstilsynets , 2018). These accidents can lead to disability, economic and social loss, and even death. That's why there should be attention to the importance of safety on the work floor (Ajslev, et al., 2016).

Around 90% of the accidents are caused by the unsafe behaviour of the employees. These behaviour factors can be indifference, distraction, lack of overview, exhaustion, lack of knowledge, or unawareness of norms are often aspects that cause accidents (Embrey, 2005). Many of these aspects are grouped under safety awareness. By increasing safety awareness, patterns that preserve unsafe behaviour can be broken. By repeatedly drawing attention to the theme of safety in different ways, you can increase support and awareness for safety (Glendon, 2006).

The study demonstrates a correlation between several factors. The first factor is the employee. Work accidents are frequently related to human behaviour, how people interact with each other, and how they deal with risks and guidelines.

The second factor lies with the workplace design, work accidents can occur because the environment is not properly designed. Employees work in a chaotic environment or don't use the proper equipment (Endsley, 1995). As a result, incidents at work can take place faster. When a workplace is not designed the right way or cleaned up well, employees can bump into the equipment or slip and trip.

The last factor that influences safety awareness is leadership. It all starts with management, which holds the key to behavioural change (Weick K. , 1995). The management has the task to steer the organization towards a

safety-conscious company. Management has an important role to play in promoting safety awareness.

Evaluating the findings of this thesis, recommendations about how to maintain or increase safety awareness at a manufactory, are as followed; management should be more involved and demonstrate a good example at the work floor and they must ensure that documentation, tools, incident reporting system and training are maintained. All new employees should get a safety training and every 3 months all the employees should get repetition of the safety training.

Reading guide

The thesis is divided into six main chapters.

Chapter One, the introduction, introduces the basic information about why and what is addressed in this thesis. In this chapter, there is background information about safety awareness and sub-chapters about the relevance of historic events, the audience, and the motivation for selecting this topic. The chapter ends with stating the objectives leading to the problem formulation and the limitations, what is not considered in this thesis.

Chapter two is the methodology. In this chapter the researched approach will be explained and what kind of data gathering will be used and how this data will be used in the thesis.

Chapter three is the literature review. In this chapter, the different literature is described. The first paragraph is about safety awareness, in this paragraph; the definition of safety awareness will be explained by different academics. After that safety awareness will be divided into four factors;

- The individual factor of safety awareness. In this paragraph the behaviour of the human plays a factor on the work floor and which elements are triggered that influence safety awareness.
- The systematic factor in this paragraph, the environment, and equipment of a workplace is reviewed and the correlation with safety awareness.
- The management factor and how they influence safety and what the management can do about the leadership to influence safety awareness.
- The Danish legislation about safety at a workplace is being reviewed and what a company needs to do to create a good and safe workplace for their employees.

Chapter four is the data analysis. In this chapter, the knowledge about the literature review and the data is transformed into the analysis. Furthermore, the evaluation of the data will be analysed.

Chapter five is the discussion. In this chapter, the results of the findings will be discussed.

Chapter six is the concluding chapter with the conclusion and the recommendations. The primary focus is the answer the problem formulation at the beginning of the report. The report ends with a list of tables and figures, references and an appendix.

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1. Introduction

Accidents at work represent a major social challenge. According to the International Labor Organization, there are approximately 360,000 fatal and 337 million non-fatal work-related accidents worldwide every year (Eurostat, 2020).

In Denmark, around 40.000 employees experience occupational accidents every year. The number of reported occupational accidents is largely unchanged in the period 2013-2018 (Arbejdstilsynets, 2018). The number of reported accidents at work concerning employment is on 2013-2018 decreased by 2%. At the same time, the number of fatalities has increased from 25 in 2017 to 31 in 2018 (Arbejdstilsynets, 2018).

Employees spend a lot of time in the workplace. Thus, industrial tasks need to be at a degree where it's unharmful to the employees' health and the work should always be done in a safe environment (Griffioen & van Leeuwen, 2011). But like mentioned before, accidents at the workplace are still very high. These accidents can lead to disability, economic and social loss and even death. That's why there should be attention to the importance of safety on the work floor (Ajslev, et al., 2016).

Numerous legal regulations are governing to prevent accidents at the workplace, but the regulations are still not enough. Because it's not enough to only consider this matter from a technical point of view. Companies should also look at the individual point of view. According to research, the individual factor is the most important factor for accidents. Around 90% of the accidents are caused by the unsafe behaviour of the employees. These behaviour factors can be Indifference, distraction, lack of overview, exhaustion, lack of knowledge, or unawareness of norms are often aspects that cause accidents (Embrey, 2005).

Many of these human behavioural aspects are grouped under safety awareness. Unsafe behaviour often plays a role in workplace accidents. By increasing safety awareness (behavioural) patterns that preserve unsafe behaviour can be broken. By repeatedly drawing attention to the theme of safety in different ways, you can increase support and awareness for safety (Glendon, 2006).

1.1 Relevance

The chosen topic is relevant because, from previous work experience at a big company, it was clear that employees aren't always aware of the risk around them, this led to many incidents. Those incidents could have been prevented if the employees were aware of the hazards around them. This research is essential for the manufactories because a dynamic work

environment has many risks. Finally, this research can be used to make recommendations to the organization so that it can take further measures to make employees more aware of the risks and thus increase safety awareness.

1.2 Objective

The master thesis aims to research and explore how safety awareness is in a large manufactory. The thesis aims to explore the causes of the incident at a workplace and how to increase safety awareness at the shopfloor of the manufactory. The approach for this report is based on risk management and risk assessment studies. The researcher established the following research question that is answered within the framework of this thesis:

How can a large manufacturing company maintain or increase safety awareness on the shop floor in an everyday situation?

The main question is supported by sub-questions:

- What are the most common causes of incidents in a large manufacturing company?
- What policy instruments and tools are needed to implement a safe workplace, aimed at guaranteeing adequate safety awareness among employees?
- How is safety awareness currently 'performing' in terms of individual factors, systemic factors, and management factors at a company?

1.3 Limitations

For this thesis, there was some limitation regarding data availability. Because of the covid-19 pandemic, it was not easy to get in contact with other companies and perform interviews with employees. The focus of this thesis is on large manufactories in Denmark, but the data gathered for this thesis is only from one company. That means that the problem formulations only apply to this specific manufactory or similar manufacturers.

2. Methodology

The main objective is to research and explore what the causes are of the incident at a workplace and how to increase safety awareness at a large manufactory. This study will target safety awareness on the shop floor of the company. This chapter will explain how the research was conducted. First, the choice of quantitative and qualitative research will be discussed, then the data gathering will be explained and lastly how it was analysed.

2.1 Research approaches

The thesis includes qualitative studies, such as case study research, theoretical research, multiple literature reviews and interviews. Qualitative studies are often used to achieve a more comprehensive understanding of a subject (Blumberg, 2008).

To gather the data to answer the research question, there was a need for a suitable research method. In the following, the method will be described. It is intended to illustrate a clear overview of the research objective. To receive a complete answer to the main question, the sub-questions need to be answered. The sub-questions will be answered with a combination of the different research approaches. The thesis is divided into phases; the required data and information, the data gathering method and the expected results.

The first phase of the thesis is developed around a literature review supporting and comparing the data findings. The literature used for this thesis is about safety awareness, safety situations, dirty dozen methods and Danish legislation about safety at work in Denmark. This will ensure a comprehensive understanding of safety awareness. The knowledge gained was used to determine and establish the second phase.

The second phase of the thesis is constructed based on desk research and data analysing, this will be a fundament for further research and development. The gathering of data about safety awareness was done, by asking a Danish company about incidents at their company. They provided the data that is used for the thesis. This data includes incidents numbers, pictures of incidents and presentations, about safety at that company. After gathering the data, an analysis was done of all the incidents of the last 12 months at that company and the causes and consequences of the incidents.

After the data gathering, a semi-structured interview was held. This style of the interview made sure that the important theoretical issues were covered, and the interview was not completely structured, this gave the possibility to ask about individual opinions and experiences of employees and their safety awareness at the work floor. Before conducting the interviews, literature was studied comprehensively. The gained knowledge was used to get inspiration for open questions, this was to understand the concept of safety awareness. Relevant theories and data themes were collected and each of the questions was developed.

The interviews are to support and understand the literature review and the data. For this thesis two interviews were performed. One interview with a department manager of a manufactory and the second interview with the health, safety, and environment coordinator of the manufactory. The interview was done after the data gathering. The data were analysed and after the analysis, questions were made, to achieve a more proper understanding of the data.

And lastly, after completing the interviews, the interviews were transcribed to process them for the data analysis. The data analysis is written after looking at the literature, the data from the company and the interviews. Based on the data analysis from the first two phases, a recommendation will be created, for the company, to make sure that they know how to maintain and increase the safety awareness at their company.

The research question is supported by applying a how-question. As mentioned before in the introduction, the main research question is:

How can a large manufacturing company maintain or increase safety awareness on the shop floor in an everyday situation?

To support and narrow the research area, three sub-questions were developed. This approach is supported by Creswell: "Qualitative research asks at least one central question and several sub-questions. They begin the questions with words such as 'how' and 'what' and use exploratory verbs" (Creswell, 2013). Also, according to Yin (Yin, 2009) stated that a what-question can be an exploratory question. The sub-questions consisting of what- and how-questions; ensures a comprehensive answer to the main question, since these are essential to get a full picture and to properly answer the main question. The following three sub-questions are served as an exploratory question ensuring a comprehensive understanding of the causes of incidents and how that relates to safety awareness at the manufactory.

Sub-question 1

What are the most common causes of incidents in a large manufacturing company?

This sub-question can be answered using data that is gathered from one of Denmark's largest manufacturers. To find out what kind of incidents occur, it must be made clear with statistical data.

Sub-question 2

What policy instruments and tools are needed to implement a safe workplace, aimed at guaranteeing adequate safety awareness among employees?

This sub-question can be answered using literature. It is first necessary to find out what policy instruments and tools a company currently needs to have, which can be done through desk research.

Sub-question 3

How is safety awareness currently 'performing' in terms of individual factors, systemic factors, and management factors at a company?

With semi-structured interviews and data, this can be answered. The interview can help to visualize how employees think about safety at work.

3. Literature review

This chapter presents different perspectives within the safety literature to explore the research question. It starts with the definition of safety awareness and then a distinction will be made between four factors that are relevant for this research: individual factors, systemic factors, management factors and finally the legislation.

3.1 Safety awareness

There are a few definitions of the concept of safety awareness; safety awareness is the ability to effectively convert feelings and experiences into alert reactions to unsafe situations so that actions can be carried out without danger (Klein, 2006). There is an important relationship between the individual's behavioural and practical world.

One of the following definitions of safety awareness is the frame of the mind that determines the perceptions and judgments of employees about personal abilities and responsibilities to avoid risks in workplaces (Dursun, 2013).

According to Christian who has another definition of safety awareness: Safety awareness is a strong forecaster of ultimate performance. The knowledge of the employee of the safety of the company has therefore a major influence on its implementation (Christensen, 2009).

Another view of Safety awareness can be described as "The individual safety awareness of safety and security matters" (Barling, 2002). (Koster, Stam, & Balk, 2011) adds to this definition with two levels of safety awareness, namely the cognitive and behavioural levels. The first level deals with the mental part where employees are aware of safety and which behaviour increases safety. The behavioural level determines the safety-related behaviours that arise from the cognitive level.

Safety awareness is an important characteristic associated with risky behaviour (Koster, Stam, & Balk, 2011). Risky behaviour increases the chance of accidents, but with good safety awareness, reasonable risk perception can be reduced and the risk of accidents in the workplace will be smaller. Anxiety and worry are emotions that have a negative effect on safety awareness. According to the Anxiety/Uncertainty Management theory, employees can sort out their insecurity and safety concerns by communicating effectively (M. Whitaker, 2013).

Safety awareness is a complex concept under which many aspects and factors of human behaviour are addressed by various researchers. In

addition, safety awareness has to do with related terms such as situational awareness and 'collective mindfulness; the capacity of groups and induvial to be acutely aware of significant details, to notice errors in the making and to have the shared expertise and freedom to act on what they notice' (Weick K. , 1995). According to (Gilson, 1995), the concept of situational awareness was identified during World War I by Oswald Boelke who realised 'The importance of gaining an awareness of the enemy before the enemy gained a similar awareness and devised methods for accomplishing this' (Sarter & Woods, 1988).

Because of diverse theories and models, it can be stated that safety awareness has to do with numerous fields. This thesis will focus on the safety situation awareness model of Endsley, 1995. In the following paragraph, a distinction can be made between individual and systemic factors. The individual factors mainly relate to the goals, expectations, knowledge, and skills that a person possesses to be able to predict unsafe situations. The systemic factors focus on the environment and the interaction with it, such as the quality of the tools, the physical space, or external stressors. Monotonous work or machine work, for example, can lead to a person only working on routine and no longer consciously sensing dangers (Endsley M. , Toward a theory of situation awareness in dynamic systems, 1995).



Figure 1 Endsley's Model of situational awareness, (Endsley M. , 1995), (Lankton).

Endsley (1995) presents a descriptive model of situation awareness in a generic dynamic decision-making environment, depicting the relevant

factors and underlying mechanisms. The model above illustrates this model as a component of the overall assessment-decision-action loop and shows how numerous individual and environmental factors interact. Among these factors, attention and working memory are considered the critical factors limiting effective situational awareness. Formulation of mental models and goal-directed behaviour is hypothesized as important mechanisms for overcoming these limits (Endsley M. , Toward a theory of situation awareness in dynamic systems, 1995). Situational awareness is about perceiving signals from the environment and the meaning given to them. This meaning is influenced by the mental models that each person has developed. These mental models are for each person triggered at a different time (Endsley M. , 1995).

According to Endsley's theory, situational awareness can be defined as the constant monitoring of the dynamic environment and perceiving how it changes (Endsley M. , Toward a theory of situation awareness in dynamic systems, 1995). In a living environment that is constantly changing, according to Endsley; new information is constantly being released and people actions will change the situation again. If this happens, an employee's situational awareness will have to adapt to the constant change in the environment. Situational awareness is about perceiving signals from the environment and giving them meaning. The observations can be influenced by the mental models that each employee has developed. These mental models are activated in each employee in different situations (Endsley M. , 1995). The situational awareness of employees can be divided into three different levels:

Level 1: Perception in the current situation. At this level, employees do not look at the environmental factors or the effects of these elements on future situations and what the consequences may be. This limited perception of the situation can cause employees to have a different picture of the actual situation. This can cause some people to react differently than others do. In this way, miscommunication can occur, which can have detrimental consequences (Endsley M. , 1995).

Level 2: Comprehension. The elements of the current situation are all recognized, as are the patterns and consequences. It is important to see and understand the risks and maintain this (Endsley M., 1995).

Level 3: Projection. The future is anticipated, based on the first two steps. The situation on the work floor is constantly changing and new information is constantly being added. New actions are often needed, and each team member will respond to them according to the role they play (Endsley M. , 1995).

3. 2 Individual factors

The individual factors relate to the goals, expectations, knowledge, and skills that one possesses to be able to anticipate unsafe situations. Large manufacturers have mostly a dynamic environment where the environment changes continuously during the day (Chertischev, 2020). This gives the employees working day, processing new activities all the time. This can cause the employees to be in dangerous situations. Because the processes change during the day, employees must anticipate them differently to avoid a dangerous situation (Chertischev, 2020).

An analysis of the concept of situational awareness (Endsley M. , 1995), makes clear how people make choices when performing complex tasks. This shows that the degree of alertness depends on several factors. The several factors are explained below.

3.2.1 Human error (Reason, 1997) In many companies, the performance of individuals and teams is negatively affected by human error. Studies have shown that these errors can be reduced or even prevented by learning from them and by developing an understanding of error causation and its consequences (Marquardt, 2019). The ability to detect, understand and anticipate errors refers to situation awareness (Reason, 1997). According to Reason, 1997, human error can be divided into three different groups:

Knowledge-based

knowledge-based mistakes can be defined as; When someone is in a certain situation does not have the precise knowledge and experience to provide a reliable estimate. These types of errors are common among beginning professionals. Experienced employees barely make these mistakes, because they perform many actions and do the processes almost entirely on autopilot (Reason, 1997).

Rule-based

If all employees are trained and thereby gain more experience, will that be enough? Mostly likely not, because not only inexperienced people make mistakes. Even professionals with a lot of experience can make mistakes. Then there is a rule-based mistake. Someone decides based on incorrect information or previous experiences, while the situation differs from the situation from the past or the training (Reason, 1997).

Skill-based

Suppose a professional has followed and completed his training effortlessly and has taken an internship on the work floor and knows what the safety risks are, will then everything go as planned, without any mistakes? Most

mistake

mistake

17

slip

likely not, because people are affected by human impulses, needs and emotions, which can lead to mistakes. This type of error is called skill-based slip. These are errors that are made during the routine execution of work, which involves a mistake or memory error (Reason, 1997).

No employee can execute his job flawlessly. Due to various types of human error, employees may not be aware of a specific situation (Guldenmund, Dossier Veilig Gedrag, 2015). The big question is how to limit these types of errors. This requires insight into the underlying causes.

Human error can be reduced by looking into the situational and organizational factors, such as the shift and activities of the workplace, the physical and mental strain of work, monitoring the quality of work, the reward and punishment of goods. or poorly performing staff, the way grids are classified, the appreciation for the work, and so on (Reason, 1997). This part will be reviewed in the next paragraph of Systemic factors because human error is connected with the systemic factor.

3.3 Systemic factors

Systemic factors represent how the environment is arranged, such as the quality of the tools, the physical space, or external stressors. The environment at a workplace is an important factor for safety (Endsley M., Toward a theory of situation awareness in dynamic systems, 1995). Sufficient awareness of the current situation is important to be able to assess the consequences of certain actions and to prevent harmful consequences and thus accidents. The systemic factors will be further explained based on the 'Dirty Dozen model, (Dupont, 1997).

A clear view of the environmental situation of human functioning allows the employee to estimate and minimize the possible risks. The environment in which the employees work changes daily because; new work is added, making the environment busy; or new types of machines are added, and old familiar machines are leaving; new colleagues come, who need to be trained and experienced colleagues leave. This means that employees have to constantly adapt to the situation in the workplace (Chertischev, 2020). This can have consequences for the employees because they have to adapt to the changing environment in which they work and can no longer perceive the dangerous situations. Which environmental changes can cause a dangerous situation can be explained with the help of Dirty Dozen.

3.3.1 Dirty dozen, (Dupont, 1993)

The Dirty Dozen is a list of twelve factors that impair a person's ability to work effectively and safely (Blaise, Levrat, & Iung, 2014). The twelve causes of Dirty Dozen relate to the basics of safety-related pitfalls of maintenance work (Atak & Kingma, 2010). The twelve factors that can play a role in a workplace are:

1. Lack of communication	5. Complacency	9. Lack of knowledge
2. Distraction	6. Lack of teamwork	10. Fatigue
3. Lack of resources	7. Pressure	11. Lack of assertiveness
4. Stress	8. Lack of awareness	12. Norms

of

Table 1 The Twelve Dirty Dozen factors (Dupont, 1997)

Lack

communication

Bad communication is one of the biggest factors for accidents and one of the human element factors. When talking about communication, it is about the transmitter and the receiver and the method of transmission. There are a few things that can go wrong during communication; the transmitted instruction is unclear. The receiver maybe makes assumptions about the meaning of the message. The transmitter maybe assumes that his message has been received and understood. Also, when communication is spoken, only 30% of the message will be received and understood (Dupont, 1997).

Complacency

Complacency is the feeling that workers have self-satisfaction and don't have awareness of potential risks at the workplace. This kind of feeling that workers have comes most often from routine activities, that have become 'normal' and that's why some workers or the whole organization might think that the task is easy and safe. When employees work in a more relaxing stage, it can be resulting in missing important signals. Complacency can also happen after recovery from an accident in the workplace. The relief after an accident can result in thinking of relaxation and make the worker think mentally less and be less vigilant and aware of risks.

What also can reduce human performance are when workers have no stress, are bored, and are not satisfied. That's why it's important when workers feel this way and do simple, routine, and regular tasks, to always be aware and expect to find faults. Always follow written instructions and procedures (Dupont, 1997).

Lack

of

knowledge

A company must regularly give training to its employees, about the equipment, the risks and safety at the workplace. Because when workers have no experience or knowledge about the specific work equipment or don't know the safety rules, workers can misjudge a situation and make an unsafe decision (Dupont, 1997).

Distractions

Distraction is the number one cause of forgetting things. People tend to think ahead. That way when they return to a task, following a distraction, they tend to think that they are further ahead than they were.

Distraction can be anything that draws an employee's attention away from their task. Some distractions can't be avoided. Like loud noises, requests from assistance or there is a safety problem that needs immediate solving. But other distractions can be avoided or can be handled after a more appropriate time, things like messages from home, administrative tasks, social conversations, decisions concerning non-work-related, etc. (Dupont, 1997).

Lack

of

teamwork

No single worker or organization can be responsible for safety at the workplace or a task. In many organizations tasks are done by team affairs. That means that people rely on their colleagues, if someone doesn't

contribute to the team effort, that can lead to an unsafe outcome (Dupont, 1997).

Fatique

Fatigue is a reaction to physical or mental stress. Fatigue can come after a long and hard period of work. When a worker becomes fatigued, he will have a hard time concentrating, remembering, and making decisions. The worker is more distracted and that way the worker loses his safety awareness (Dupont, 1997).

Lack

resources

Resources are personnel, time, data, tools, skill, experience, support, and knowledge. When these are missing and an employee needs them for their task, it can interfere with the quality and to complete a task. When not all equipment and parts are complete during a maintenance task, the employee is maybe pressured to complete the task using old or inappropriate parts or tools (Dupont, 1997).

of

Pressure

In a dynamic environment, it is expected to work with pressure. But when you are pressured to meet a deadline and that interferes with the quality and safety, then that is dangerous. Pressure can happen due to a lack of resources, like time. Employees put pressure on themselves, by taking on more work than they can handle (Dupont, 1997).

Lack

assertiveness

Assertiveness is a communication and behavioural style that allows workers to express feelings, opinions, concerns, beliefs and needs. When employees can't express those feeling and thought, it can affect ineffective communication and can damage teamwork (Dupont, 1997).

of

Stress

When a worker is suffering from stress, it can affect the work, by errors of judgment, lack of concentration and poor memory. These factors are dangerous when one works in a dynamic workplace or with dangerous equipment (Dupont, 1997).

Lack

of awareness Working in an isolated place and having one task and your responsibilities can cause tunnel vision, which can cause a lack of safety awareness (Dupont, 1997).

Norms

Over time and through experience a workplace culture will be developed. This workplace practice can be good, bad, safe, and unsafe; and most employees will refer to them as " this is the way we do it here" and they will become the norm. These norms are unwritten rules or behaviours, which deviates from the required rules, procedures and instructions (Dupont, 1997).

3.4 Management factors

Management influences safety awareness, according to Shein research, '*Based on management factors'* (Schein, 1992). The role of leadership in creating a safer working environment is recognized by many researchers including (Koster, Stam, & Balk, 2011). Employees rely on rules and expect their leaders (managers) to tell them what to do (Hofstede & Hofstede, 2005, p. 68).

Often culture is located deep in the organization, and the culture of the organization starts with the management. Organizational culture is "the way things are done around here" (Deal & Kennedy, 2000). Culture also includes the organization's vision, values, norms, systems, symbols, language, assumptions, beliefs, and habits (Needle, 2004). The culture is, therefore, a particular part of the behaviour displayed by the employees (Schein 1992; Guldenmund 2000). Various literature describes that people often do not know why they behave in a certain way at work and that behaviour is guided by the norms and values appropriate at the time of establishment. It is often said 'that's how we do it here, without knowing the exact background, and that has an effect on the safety awareness of the employees (Meems & ten Hove,). The safety culture of a company can be seen as an important determinant of safety performance ((Cox & Cox, 1991).

Management has a crucial role in promoting safety at work and must initiate and supervise that process. Management is the key to behavioural change in an organization. The right leadership level can influence the desired behaviour in the organization. Safety leadership starts with the board and management, without their commitment a high safety awareness level will not be achieved. They can do this with the implementation of safety guidelines and procedures, these are seen by management as key ingredients of a safer workplace environment. This is because employees are becoming more aware of the risks if they know the hazards (Zohar, 2008 & Zohar & Luria, 2003, 2008).

To reduce incidents at work, it is necessary to increase safety awareness among employees and management. Only then will the incidents decrease, and the norms and values of employees change so that they can work more safely (Andersen et al. 2018). The management can help increase safety awareness in many ways, give a good example, involve employees in safety matters, give compliments when work is going well and safe and stimulating training. This will help improve safety at the company.

3.5 Safety Legislation, Guidelines and Tools

One of the factors that can improve safety on the work floor, is if the company is following national safety legislation and has its own safety guidelines. In this paragraph the Danish legislation about safety will be explained and what guidelines a company should have to prevent accidents on the work floor.

According to the research conducted by Zohar, it shows that an organization must have a safety policy and procedure and that these must also be enforced. Documents are important ingredients for a safer working environment because this way employees become more aware of the risks in the workplace. This is a management task that must implement, guide and guarantee processes (Zohar, 2008 & Zohar & Luria, 2003, 2008).

To have these safety policies and procedures, a company must follow the legislation of the country they operate in. The legislation to safety at the work floor in Denmark is as flowed:

In Denmark, all Danish company has to follow the Danish regulation that set requirements for cooperation on health and safety, in Danish the Arbejdsmiljøorganisationen (AMO). There are several types of regulations that exist within health and safety (Arbejdstilsynets, 2018).

The Working Environment Act contains the general requirements concerning the working environment. WEA (Working Environment Authority) guidelines indicate how working environment regulations should be interpreted.

If a company has more than 35 employees, it must establish a Health and Safety Committee. The task of the Health and Safety Organisation is to help ensure a good working environment and prevent occupational health and safety problems. The health and safety organizations are represented by the employees and managers of the company. The health and safety representatives who participate must be elected from their employees because they represent the employees and must be in regular contact with them (Ministry of Employment Consolidated, 2021).

The health and safety organization are responsible for the daily general task related to health and safety work. They make sure that there is a good working environment and prevent health and safety problems. They are also responsible for making the managers and employees be aware of risks and promoting the health and safety rules and guidelines (Ministry of Employment Consolidated, 2021).

The legislation says that companies must do everything to make sure that their company is safe for their employees. A company can do that by working not only with policies and guidelines but also using tools.

Tools

Tools help legislation to make a workplace at a company safer. Tools are of great importance in an organization to increase safety awareness. Tools are instruments that organizations can use to work on the culture of healthy and safe working. Examples of tools can be a toolbox meeting, training about safety risks, a Last-Minute Risk Analysis (LMRA), a Task Risk Analysis (TRA) or a Risk Assessment (Arbo Grafimedia, 2020). Every company should have and prepare a written health and safety assessment. This is a tool for dealing with the risks in the working environment. The risk assessment helps to see if there are any problems relating to health and safety at the workplace. It benefits a company to have a risk assessment for the following reasons: it reduces sick leaves, and it also reduces the costs of accidents. The assessment also helps to plan to address the problem before someone get injured. That's why the risk assessment can contribute to a good and safe environment (Arbejdstilsynets, 2018).

In an organization, these tools should be given to the employees at least once a month. An organization must evaluate the risks of incidents and the safety of work (Ajslev, et al., 2016). In this way, you ensure that safety in the organization is improved and guaranteed every time. These tools can be given by Health and Safety committee. According to the High-Reliability Organization principle, it is important to invest in training. In this way, you create a safe and reliable environment (Christensen, 2009).

ISO

The ISO 45001, is an international standard for health and safety at work, this ISO can help provide a structured framework for ensuring a safe and healthy workplace, which sets requirements for building a health management system. In combination with the ISO 45003 guideline on psychosocial health and safety, companies can reduce risks in the workplace and create safer and healthier working conditions, taking into account all safety aspects. In addition, ISO 45001 supports companies in ensuring compliance and legal obligations. ISO 45001 can be applied to all types of organizations - large and small - in all business sectors. It is based on OHSAS 18001 and other recognized occupational health and safety standards and conventions (International Organization for Standardization, 2018).

Inspections

To make sure a manufactory is following the Danish legislation and has safety guidelines for their employees, the Danish Arbejdsilsynet inspects companies if they are following every safety rule. They make sure that employees have a safe a healthy working environment according to Danish legislation (Ministry of Employment Consolidated, 2021).

The Arbejdsilsynet can enter every company in Denmark without permission, to check the health and safety. During the inspections, the inspector will look if the environment is in order, if the company owns a risk assessment, they will look at the ergonomic conditions, the noise levels, and the risk of accidents. The inspector is entitled to interview all employees and take samples from the business for analysis and photograph working situations in the company (Arbejdstilsynets, 2018).

When analyzing the data in the next chapter, it is important to investigate if the manufactory has safety guidelines, tools and ISO certificates and if accessible all the documents are for their employees. Poorly written or non-existent guidelines can lead to errors and misunderstandings that can endanger the safety of employees and the environment at the workplace. Employees also need documents that contain all processes and procedures. As a result, the employees can work more safely and faster, because everything is stated in the instructions of the document (Koopman, 2014)). Finally, documentation is important for a large manufactory because new employees are constantly being added. A lot of knowledge has to be transferred in the first weeks. In such a situation it is more useful to have written guidelines and rules so that the information you have to transfer becomes easier. This reduces the chance that important information will be forgotten (Griffioen & van Leeuwen, 2011). It is also useful because in this way all employees are trained in the same way. Lack of resources and standards can affect the workplace according to the Dirty Dozen model (Blaise, Levrat, & Iung, 2014).

4. Analysis

Throughout this chapter, company descriptions and data are analysed and described. There are a few factors that influence safety awareness, according to the data and interviews. The analysis is presented in this chapter.

4.1 Company descriptions

The following paragraph will provide information about the company, that the data is based on, all the data used in this thesis comes from this company. The company's name will stay classified, but other data about the organisation will be shown in Table 2 here below.

Industry	Fluid control equipment, pump, seal, valve manufacturing, climate & energy
Products	Refrigeration, air conditioning, the control of electric motors, the heating of buildings, solutions for renewable energy such as solar power and heat pumps
Number of employees	37,000 (2019)
Factory sites	95 factories

Table 2 Company description

The company's vision and mission are safety first, this company has a program for all their employees and visitors to focus on safety in the workplace. The program focuses on general safety awareness, safety leadership, hand & finger injuries, trips & slips, and how machine safety is maintained. This company works with the health and safety framework that is recognized by management standards, which are certified OHSAS 18001 and ISO 45001 (Company, 2020).

4.2 Incidents

Incidents in the workplace occur regularly. As discussed in the introduction, there are 360,000 fatal and 337 million non-fatal incidents per year

worldwide (International Labour Organization, 2010). Many incidents are related to human behaviour, which is why human behaviour is often the cause of incidents at work. Human error, according to Reason, can be divided into three levels as discussed in the theoretical framework: Knowledge-based, rule-based, and skill-based (Reason, 1997).



Figure 2 All the accidents from October 2020 until September 2021

This thesis uses data of incidents of the period October 2020 until September 2021, which can be seen in Figure 2. The majority of the incident that occurs are minor incidents. Minor incidents are cuts and grazes, burns, bumping, products that are not placed right and slippery floor.

Analysing the data further, it shows that the underlying causes of these incidents can be categorized into three big factors as shown in Figure 3; human behaviour, followed by facilities and equipment and the third procedure. In the following paragraph, the data will be explained in figure 3.



Incident cause by category LTI + MTI (last 12 month)

Figure 3 The causes of all incidents

4.3 Human factors

The human factor plays a big role in a large manufacturing company. Human Behaviour that influences the safety awareness of employees mainly relate to, goals, expectations, knowledge, and skills that a person possesses to be able to properly anticipate unsafe situations (Endsley M. , 1995). At a manufactory, there are employees in training who just have started. These starting employees will make several knowledgebased mistakes at the start of their career because they do not yet have the right knowledge and experience. Some employees have been working for years and still make the wrong decision because, based on their own experience, it 'always went so well. This, while the situation is dangerous, and an incident can easily take place. Finally, incidents can occur because employees were not alert at the time, because they slept badly or because things are not going well emotionally (Reason, 1997).

`Yeah, here it's human behaviour. So, when we look globally then we see that most risks come from human factors".

When analysing the data its shows that most incidents that have occurred in the last 12 months are caused by human factors. When looking at the activities when these accidents happen the data shows us the following: The incidents happen the most when working manually. Working manual material handling means that the employee is lifting, lowering, pushing, pulling, carrying, or holding. These activities represent the most common causes of occupational fatigue, back pain, and lower back injuries. During the interviews, the respondents emphasised the reasons for accidents could be that employees do the job faster this way or this is the way they always do it. The following quotes show this:

'It's easier and faster to just do it like that"

'I always have been working like this, I never had a problem"

"Everyone knows the rules very well here. But sometimes it's easier to work a little different".

Activities when incidents happen

Most incidents occur when employees work on:

- Manual material handling,
- machining and assembly,
- Employees are walking and working on the surfaces of the workplace.

When analysing the data there were a few handlings that caused incidents; products that were lifted wrong or, that were too heavy, too big or had shapes that makes them hard to handle. Products that have sharp edges make them hard to work with. Other tasks that can make manually work Figure 4 Activities when the incident happen. The most

cause incidents are a poor use of lifting techniques, which can be lifting too often or

Activity when incident happened LTI + MTI (last 12 month)



Figure 4 Activities when the incident happen. The most incidents occur when the employees are working with their hands

too long; lifting with back bent or while twisting or reaching too far; lifting while sitting or kneeling, etc. Another cause is when not wearing the clothing that can make an employee move or reduce grip strength (Zin Cheung, 2007).

`The employee's work allots with sharp products and machines, so an accident can happen very fast, and it also happens often that their fingers or hands have cuts''

'I don't know why the managers don't say something about the workplaces, we train the managers to make it as safe as possible for their employees"



Figure 5 products that are covering the safety lines. The manager of this department saw this, but he didn't say anything about it.

Secondly when employees work with machines and when they need to assemble, accidents happen frequently. An Assembly line is a manufacturing process in which interchangeable parts are sequentially added to a product to create an end product (Zin Cheung, 2007).

Lastly walking and working at the surface of the manufactory. Surface means the horizontal and vertical workplaces such as floors, stairs, roofs, ladders, ramps, scaffolds, elevated walkways, and use of fall protection systems. Accidents that can happen are slipping or equipment falling on an employee (Zin Cheung, 2007).



Figure 6 Slippery surfaces around the manufactory

"The workplaces need to be cleaned better because we keep seeing more and more slip and trips that are happening"

As mentioned in chapter 4.2 Another problem that can cause hazards is poor housekeeping that can cause a slip, trip, and fall hazards. Analysing the data, it is observed that the workplace can cause incidents, because employees leave material on the floor or don't keep the yellow safety lines empty.

4.4 Position and Experience

Most incidents happen to hourly paid employees, Figure 17. Hourly paid workers are employees who work on the shop floor. A lot of incidents happen there, because, these employees work with machines and heavy equipment.

Also, the employees who have been working there for a short period, are involved in accidents. Figure 19 shows the number of months and the x amount of accidents. Employees who have been working there between 0-9 and 10 -19 months are involved the most in accidents. Based on Reason literature on

Injury by employment position LTI + MTI (12 month)





Injury by work shift LII + MII (last 12 month)



Figure 8 Most incident occur during daytime

situational awareness (Reason, 1997), Reason explained that people make choices when performing complex tasks. The literature explains that the degree of alertness depends on several factors. In this case the Knowledgebased mistakes. Employees who have been working for only a year at a workplace, have a higher chance to get injured, than workers who have been working at a company for more than one year. The chance of getting injured for new workers is around three times higher, according to the research from the Toronto-based Institute for work & health (Trotto, 2016).

'I think it's because new employees are not known with the environment and other employees who have been working here, know their environment and know the risks around them."

Most injuries occur during the daytime shifts, almost 50%. This can be explained because the employee gets directed or feels pressured to finish their activity in time. Injury at night also occurs around 25%.

This study shows that the incidents during non-standard working hours are not due to the nature of the work, but due to time of day, according to Dr Cam Mustard, 2013. Why do accidents happen at night? Mustard points to two possible factors. The first is worker fatigue due to sleep disturbance and/or long work hours. The second is lower levels of supervision and co-worker support during non-daytime hours (Institute for Work & Health, Toronto, 2013) (Mustard, 2013). According to the interview, the respondent answered:

> 'There are accidents at night, but they are not reported. This is because at night there is less supervision, and the employees can do what they want, and they don't always follow the rules. But it's harder to check upon them. So, people are more creative than normal."





Figure 9 Most incidents happen to employees who just started working there



Injury by work function LTI + MTI (last 12 month)



Figure 10 The function where employees get the most injured are the operators

It can be concluded, when observing the data and looking at the positions and experience of the employees that most incidents happen during the day shift, with employees who work with machines and heavy equipment. What is also observed from the data, is that most employees who have been working there for a short period, make the most accidents. This can be explained:

`New employees don't have the knowledge and awareness about their new workplace and the equipment they work with. They underestimate the risks."

4.5 Facilities and equipment

Other elements that contribute to accidents are facilities and equipment, which could be counted as systematic factors. The way how the environment is arranged and systemic factors also influence the safety awareness of employees (Endsley, 1988). Systemic factors are the way the environment is arranged, such as the quality of the tools, the physical space, or external stressors (Endsley & Garland, Situation awareness analysis and measurement., 2000).

When a workplace is not well properly set up then, the employees can easily bump up to equipment and machines. Another example that causes



Figure 11 cable on the floor, this can cause an incident

incidents is Fx. If the floor doesn't have marked safety lines.

All companies must ensure that their equipment is operated and maintained correctly to reduce the risk of accidents or damage to health and meet health and safety requirements (Baeten, 2020).

4.6 Workplace design

The data for the last 12 months showed that most incidents that have occurred are caused by workplace design and facilities and equipment. According to the interview, the workspaces at the manufactory are sometimes chaotic, the employees don't see the mess around them, they don't clean up their workspace. But this kind of mess can create safety risks on the work floor. It can be noted from the interviews that they find their workplace cluttered and that accidents can take place at any time.

"The area down here at the workplace is too crowded and messy."



Figure 12 Messy workplace, with equipment and cables on the floor.



When observing the environment of the manufactory, it shows that the employees work in a place that has many risks surrounding them. As seen in Figure 4 and Figure 5there are some cables on the floor that can be a potential hazard, these cables should be folded and hung. But the employees leave the cables there because it's easier and faster to do it like that.

4.7 Equipment

Another risk at the shopfloor is the equipment that is not placed in the right way. Some empty boxes lying around on the floor and products that are not placed on the shelf correctly. These could be potential hazards because employees could bump into them, or they could fall from the shelf. It emerged from the interviews that not everyone uses safety Figure 13 Products that is not placed right and can fall equipment. I quote the respondent, who says that he does not always use his protective equipment because it is easier and faster without:



"They are not always used, out of convenience".



Figure 14 Products that are placed too high and not correctly.

Several employees, that have been interviewed occasionally work without proper protective equipment. When ask why, often the answer is: It can be done quickly, or this can be done without. Respondent also says the following about not using protective equipment:

> "If you have to do something quickly, they aren't used either".

The lack of resources does not appear to be an issue from the research, but the lack of knowledge about the use of these resources for their safety does. Employees often neglect these resources because of the convenience or because of the lack of knowledge about the possible consequences.



Figure 15 A rapport from the incidents system. It says; that the worker wounded himself, with a knife that was not allowed to work with.

Another issue can be using the wrong equipment like observed during the interviews:

"We still find knives that are forbidden to use in production, and we have told them many times not to use that kind of knives."

Found in production





Figure 16 Knives that are found in the workplace, that are forbidden
'Yeah, we inform the employees, about equipment, when we have training about how to clean up and what equipment should be used, and which once are forbidden. But we still are finding these kinds of tools that are forbidden".

When asking the managers if he knows about the forbidding knives at his department, he answers:

'Yes, I know that these knives are being used, but sometimes this is way better and faster because we don't have the right equipment for that job. And there are grown men, they can handle a knife.'

The health, safety, and environment coordinator pointed out that the managers should give a good example when using equipment and that doesn't happen often.

Work practice

What often came back in the interview with the employee is that they work 'In their way', sometimes even without complying with the procedures. I quote respondent:

'I often work differently than the rules because it's easier''.

Employees should always expect to find errors and employees should learn to follow written instructions and procedures that increase vigilance, such as inspection routines, which can provide appropriate incentives for employees (Klein, 2006).

It emerged from the interviews with the employees that employees occasionally deviate from the safety rules. The following deviations:

- Not everyone had earmuffs against loud noise
- Walking outside the yellow lines without safety shoes



During the interviews, the employees were asked why they deviate from these standards. The answer given by almost everyone was;

Figure 17 Walking outside the yellow safety lines can be dangerous

4.8 Procedures

When Procedures are not followed, incidents could happen. Safety Procedures can be 'how to use a machine", or what and how equipment should be used, or what safety clothes should be worn. Procedures could be also the fire procedures, what to do during a fire and how to evacuate (Koopman, 2014).

This is where Dirty Dozen's theory comes in handy. The twelve factors mentioned earlier form various pitfalls to prevent unsafe working. Why are employees not aware of these pitfalls? Why don't they see the risks at work? This has to do with the safety awareness of the employees on the work floor (Dupont, 1997).

The reasons why employees have become blind to the risks at work can be related to several factors, as Endsley discusses in his study. The degree of alertness is related to several factors, namely: how an employee processes information in a complex environment, how he subsequently makes decisions and finally how the employee acts (Endsley M., 1995).

This also plays a role in a manufactory. There are various tasks that employees must perform, whereby they must pay close attention to what they are doing, they must not be distracted by outside stimuli. Complex tasks can include working with machines, working with equipment and driving products in the magazine from A to B. Then they must be able to judge with the knowledge they have, whether the task can be performed correctly in that way. Finally, employees must be able to anticipate threats that may arise from certain decisions they make. All these factors influence the safety awareness of employees and can therefore play a role in incidents in the workplace (Taylor, 2010).

Receiving Information

According to the data, a factor is also how employees think. If an employee has prejudices, he may misjudge the risks of a situation. A bias can be a misjudgement because in his experience the employee has always done it that way and things are probably going well now, while that action may not be wise. Experience also plays a role, but this does not always mean that a certain way of working is also safe. During the interview, a give counterargument to unsafe work was: "I've been doing it this way for years" (M. Meems & J. Hove, Session N.). In addition, the capacity to absorb information plays a role. Employees have different capacities and skills to receive, store and process information. For example, one employee

finds it useful to receive all information in the morning during a meeting, while the other employee prefers to receive information via email.

"Information is transferred in different ways here, during meetings and information can also be found on the computers"

 We engineer tomorrow and build a better future. Policies on business conduct: provide the link between our aspiration and our Core & Clear strategy and how we conduct business at school serve as internal guidance and as information to external stakeholders. 	Introduction to Policies Core & Clear – Our Group strategy Policy Management Environment, Health and Safety Policy Health & Wellbeing Policy People Policy Quality Policy Human Rights Policy Ethics and Compliance Policy Sustainability Policy Product Compliance Policy Risk Management Policy Information Security Policy Communication and Reputation Policy Anchoring of Comp	1 1 1 1 1 1 1 1
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S00B0109en Standard Registration. implementation and deregistration of chemical products	
50080434en Standard Gates, shelves, wire containers, metal and plastic boxes, pallets	
50080434da Standard Porte, reoler, trådcontainer, metal- og plastkasser, paller	
50080650en Standard Noise from Machines and Systems – Requirement Specification	
50080650da Standard Støj fra maskiner og anlæg – specifikation af krav	
50080668en Standard Health, Safety and Environmental Assessments in workplaces, processes and o	organizational changes
50080680en Standard Environment, health and safety (EHS) - Groups, representatives, elections and	training
500B0680da Standard Arbejdsmiljø - Grupper, repræsentanter, valg og uddannelse	
50080682en Standard Reporting work-related injuries, occupational diseases as well as pain and suff	fering
500B0663en Standard Waste disposal, Nordborg Industrial Park	
500B0685en Standard Working from Heights	
50080691en Standard Powered Industrial Vehicles	: @ □
50080717en Standard Workplace assessments. EHS safety inspection rounds	
50080751en Standard Governance and Management of the Participant Vegative List	
500B0826en Standard Work with carcinogens substances	
S0080903en Standard Purging and drying of materials and machines	
500B1254en Standard Safety at	

Figure 19 All the policies about environment, health and safety

When analysing the data, it shows that the company does many things to communicate safety information. There is safety training, there are safety meetings and safety walks through the shop floor. But is this all enough to make the employees more safety aware and to reduce the incident on the work floor? It's also important to have the safety guidelines and policies written down and hand to the employees so they can read them. I quote one of the respondents about the accessibility of information: *`Information is not easy to find, I have to go to the computer, somewhere to a C drive and then to an f drive and from there to an a, b, and d drive. I don't know where to find it! I know it is there, but where?".*

The information is there, as seen in Figure 11 and Figure 12, the company has a lot of guidelines and policies about safety, but it is difficult to access or difficult to understand for some employees. Also, according to the employee, the information about hazardous substances is not transferred correctly.

The interviews showed that a lack of communication plays a role. According to the respondent, communication about safety is not sufficient, and communication must be done differently:

"Communication here is not sufficient and in the right way for some of the employees".

According to the interview, it is because some employees need to get the information in different ways. Some employees can't focus long during meetings or don't understand the guidelines that are written. Another way for them to understand the risks at work could be to walk together with the managers around the workplace and see what is unsafe.

In addition, employees have difficulty absorbing information. For that reason, factories should do different ways to cover safety topics, such as safety magazines, safety meetings and safety rounds. Nevertheless, employees do not find this sufficient enough, and they have a greater need for training. According to them, they learn much more from this than from 'all those magazines and meetings'. However, not all employees share this view. Some employees feel that they have sufficient knowledge. Quoting a respondent:

> "I have built up excellent experience in all the years that I have been working here. Because of this, I have enough knowledge of the risks here" and "it is not all that difficult here. With common sense, you can make it safer here".

Knowledge

There is a difference between employees, some think they have enough safety knowledge and can work safely and are aware of most of the important risks around them. Other employees think they should get more safety training and also more and different ways of communication about safety. Quoting the respondent, about knowledge of information:

"Yesterday we had a small meeting about hazards and products that we use. I didn't know that those products can do so much harm. And I bet that much information is missing about other products".

Some employees think, however, that he has sufficient knowledge:

'I am well-trained, I pay close attention when my manager tells something about risks, and I am aware of the environment and how I should deal with it. As I said, common sense goes a long way''.

There is a difference between different employees. It is striking that the younger employees, who have been working for about five years, want to gain more knowledge and follow training courses. The young employees do not think they already have enough knowledge and are open to new information. The older mechanics, who have been working for more than believe that they vears, already know and have seen twenty everything. This can be linked to the Dunning-Kruger effect. The Dunning-Kruger effect is a cognitive bias in which people wrongly overestimate their knowledge or ability in a specific area. This tends to occur because a lack of self-awareness prevents them from accurately assessing their skills. Knowledge and skills are important factors for the employees (Lucassen, 2018). An employee who searches for information quickly and purposefully increases situation awareness because the action can be taken more quickly. For example, using work instructions (Steijger, Starren, Keus, Gort, & Vervoort, 2003). Because an employee is experienced, the information and processes processing of is faster, some are automated. This allows faster and better decisions to be made and appropriate action can be taken (Trotto, 2016).

Finally, knowledge is a major factor that plays a role in individuation (Endsley M. , 1995). If the employee knows how it all works and he knows what is continuously happening around him and how to anticipate it, then he is aware of the risks and he can work safely. But if the employee is just new and does not have sufficient knowledge of the environment, the equipment, and the machines, then his perception of dangerous signals is

minimal and he will not quickly recognize a dangerous situation and therefore run the risk of an incident (Ministry of Employment Consolidated, 2021) (Arbejdstilsynets, 2018).

4.9 Training

It emerged from the interview with the employee that the employees wish for more physical training at their work. quoting respondent here:

"We do miss training here".

Employees also recognize the need for training and consider it an important means of learning more and thereby increasing their knowledge of the work they perform. Quoting respondent:

'Training is very important. It happens far too infrequently''.

There are some trainings on the website of the manufactory, but they are all online training, as seen in Figure 13. The employees can take the training whenever they like, there is no mandatory repetition every few months.



Initiatives and programs

Figure 20 Online trainings for the Employees

The risk with the online training is that the employees who have to take them, aren't sitting behind a computer all day. They are working all day with machines and assembling products. They don't have a computer in front of them and can take the training easily. Safety awareness studies also show that lack of practical experience and specific knowledge can lead to wrong or unsafe decisions being made (Koster, Stam, & Balk, 2011).

With complex systems, it is impossible to perform the tasks without training, experience, and adequate documentation. In addition, systems and procedures can change significantly and employee knowledge can quickly become outdated. It is important for employees to continuously train and develop and to share their knowledge with colleagues (Dupont, 1997). Quoting one of the respondents about training:

" All employees get safety training and explanation about the machines they work with in the beginning, that way they know the risks"

The employee must have all information available when it comes to, resources they work with. For example, some operators do not know with what dangerous substances they work. This information should not be given once at the beginning or once a year, this information and training should be repeated every three till four months.

4.10 Causes of incidents

It can observe in Figure 20 that most injuries happen with the operator workers. An operator is a person who operates a machine. This can be explained because they work with machines and heavy equipment, the causes of events are diverse.



Cause of event LTI + MTI (last 12 month)

Figure 21 The causes of incidents are very divergent

Cut

People who work with knives, scissors or sharp equipment are more likely to sustain severe cuts. Every year many people work with sharp equipment who cut themselves so badly that they must miss part of their finger. Good training and protective gloves are therefore very important (Zwetsloot, 2017).



Figure 22 An employee cut himself on a machine

Bumping into things

From the last 12 months, the data shows that around 25% of the injury is simply because they bump into something while walking. Think of a collision with walls, doors, cupboards, glass windows, tables, chairs, etc. As a result, head, knee, neck, and foot injuries often occur. These accidents are usually the result of inattention. To prevent this, an employer must ensure a spatial working environment as much as possible (Zwetsloot, 2017).



Figure 23 This are the places the employees bump into and hurt themselves

Fall from height

Some employees suffer (serious) injuries because of a fall. For example, falling from ladders or scaffolding. From the last 12 months, the data shows that around 10% of the injury is because employees fall from height. Even though these numbers don't seem high, the consequences can be very serious. These accidents can often be prevented afterwards. It is important that employees work with approved equipment, that they are equipped with personal protective equipment (anchoring) and that they receive good training before work (Zwetsloot, 2017).

Slipping/tripping

Workplace injuries are often caused by slips or trips. From the last 12 months, the data shows that around 25% of the injuries are because of *Slipping and tripping*. *S*lipping is often a result of a slippery floor. Employers must therefore provide good footwear in workplaces where the risk of slipping is very high. Stumbling often happens because objects are not properly cleaned up and therefore continue to swing on the work floor. Employees themselves play a large part in this (Zwetsloot, 2017).



Water on floor

Gasket on floor

Parts on floor



Figure 24 Slipping and tripping happen around 25% of the time. In all six figures it is hown how this slipping and tripping accidenst happen

Overload

Overuse injuries are very commonly reported by insurance companies. This includes injuries related to pulling, lifting, pushing, holding, carrying, and throwing at work. This often results in back pain (Zwetsloot, 2017).



Figure 25 lifting the wrong way, can seriously injure the back of the employee. As shown in the picture, the employees work with heavy products and machines

4.11 Consequences of incidents

The consequences of the incidents when analysing the data are employees who work with the machine, that get injured at their fingers and hands. Most injurers are cuts, also bumping into equipment and slipping and tripping on things that should not be there.

'Most injuries are cuts in fingers because the employees work with sharp equipment and products.''

"Also, a lot of slips and trips, because there are a lot of things on the floor that should not be there, think about water, parts of equipment on the floor or cables on the floor. These can cause serious injury if you don't pay attention."

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Part of body harmed LTI + MTI (last 12 month)

Figure 27 The part of the body that is the most harmed; are the fingers

4.12 Leadership

Management plays a role in the safety awareness of their employee (Collins, Gadd, Flin, Mearns, & O'Connor, 2010). Through the right leadership, the desired behaviour in the organization can be influenced (Weick & Sutcliffe, 2011).

Based on the data and interviews, it will be explained how management influence safety awareness at this moment. Finally, it will be explained how management can positively influence the behaviour of the employees in the future.

The interview with the employee showed that the majority does know what measures the management is taking in the field of safety. Quoting respondent:

" I think that the organisation provides safety information".

Safety communication can be interpreted differently by everyone. This can also have consequences for the information employees receive from management.

Set a good example

According to the theory of Schein and Guldenmund, the role of management is essential in creating safety in the workplace. Management must set a good example for employees (Schein, 1992). Management must also inspire the employees and make them more aware of the risks at work. The management reflects the organization.

According to the respondent, management should be more concerned with safety:

"Management could be a little more active in safety"

'How the management can go around and accept all these risks, that's the question''

The respondent believes that the management should do more in the field of safety, namely offer training courses to the employees on the shop floor.



Figure 28 A product that is covering the yellow safety line

The next respondent thinks that management already takes sufficient measures in the field of safety:

"Yes, I think they are just doing a good job. They always inform you about important safety things. There are also clear agreements about working safely, so no excuses not to stick to them. But I must say that some leaders are stricter in this area than others".

The interviews with the employees also show that there is a need for more attention from management. In this way, the employees feel recognized. This emerges in one of the interviews, quoting respondent:

" Sometimes there is no personal contact".

Several employees think that the management is doing its job well. There is a difference in answers about the management concerning safety and communication about safety, this can be explained, because every department has another manager, and every manager thinks and acts differently about safety. Also, it is striking that the employees who are happy with the management are often young employees who have not been working for a long time. Other employees who have been working for more than twenty years are less pleased with the management.

According to Schein and Guldenmund, management must be visible and involved with their employees. That means they have to show themselves in the workplace now and then and have a chat with the employees. In this way, a bond is created and through a conversation, it is possible to find out what the employees think about safety (Schein, 1992). According to the management, the door is always open, and employees can always come if they have any questions. Furthermore, a manager should always give a good safety example. But that doesn't always happen, as the following quotes show:

"Last time someone from management walked through the workplace together with an external person. And that person was not wearing safety shoes. It was pointed out by several employees that the gentleman did not have the right shoes. After being approached by an employee ten times, the manager got angry and said yes, I get it.

That is not a good example of him".

According to Schein and Guldenmund, management should lead by example about safety. Management must show that safety is high on the agenda. In addition, management can set the right example by wearing the right personal protective equipment in the workplace (Schein, 1992).

Mutal trust

Furthermore, management can increase awareness by holding a weekly meeting about safety or by carrying out safety inspections together with an employee. This also creates mutual trust.

> "The management they go daily in the production area for at least 15 minutes to half an hour and perform these walks, safety walks we call it."

The management takes a safe walk every day around the shop floor alone. But it's more efficient to not do this alone but to take an employee with him in the production, and every day take another employee. This way the employees also see the hazards that are on the shop floor. And this could also help with the relationship between management and employee. Because the management goes around the production area and afterwards comes and tells what is wrong and needs to go different, this will not help the relationship between management and employee.

Many organizations have a top-down culture (Berkel and Rodenrijs, 2013). Mutual trust between management and employees is important in an organization to change behaviour and culture. Management can change the employee's behaviour in various ways. One of those ways is to reward. It's simple, and it doesn't take a lot of time and money. Employees generally feel that they are poorly rewarded by management for desired behaviour. While compliments to employees are very much appreciated. It helps if management rewards employees for working safely, which will give employees satisfaction and make them want to do their best next time. This promotes safety at work and ensures that other employees will follow this example because they also want to be rewarded. It emerged from the interviews that are conducted with the employees that motivating with rarely employees rewards or compliments occurs. Quoting respondent:

"There are no compliments when something goes well".

What is striking in the study is that supervision can differ per department. Smaller departments are more supervised and that those employees are more aware of the risks. The manager also walks around and checks whether everyone is obeying the safety regulations. The somewhat larger department lacks this supervision and there is no attention to each other.

> "I think that differs per department. I am quite careful if I am not wearing gloves or wearing eye protection. And we also check each other, if I see that my colleague is working unsafely, I immediately say something. Our department is quite good at this".

How can management make 'safety' attractive? Because rules are not interesting to read for employees. It can also be done differently by, for example, using fun advertising, funny posters, exercises in the workplace or imitating an incident (Zohar, 2008 & Zohar & Luria, 2003, 2008).

5. Discussion

In this thesis, the risk management of safety awareness in a manufactory is introduced. The results indicate that Accidents at work represent a major social challenge (International Labour Organization, 2010). Many accidents are related to carelessness, inattention, lack of overview, exhaustion, lack of knowledge or lack of good tools these are often responsible for accidents. Many of these aspects are lumped together under the heading of 'safety awareness' (Glendon, 2006).

The study demonstrates several factors that influence safety awareness at the workplace. The first factor is the employee. Work accidents are often related to human behaviour, how people interact with each other and how they deal with risks and guidelines. A condition for creating awareness is that employees are aware of all the risks around them. Employees like to see what they want to see, so their objective drives them (Verkleij, 2014). However, as a result, information can be processed incorrectly, because it's not communicated the right way, or employees will work in their way. This in turn means that employees will act incorrectly faster and then incidents will take place faster (Dupont, 1997).

Also, all employees should receive safety training, about the equipment they work with and about the environment they work in. This training should not be given once, but it should be given every three months. This way, the awareness of risks will be known and won't fade away after X number of months (Endsley M., Toward a theory of situation awareness in dynamic systems, 1995).

The second factor lies with the workplace design, work accidents can occur because the environment is not properly designed. The workplace environment is important for employee safety (Sarter & Woods, 1988). A manufactory can be very full on the site, this can quickly lead to accidents. Employees need insight into the current situation to be able to assess the consequences of certain actions so that they can see the risks and use this to prevent incidents. In complex situations, these skills fall short, because employees work in a chaotic environment or don't use the right equipment (Endsley, 1995). As a result, incidents at work can take place faster. When a workplace is not designed the right way or cleaned up good, employees can bump into the equipment or slip and trip. The management can play a big role in informing the employees how important it is to clean up their equipment and not use forbidden equipment and always keep the safety lines not occupied (Margaryan, Littlejohn, & Stanton, 2016).

The last factor that influences safety awareness is leadership. It all starts with management, which holds the key to behavioural change (Weick K. ,

1995). The management has the task to steer the organization towards a safety-conscious company. Management has an important role to play in promoting safety awareness. To change the behaviour of the employees, it is up to management to direct it. Management must ensure that the process they implement is supervised and safeguarded. In addition, management must inspire employees to work more consciously and safely (Reason, 1997). They can do this by setting a good example and by always being visible and involved. Only in this way, mutual trust is created, and you can direct the behaviour of the employees to work more consciously and safely.

This analysis supports the literature that several factors affect safety awareness in a workplace, according to Endsley's model. It is about perceiving signals from the environment and the meaning given to them. This meaning is influenced by the mental models that each person has developed. These mental models are for each person triggered at a different time. Employees must have a good understanding of the environmental situation of human functioning (Endsley M. , Toward a theory of situation awareness in dynamic systems, 1995). As a result, they are better able to estimate the possible risks and reduce the risks. In addition, other factors can influence the safety awareness of employees. Incorporating information in a complex and dynamic environment is not always easy.

To secure the safety at a company employees should have knowledge and access to documentation about safety procedures (Zin Cheung, 2007). Documents are important ingredients for a safer working environment because in this way employees become more aware of the risks on the work floor (Steijger, Starren, Keus, Gort, & Vervoort, 2003). This is a management task that must be implemented, guided, and guaranteed processes (Zohar & Luria, 2005).

The empirical research and the literature have shown that these factors play a role in influencing the safety awareness of employees at the manufactory.

6. Conclusion

How can a large manufacturing company maintain or increase safety awareness on the shop floor in an everyday situation?

A large manufacturing company can create a safe working environment on the work floor if they work on raising safety awareness. From the literature, data and interviews, it emerged that management has a major influence on the behaviour of employees. Management influences the culture of an organization and can steer the organization in the right direction.

Management must set a good example for its employees by working safely and using the right resources. Management is the key to changing the behaviour of its employees. They can do this by providing the right documents and tools. It is important that management anticipate this and ensures that these resources are made available, supervised, and safeguarded. In addition, employees should be rewarded for the work they do well so that they are motivated to work even better. External factors that influence the work of the employees must also be resolved, such as a messy workplace and using the right equipment.

The next step for management is to find out what factors come into play as to why these employees are not aware of the risks at work. And what methods the management can use to ensure that employees become more aware of the risks? One of the methods that almost all employees are open to is training. Training can be about risks on the work floor, risks about products they use, training about how to use the right equipment, etc. It's important to understand the risks that are there on the work floor, that way, the employees know what to look for and are more aware of the risks around them. Training increases the employees' knowledge of risks. Knowledge is the next step towards behavioural change and a safer manufacturer.

Recommendations on how to maintain and increase safety awareness on the shop floor, are made in the next section.

6.1 Recommendations

As a result of the research on safety awareness, several recommendations are proposed in this section to increase employees' awareness of risks in the workplace.

Management involvement

First, management will have to be more involved with the employees. Management should show more involvement and set a good example in the workplace. Showing themselves on the shop floor now and then, asking how things are going and what the employees are doing. This creates mutual trust, and management can direct the employee's behaviour. Management can change the safety culture in the workplace. Management is the key to behavioural change.

Safety training for new employees

The next step to create more safety awareness: Provide all new employees with safety training in the beginning. This gives the new employee immediate insight into the risks. Then they also know what the risks are and what measures the new employees can take to work safely. General safety training with all safety information can help employees to work safely.

Training

In addition, a company should provide repetitive safety training to all employees entering the workplace. These workouts can be given every three to six months. Training can then consist of, for example - playing out a scenario in the workplace, a presentation about the risks of hazardous substances or a toolbox (brief information about a specific subject). A new risk can be presented every three months. This way, the company increases the knowledge of risks for their employees, and as an employee, they are more aware of everything around them. In addition, the management must set a good example and anticipate this training. In this way, you increase everyone's knowledge and help each other to make the organization more aware of risks.

Guarantee

Finally, assurance from management must ensure that the vision, mission, documentation, tools, incident reporting system and training are maintained. A company can do this through Key Performance Indicators (KPI). KPI are variables to analyse the performance of a company. They can use KPI's to measure the success of a training or a tool. With a KPI an organization can provide insight into the progress of the pursuit of long-term goals. As an organization, they can also continue to improve themselves by making training courses even better or by using more tools. As a result, the organization continue to develop itself in the field of safety.

6.2 Further research

This chapter addresses some of the topics that can be considered for further research, recognizing a lack of time and limitations of the analysis.

6.2.1 Topic

The chosen topic has been a broad topic. Where each of the factors could have been researched on their own.

6.2.2 Interviews

To get a better understanding of how employees think and act bout safety, more interviews could have been taken. The best way to get an understanding is to interview different employees from different departments, ages, and positions.

6.2.3 Observations

To understand how employees act in their environment, it could have a benefit to observe the employees at their workplace.

6.2.4 Manufacturers

To get a broader knowledge about safety at Danish manufactory, there should have been more interviews done by different kinds of factories.

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Appendix 10.1 Interview questions

Good afternoon, my name is Aylin, and I'm a student at Aalborg University. I study risk and safety management and for my last year, I have to write a thesis. My thesis is about safety awareness in manufactories.

I would like to interview you because I am curious about your opinion about the incidents and safety awareness within this company.

The results of this interview will be worked out in a transcript and that is why I would record this interview. (After that I delete the recording).

The interview will last approximately half an hour to three-quarters of an hour.

Do you have questions?

background:

1. Experience?

In general:

- 1. How is safety?
- 2. Is reporting an important aspect of the organization's daily business, why?
- 3. What kind of responsibilities do employees have when it comes to reporting?

Important

- 1. Can X create a safer working environment in the workplace by raising safety awareness?
- 2. How would you encourage staff members to adopt your safety measures?
- 3. What would you do if you observed employees neglecting to follow safety procedures?
- 4. How does a good production site look like to you?
- 5. What are the most common causes of incidents? human factor
- 6. Why do you think that's the case?
- 7. How can you make them more aware?
- 8. How is the safety awareness in the management area?
- 9. What would work to create awareness among other employees?

Policy

1. Are policy instruments and tools implemented, concerning safety? Which are those?

Safety information system:

- 1. When it comes to reporting, how does this work within this organization?
- 2. In your opinion what is an effective safety information (reporting) system?
- 3. Do you think the safety information system is understood and accepted by all employees?

- 4. Do you feel that the reported information, covers the true safety conditions in the organization? Or do you think under-reporting occurs?
- 5. How is it when it comes to availability, is the reported and processed information in the safety information system available at all times and for who?
- 6. Do you use some kind of safety indicators and performance goals?
- 7. Do you use any measures to assess the safety information system's effectiveness from time to time?

Safety Culture:

- 1. Do you feel there is a shared understanding of what is important, how things work, and the way things work regarding reporting and/or other safety matters?
- 2. Do you experience that there is a mutual established trust and two-way communication within the organization when safety-related matters arise?
- 3. Do you reward good HSE-results?
- 4. what consequence are used if lacking or no-reporting occurs?
- 5. How does the organization use previous incidents, near-misses, accidents for future improvement and learning?

In the end:

Anything else you would like to add?

10.2 Interview 1

00:00:00.000 --> 00:00:19.070

Aylin Rushdi Azawi

hello, I'm doing, uh, my master thesis about safety, awareness, and the causes of incidents. Like a big man factory, but I focused now and because my husband is working there. So, I'm looking at what?

00:00:19.150 --> 00:00:49.260

Aylin Rushdi Azawi

The UM causes the incident. Why are people not aware when what kind of company do to make people more aware? So yeah, there are not, so they're not happening so many accidents. And I did. I used to work in Holland at the airport, and I did my bachelor also about safety awareness and I found it so interesting about how people think when they work.

00:00:49.310 --> 00:00:51.280 Aylin Rushdi Azawi And why do they do the things?

00:00:52.020 --> 00:00:52.460 Mirela Uh-huh

00:00:52.290 --> 00:01:08.010

Aylin Rushdi Azawi

And why are they? Do they let things happen? And I found it so interesting. So, I thought you know, I wanna do my masters also in this safety awareness and then go maybe a little bit deeper. Maybe take like a big company and see how the human factor is.

00:01:09.190 --> 00:01:21.390

Mirela

yes good. Yeah, it's an interesting subject and I'm agreeing because we can develop all kinds of tools we can. You know we have so many procedures, but we still have a high number of incidents.

00:01:10.870 --> 00:01:11.280 Aylin Rushdi Azawi Yeah.

00:01:21.800 --> 00:01:22.270 Aylin Rushdi Azawi Uh-huh

00:01:22.100 --> 00:01:52.470 Mirela

And many times we also we are fast. You know, in analysing the investigation and saying it's human error and it's something that I don't even accept. UM, I'm. I'm saying the human error is the last cause that you can choose it. It's also always underlying other causes. And it's rarely possible to say that it's human error. So that's why.

00:01:31.100 --> 00:01:31.350 Aylin Rushdi Azawi yeah. 00:01:51.410 --> 00:01:51.660 Aylin Rushdi Azawi What?

00:01:52.530 --> 00:01:55.520 Mirela At least my vision or on the on these things.

00:01:53.330 --> 00:01:53.710 Aylin Rushdi Azawi Yeah.

00:01:56.170 --> 00:01:57.060 Mirela Uh, because.

00:01:58.050 --> 00:02:29.490 Mirela

We are, we are if we investigate it. If we have good problem solving and if we take the full investigation and we have some tools like the fish bone diagram and four times why so if we look at all these underlying causes, we can find always like procedure where maybe not clear enough we have not instructed the employees properly but most and the most important one. It's we have it. We called the top. It's looking at the equipment.

00:02:30.020 --> 00:02:31.990 Mirela How it's our machinery?

00:02:33.020 --> 00:02:39.690

Mirela

Everything that we have at tools, it's completely safe. Have we given to the employees the sufficient you know?

00:02:40.960 --> 00:02:45.870 Mirela

Tools to work with and we can always find these gaps that we are not perfect.

00:02:46.810 --> 00:02:47.590 Mirela And dumb.

00:02:49.010 --> 00:02:51.240 Mirela So I don't know where to start up.

00:02:50.980 --> 00:02:53.790 Aylin Rushdi Azawi OK, it's super interesting all over the place.

00:02:54.180 --> 00:02:58.330 Mirela So I can start with one of your general questions.

00:02:58.380 --> 00:03:01.460 Mirela So here we are sent. I have some things up here, yes. 00:03:02.550 --> 00:03:04.460 Mirela So you are asking in general about.

00:03:05.300 --> 00:03:07.340 Mirela Safety at and.

00:03:08.170 --> 00:03:12.470 Mirela What we have in Denver. So, we have many things, and this is where it's where to start.

00:03:13.860 --> 00:03:17.710 Mirela We have as a basic our safety at the program.

00:03:18.380 --> 00:03:18.900 Aylin Rushdi Azawi Yeah.

00:03:19.670 --> 00:03:21.590 Mirela At this is more about.

00:03:23.330 --> 00:03:45.480 Mirela

You know the requirements for having the minimum requirements. Let's say like the protective equipment like everybody entering them, false promises, they will need to have safety glasses, safety shoes, and depending on the area may be other safety, like earplugs. Whatever is necessary based on the risk in that area.

00:03:45.640 --> 00:03:46.190 Aylin Rushdi Azawi Uh-huh

00:03:46.850 --> 00:04:01.530 Mirela

So those are, let's say the main requirements here described in safety at and I could hear that you might already have access or looked at this requirement, so I don't know if it's something interesting or you have questions about the safety program.

00:04:03.180 --> 00:04:25.880 Aylin Rushdi Azawi well, I was just like what I know is yeah you have safety equipment and safety rules but there were always people like thinking, yeah but I need to do this quickly or any two I have I. I'm pressured so I'm just going to take this and put this here or like how do you deal with that?

00:04:18.070 --> 00:04:18.580 Mirela Uh-huh 00:04:26.230 --> 00:04:29.430 Mirela

yeah, so this had just the basic requirements as we said.

00:04:31.370 --> 00:04:40.850

Mirela

Uh, so let's think about what we have done in the last couple of years. We had the speak up for safety campaign.

00:04:41.300 --> 00:04:42.450 Aylin Rushdi Azawi Uh-huh OK.

00:04:42.810 --> 00:05:06.610 Mirela

So, this is one of the let's say, as you also mentioned. What do we do more so, so this campaign was lounge? I don't remember if it's 2019 or and is there where we have created materials. They are animation. They have been in production. We had handed out that we have given to the employees and posters.

00:05:07.450 --> 00:05:10.770 Mirela And we had training for school all the employees.

00:05:11.770 --> 00:05:36.620

Mirela

Uhm, and somehow train them and how to you know, spot those hazards to identify and to stop the hazards. The second is to report it because sometimes we see it, but we just pass by so there is a risk that we can. Everybody can see it so it's we had a second step to say OK, you need also to report it. You cannot leave the premises before reporting the hazards.

00:05:27.950 --> 00:05:28.400 Aylin Rushdi Azawi Uh-huh

00:05:37.060 --> 00:05:37.440 Aylin Rushdi Azawi uh-huh

00:05:37.380 --> 00:05:55.020

Mirela

And then in the end to correct it. And it's not necessarily that is the only way to correct it, but could be that needs to be corrected by, uh, somebody from maintenance. This is why I say correct but act safely. If you can do it by or do it. But think safely and.

00:05:55.760 --> 00:06:00.090 Mirela And if not, inform the people that should correct this hazard.

00:06:01.160 --> 00:06:01.660 Aylin Rushdi Azawi OK.

00:06:01.970 --> 00:06:05.230 Mirela So this has been part of raising awareness. 00:06:05.840 --> 00:06:09.450 Mirela And we see it and maybe we have improved, but maybe it's not sufficient.

00:06:10.610 --> 00:06:16.710 Mirela So what we do regarding awareness, at least let me see we had created UM.

00:06:17.600 --> 00:06:23.310 Mirela

A safety risk. A catalogue we'd safety risk because sometimes people they don't know what to look for.

00:06:23.910 --> 00:06:24.400 Aylin Rushdi Azawi Uh-huh

00:06:24.840 --> 00:06:55.350 Mirela

So it's one of the that's improvements we have done this year, so I would just go very fast through this. It's saying actually that you should use this catalogue during start-up meetings so you can take a focus area and talk with the employees and say today we are looking for slip and trip hazards for example and have a dialogue and say we gave we can see this risk or risk have happened in another location. Let's focus on this.

00:06:40.940 --> 00:06:41.360 Aylin Rushdi Azawi OK.

00:06:47.090 --> 00:06:47.460 Aylin Rushdi Azawi Uh-huh

00:06:55.670 --> 00:06:58.040 Mirela So its start-up meetings with all the production.

00:06:58.800 --> 00:07:00.850 Mirela And then we have the daily safety walks.

00:07:01.810 --> 00:07:02.290 Aylin Rushdi Azawi OK.

00:07:02.680 --> 00:07:04.830 Mirela And daily safety walks.

00:07:07.170 --> 00:07:08.200 Mirela It's a.

00:07:09.790 --> 00:07:20.680 Mirela It's by far the management they should go daily in the production area for at least 15 minutes to half an hour and perform this works, gamble walks how we call it.

00:07:21.270 --> 00:07:28.200

Mirela

Yeah, so they need to have a plan locally and to go around the production and come check for hazards in general.

00:07:29.470 --> 00:07:33.460 Mirela So there are two methods, both the employees, but also the management teams.

00:07:34.010 --> 00:07:34.600 Aylin Rushdi Azawi OK.

00:07:35.200 --> 00:07:37.120 Mirela And then here it's.

00:07:37.920 --> 00:07:45.400 Mirela

We have developed some areas like this one is manual material handling and then we give examples. We say OK. What are the hazards?

00:07:46.550 --> 00:07:54.010

Mirela

Uh mused, the right PPE and use the right tools so they're just to give some examples this so this is for.

00:07:55.490 --> 00:08:01.190 Mirela If manual handling, then we give more information. What are the typical hazards?

00:08:02.570 --> 00:08:22.350

Mirela

And then we have this cold coaching guard. So here we are showing examples, and this is for your life. It's what is happening. This is in our production. Those are our products so we are seeing what the typical hazards are and how they can improve. And we have several examples for each category.

00:08:16.640 --> 00:08:17.090 Aylin Rushdi Azawi Uh-huh 00:08:23.080 --> 00:08:23.680 Aylin Rushdi Azawi OK. 00:08:24.420 --> 00:08:26.700 Mirela So you can see here some of the examples.

00:08:28.010 --> 00:08:37.560 Mirela So this was one of the areas and then we have similar for so those are all actual. This is the highest risk that we see.

00:08:38.460 --> 00:08:52.840

Mirela

We call it beforehand and finger but is in general. Yeah, when you get injured on hand and finger, but it's, uh, its typically material manual handling, material, assembly, whatever. We can call it.

00:08:53.980 --> 00:08:55.570 Mirela So 2.

00:08:54.880 --> 00:09:00.250 Aylin Rushdi Azawi I think the spring has been stopped. I don't know if I cannot see anything anymore.

00:09:00.590 --> 00:09:01.750 Mirela No OK, no problem.

00:09:06.670 --> 00:09:07.370 Mirela Yes.

00:09:08.040 --> 00:09:09.390 Aylin Rushdi Azawi Yeah, now I can see.

00:09:10.760 --> 00:09:15.170 Mirela So in other categories, working surfaces is the next high risk that we see.

00:09:16.640 --> 00:09:22.430 Mirela Uh, we see slips and trips. We call it so. We have a lot of the risk and.

00:09:23.050 --> 00:09:34.060

Mirela

Is the same similar? We are explaining what the risk is and then we have again the coaching cards. So, the same system shows examples where they could look for.

00:09:34.680 --> 00:09:36.190 Aylin Rushdi Azawi August Busch marked yeah.

00:09:36.700 --> 00:09:45.510 Mirela

So it's actually from what happened previously in our production, so then we have different examples of where it can go wrong.

00:09:46.150 --> 00:09:48.120 Mirela Including outside areas.
00:09:48.960 --> 00:09:49.570 Mirela And.

00:09:51.350 --> 00:09:53.920 Mirela So this is tripping over objects.

00:09:55.720 --> 00:09:57.040 Mirela Then we have agronomics.

00:09:57.820 --> 00:10:02.170 Mirela And it's one of the areas that we see an increase.

00:10:03.390 --> 00:10:06.320 Mirela At least we know that they are very hard to.

00:10:08.230 --> 00:10:13.360 Mirela Discover in good time and if the employees don't say you know it's, uh.

00:10:10.460 --> 00:10:10.740 Aylin Rushdi Azawi Yeah.

00:10:14.390 --> 00:10:18.810 Mirela Difficult evaluation now said the first one. There are much easier to detect.

00:10:19.220 --> 00:10:20.140 Aylin Rushdi Azawi Yeah, exactly.

00:10:20.840 --> 00:10:25.160 Mirela And here we are also giving avoid, you know giving some recommendation.

00:10:25.780 --> 00:10:34.360 Mirela If you see somebody lifting, so it's a risk so we can identify those by involving the employees. Again, the coaching cards.

00:10:35.190 --> 00:10:36.120 Mirela So those are just.

00:10:36.800 --> 00:10:49.700 Mirela

A few examples of the risk that we had at least a catalogue we have started to create to train, to teach people and how to so we are trying to link the speaker for safety campaign that you see in.

00:10:49.940 --> 00:10:50.410 Aylin Rushdi Azawi Uh-huh

00:10:50.850 --> 00:10:53.450 Mirela 2 examples to train on how to spot them.

00:10:54.050 --> 00:10:54.530 Aylin Rushdi Azawi yeah.

00:10:54.850 --> 00:10:58.070 Mirela And I think I have something more here.

00:10:59.810 --> 00:11:03.460 Mirela You were asking about engagement. This is a.

00:11:02.650 --> 00:11:02.950 Aylin Rushdi Azawi Yeah.

00:11:04.530 --> 00:11:07.140 Mirela This strategy we are talking about for next year.

00:11:07.940 --> 00:11:13.410 Mirela

So just to talk about, it's yeah there are some few slides, but if you see this.

00:11:15.830 --> 00:11:45.910 Mirela

The safety culture you were asking about, the safety culture we have these three pillars we called it and its leadership, its competencies and engagement. So those are, let's say the safety culture for us and to work, you know, for we call it vision. 0 So we don't want to have any injuries, but we know it's difficult but toward towards this uh, target.

00:11:17.750 --> 00:11:18.080 Aylin Rushdi Azawi Yes. 00:11:26.900 --> 00:11:27.350 Aylin Rushdi Azawi OK. 00:11:41.710 --> 00:11:42.130 Aylin Rushdi Azawi See. 00:11:47.290 --> 00:11:55.400 Mirela So and of course, we have this fundamental safety operation that I'm telling you because it's always you can find something that can be improved. 00:11:55.840 --> 00:11:56.270 Aylin Rushdi Azawi Yeah.

00:11:57.000 --> 00:12:00.250 Mirela And if I have to jump because this is what you're.

00:12:00.930 --> 00:12:02.740 Mirela Let's say the area of interest is.

00:12:02.810 --> 00:12:03.230 Aylin Rushdi Azawi Yeah.

00:12:03.610 --> 00:12:06.560 Mirela So we want to have some safety engagement activities.

00:12:07.650 --> 00:12:18.120

Mirela

And means that we want we have tried several times, but it didn't succeed yet to have an annual safety activity.

00:12:18.540 --> 00:12:20.230 Aylin Rushdi Azawi Then how come they didn't?

00:12:18.870 --> 00:12:19.130 Mirela But

00:12:19.840 --> 00:12:35.690

Mirela

across, because we do have many safety activities locally, but we want to have an airline safety activity in one day or one week where we have, you know, our CEO Gore going in front of the people are saying this is what we want.

00:12:36.590 --> 00:12:48.480 Mirela

Uhm, it has been stopped this year due to other focus activities. So, this is what we want. We want to have this as part of the enforcement that we have a yearly

00:12:49.390 --> 00:12:55.650 Mirela global activity throughout the entire group. Group and it is difficult because we are a big group.

00:12:53.310 --> 00:12:53.640 Aylin Rushdi Azawi OK.

00:12:55.890 --> 00:12:56.360 Aylin Rushdi Azawi Yeah. 00:12:58.180 --> 00:13:12.680 Mirela

Uh, and then they're also local safety awareness activities. Depending on the local challenges. Because we are so different, so some this is where we need to. To also say it. Maybe it's not sufficient that we make.

00:13:06.890 --> 00:13:07.520 Aylin Rushdi Azawi Exactly.

00:13:13.510 --> 00:13:17.110 Mirela Only at or level do you need also to have your local activities.

00:13:17.580 --> 00:13:24.670 Aylin Rushdi Azawi Yeah, because is international, so I guess another country has their culture. Safety culture is different.

00:13:25.520 --> 00:13:33.570 Mirela

It is, yes, it's behaviour. We see a lot of behaviour differences or at least challenges in behaviour.

00:13:27.430 --> 00:13:27.780 Aylin Rushdi Azawi Yeah.

00:13:34.380 --> 00:13:34.830 Aylin Rushdi Azawi Uh-huh

00:13:34.500 --> 00:13:36.500 Mirela I know we have some, for example in Mexico.

00:13:37.180 --> 00:13:37.630 Aylin Rushdi Azawi OK.

00:13:37.790 --> 00:13:48.330 Mirela No matter how much we put more pressure on, still, it's. It's tough to move this behaviour because this is how people work. This is how they are used to, and it's.

00:13:49.420 --> 00:13:51.850 Mirela Yeah, that's the biggest challenge.

00:13:49.710 --> 00:13:50.130 Aylin Rushdi Azawi Thank you.

00:13:52.820 --> 00:13:53.430 Aylin Rushdi Azawi OK. 00:13:53.440 --> 00:13:54.000 Mirela And.

00:13:54.650 --> 00:13:55.640 Mirela What do you see here?

00:13:55.690 --> 00:14:11.400 Mirela

Here actually, is this reinforcement we need to. We are testing different approaches to find programs to lead this cartel cultural change. So, as I'm trying to tell different cultures different yeah behaviours.

00:14:12.280 --> 00:14:14.260 Mirela So now we had actually.

00:14:15.130 --> 00:14:19.710 Mirela Found a program and we are testing it. It's a pilot.

00:14:20.770 --> 00:14:22.580 Mirela It's called a safe start.

00:14:23.290 --> 00:14:23.770 Aylin Rushdi Azawi OK.

00:14:24.050 --> 00:14:38.330 Mirela

Safe start, it's a company or well-known company that have developed some and it's very simple training as I understood, but they have a good concept. It has been rollout for 20 years maybe.

00:14:38.770 --> 00:14:39.240 Aylin Rushdi Azawi OK.

00:14:39.530 --> 00:14:43.140 Mirela Uh, so big companies that.

00:14:43.910 --> 00:14:51.930 Mirela They cannot remove the rest. They know they will have this risk. Also, I don't know in in in in 10 years because they cannot do their job differently.

00:14:52.990 --> 00:14:57.960 Mirela They had at least learned how to use this safe start program.

00:14:58.620 --> 00:15:04.930

Mirela

They are teaching their people to work safely in an unsafe environment.

00:15:05.490 --> 00:15:06.000 Aylin Rushdi Azawi OK.

00:15:05.600 --> 00:15:09.510 Mirela By working with their mindset, training them.

00:15:10.080 --> 00:15:11.160 Mirela To detect risk.

00:15:12.600 --> 00:15:20.180 Mirela

Teach them how to stop because of what they are saying. We this training. I would. I look forward to seeing we have the first pilot here in November.

00:15:21.040 --> 00:15:21.910 Aylin Rushdi Azawi Oh, OK.

00:15:21.250 --> 00:15:21.840 Mirela Uhm?

00:15:22.480 --> 00:15:30.080 Mirela

Do what they are teaching people is because they're saying the first time you do something. You are very aware of this can be risky.

00:15:27.400 --> 00:15:27.730 Aylin Rushdi Azawi Uh-huh

00:15:31.130 --> 00:15:32.080 Mirela Second time.

00:15:33.310 --> 00:15:37.240 Mirela You will say, oh, I have done this before. You know it's not that risky anymore.

00:15:38.250 --> 00:15:38.550 Aylin Rushdi Azawi yeah.

00:15:38.490 --> 00:15:41.200 Mirela Uh, I was wanted to see if it's still working, yes.

00:15:41.020 --> 00:15:41.300 Aylin Rushdi Azawi Yeah. 00:15:42.680 --> 00:15:43.230 Mirela Uh.

00:15:43.900 --> 00:15:57.490 Mirela And third time in four times. So, you sta

And third time in four times. So, you start to decrease your awareness in time as your mind is telling you is getting used to this risk. So actually, in one point, it will go wrong because.

00:15:50.110 --> 00:15:50.550 Aylin Rushdi Azawi Uh-huh

00:15:53.870 --> 00:15:54.700 Aylin Rushdi Azawi yeah exactly.

00:15:58.330 --> 00:16:06.660 Mirela From the beginning, you have forgot that there were some risks in the beginning. You are aware of the risk, but in time you have learn how to work with the risks.

00:16:07.650 --> 00:16:26.990 Mirela

They have a very good example. Send and very good programs. Then this is what we look for because as you said we can make all kinds of procedures we can give them all the protective equipment we want. They will still be. The risk will be there will still be there.

00:16:28.010 --> 00:16:36.040 Aylin Rushdi Azawi Yeah, but this is one of the also literatures that I'm reading about that in the beginning that people are so aware and then.

00:16:37.070 --> 00:16:41.340 Aylin Rushdi Azawi Line and then it goes down, down, down, down and they don't see it anymore.

00:16:37.960 --> 00:16:38.560 Mirela Decline.

00:16:42.030 --> 00:16:51.740 Aylin Rushdi Azawi And like how do you make those people aware? So that's also what I'm looking for. Like how I can do that. So that's also what I'm writing about. So, this interesting for me.

00:16:42.280 --> 00:16:42.730 Mirela Yes.

00:16:53.170 --> 00:17:00.250 Mirela

I will show you something I don't worry for sure, but let me see if I have this, uh.

00:16:54.970 --> 00:16:55.260 Aylin Rushdi Azawi OK. 00:17:02.110 --> 00:17:08.640 Mirela No, I don't have this presentation. I wanted to see if I have something with safe start because we cut them. 00:17:11.090 --> 00:17:12.810 Mirela No, I don't have it here. 00:17:13.860 --> 00:17:21.270 Mirela We got a small presentation about safe start. Uh, the company. Let me see if I have this one. 00:17:17.460 --> 00:17:17.850 Aylin Rushdi Azawi OK. 00:17:25.010 --> 00:17:25.950 Mirela Need to stop sharing? 00:17:26.010 --> 00:17:26.580 Mirela God. 00:17:27.970 --> 00:17:30.290 Mirela To be able to find the information. 00:17:51.290 --> 00:17:53.040 Aylin Rushdi Azawi Yeah, yeah. 00:17:59.290 --> 00:18:00.910 Mirela Let me share this one. 00:18:01.630 --> 00:18:02.040 Aylin Rushdi Azawi Yep. 00:18:04.390 --> 00:18:08.240 Mirela This company it's quite interesting what they are saying. It's actually. 00:18:09.690 --> 00:18:18.990 Mirela 90% of the incident it's ourselves, it's our own actions. Let's say because we decide to do something or. 00:18:19.790 --> 00:18:27.440

Mirela

Uhm, 80% is due to other people and two percent is actually to equip and this is their philosophy. So yeah.

00:18:26.520 --> 00:18:26.890 Aylin Rushdi Azawi In

00:18:28.400 --> 00:18:36.940

Mirela

This is where we will need a change in that knows for sure. So, this is why I'm telling you that it's quite interesting. Let me see if I.

00:18:37.540 --> 00:18:41.640 Aylin Rushdi Azawi but doesn't that mean that it is he will be here most.

00:18:41.100 --> 00:18:44.810 Mirela Yeah, it's humid. Yeah, it is mostly on human being, yeah.

00:18:42.530 --> 00:18:42.850 Aylin Rushdi Azawi Yeah.

00:18:44.770 --> 00:18:45.110 Aylin Rushdi Azawi Yep.

00:18:46.790 --> 00:18:52.550 Mirela So we are trying to do this in a test right now to find out if this is really.

00:18:53.710 --> 00:19:03.310 Mirela

That's what needs. But it will use it for some location which will not fit on the location to feed the location where we have for behaviour issues.

00:19:05.040 --> 00:19:21.890

Mirela

So, so we'll see if it's a problem for them. For us, we don't know yet, so now I'm contradicting myself of course, because in the beginning I said the statement it is there we need to work to have a safe workplace, and then you work with the behaviour part.

00:19:09.460 --> 00:19:10.150 Aylin Rushdi Azawi OK. 00:19:19.170 --> 00:19:19.660 Aylin Rushdi Azawi Uh-huh 00:19:21.770 --> 00:19:22.130 Aylin Rushdi Azawi

Ε.

00:19:23.370 --> 00:19:37.200

Mirela

So I believe that we are, we still have a lot of improvements to do to come here to this. Uh, because we are trying very hard to teach our people to actually work in an unsafe environment.

00:19:38.590 --> 00:19:48.890 Aylin Rushdi Azawi But don't you also think that the environment is part of the safety? There's so does the environment is perfectly.

00:19:49.290 --> 00:19:54.110 Aylin Rushdi Azawi Uh, we designed that means that there's less incidents.

00:19:54.740 --> 00:20:00.990 Mirela Yeah, maybe I can show you some of the presentation I made previously.

00:20:05.300 --> 00:20:09.360 Mirela I tried to you ask about the analysis of the accident.

00:20:09.650 --> 00:20:10.030 Aylin Rushdi Azawi Yeah.

00:20:11.120 --> 00:20:11.590 Mirela And.

00:20:13.230 --> 00:20:18.480 Mirela First of all, this is what is happening. What we have examples of incident.

00:20:19.300 --> 00:20:21.170 Mirela And this is what we see in the production.

00:20:21.990 --> 00:20:38.470 Mirela

If we see this risk and we don't remove it, how can we expect it to improve? This is why I'm saying we can work with behaviour, and this could be also behaviour because why people are not taking up these things from the floor. Why are we not reporting while we are not fixing the problems?

00:20:22.030 --> 00:20:22.370 Aylin Rushdi Azawi Yeah. 00:20:39.800 --> 00:20:40.420 Aylin Rushdi Azawi You 00:20:40.020 --> 00:20:50.400 Mirela But it's clearly, we don't have a safe workplace where we have such risks around the production. We can find it all over the place, so the next slide is showing risk.

00:20:50.760 --> 00:20:51.270 Aylin Rushdi Azawi uh-huh

00:20:52.570 --> 00:20:53.150 Aylin Rushdi Azawi news.

00:20:52.730 --> 00:21:01.310

Mirela

We still find Nice that are forbidden to use in production, and we have told them many times not to use that kind of nice.

00:21:02.710 --> 00:21:06.460 Aylin Rushdi Azawi But how come that equipment is not moved just?

00:21:07.170 --> 00:21:17.910

Mirela

Yeah, that's the question. When we have you informed when we have trained on how to spot how to clean up how, to you know, standardized and not to have these types of tools, we are still finding it.

00:21:07.420 --> 00:21:07.680 Aylin Rushdi Azawi Like

00:21:18.580 --> 00:21:25.250 Mirela So, so it's going a little bit in the direction of also leadership, because this is up to the leadership, yeah?

00:21:22.800 --> 00:21:24.360 Aylin Rushdi Azawi exactly my next question.

00:21:25.100 --> 00:21:27.830 Aylin Rushdi Azawi Yeah, like how the management is.

00:21:28.410 --> 00:21:33.190 Mirela Exactly how the management can go around and accept all these risks, that's the question.

00:21:29.240 --> 00:21:29.650 Aylin Rushdi Azawi Yeah.

00:21:32.150 --> 00:21:32.470 Aylin Rushdi Azawi So 00:21:34.710 --> 00:21:49.250

Mirela

Then I will show you this is you're asking about the incidents. Here they are. It's a comparison between 2020 21. So, I was analysing the risk in these categories or at least three qualities.

00:21:51.110 --> 00:21:52.810 Mirela This area that I told you.

00:21:53.330 --> 00:21:53.800 Aylin Rushdi Azawi Uh-huh

00:21:53.480 --> 00:22:00.680

Mirela Machinery manual handling. A repair maintenance. Then we have the slip and trip traffic and economics.

00:22:00.880 --> 00:22:01.340 Aylin Rushdi Azawi here.

00:22:01.280 --> 00:22:16.990 Mirela

And we have actually observed increasing the slip and trip, and we have analysed this data, uh, much deeply, and we found actually many cases in the outside areas. So now we are making improvements on this on this area.

00:22:15.350 --> 00:22:15.630 Aylin Rushdi Azawi So

00:22:18.140 --> 00:22:22.560 Mirela And you were asking about the root cause. Here is the root cause.

00:22:23.480 --> 00:22:38.230

Mirela

For the incidents, at least in that time when I was looking at the at the figures and I found out that actually facilities and equipment. It's one of them, not where we have a program for this for machine safety that we are.

00:22:37.810 --> 00:22:38.230 Aylin Rushdi Azawi E. 00:22:38.930 --> 00:22:40.640 Mirela Analysing our machine safety.

00:22:41.280 --> 00:22:49.610 Mirela

But then I found out the procedures, but that's easy. Why we don't have the right procedures in place we all the time. Find out where we are missing a procedure.

00:22:50.130 --> 00:22:52.220 Aylin Rushdi Azawi OK, that's interesting.

00:22:52.660 --> 00:22:57.110 Mirela Yeah, so human factor is the next one, but you can see actually it's not that high.

00:22:57.810 --> 00:22:58.250 Aylin Rushdi Azawi No.

00:22:57.820 --> 00:22:59.520 Mirela Compared with the others.

00:23:01.080 --> 00:23:03.560 Aylin Rushdi Azawi Yeah, and also place design it's.

00:23:01.270 --> 00:23:01.920 Mirela Uhm?

00:23:03.390 --> 00:23:11.610 Mirela

Yeah, workplace design is one of the you're asking the environment. Yeah, how do we place, you know? Do we have sufficient space? How do we, you know?

00:23:06.350 --> 00:23:06.650 Aylin Rushdi Azawi Yeah.

00:23:12.200 --> 00:23:12.710 Mirela Uh.

00:23:13.770 --> 00:23:19.470 Mirela Put our machines and you know the task that people need to do so those are actually the four.

00:23:20.190 --> 00:23:23.730 Mirela Big categories in Climate Solutions segment.

00:23:24.040 --> 00:23:24.530 Aylin Rushdi Azawi Uh-huh

00:23:24.790 --> 00:23:27.670 Mirela And we said that's easy to fix, you know. And. 00:23:28.340 --> 00:23:33.730 Mirela Having things in place, we have many programs up here. I was trying to show 5S.

00:23:34.740 --> 00:23:45.190 Mirela Why we are not there we should. This is examples from a on audit. This isn't an audit at. It's performed at the level and here we could see. OK, this is.

00:23:40.200 --> 00:23:40.430 Aylin Rushdi Azawi uh.

00:23:46.040 --> 00:23:56.270

Mirela

Actually identified why we are not fixing the problem. So, this is where we go to the management and present with the fact with the data and we asked them to do something.

00:23:57.700 --> 00:23:58.350 Mirela Uhm?

00:23:59.180 --> 00:23:59.710 Aylin Rushdi Azawi OK.

00:23:59.330 --> 00:24:05.950 Mirela

Yeah, so this is a so please. This is procedures so we can see we don't have sufficient or clear recipes.

00:24:08.740 --> 00:24:16.390 Mirela And based on this, we set up some actions, 5S SOPS, review walks.

00:24:17.480 --> 00:24:28.340 Mirela

Uh, safety walks and dad showed before and, uh, we have safe start. You can see also as a pilot. We are starting this with the behaviour to find out if it's something for us.

00:24:28.560 --> 00:24:30.760 Aylin Rushdi Azawi Yeah, I think it's really smart, but.

00:24:31.710 --> 00:24:32.230 Aylin Rushdi Azawi You don't.

00:24:31.770 --> 00:24:40.450

Mirela

This is what I had to as a meeting with the management and then now I'm taking each division to discuss what where they will put focus on which location and.

00:24:41.170 --> 00:24:43.820 Mirela Because we have our troublemakers, we can say. 00:24:44.320 --> 00:24:54.510 Aylin Rushdi Azawi Yeah so, but I'm sorry I should have access in this type, but so you're the safety of all departments. Or just then or. 00:24:53.370 --> 00:24:53.880 Mirela Uh. 00:24:54.540 --> 00:25:00.020 Mirela I'm only for climate solutions, so it means it's around 10,000 employees. 00:25:00.790 --> 00:25:02.280 Aylin Rushdi Azawi OK, let's. 00:25:01.500 --> 00:25:03.680 Mirela So we have two other big segments. 00:25:03.980 --> 00:25:04.490 Aylin Rushdi Azawi OK. 00:25:05.070 --> 00:25:05.480 Mirela Yes. 00:25:06.360 --> 00:25:06.770 Aylin Rushdi Azawi What? 00:25:07.370 --> 00:25:08.560 Mirela But, and we have around. 00:25:07.570 --> 00:25:07.850 Aylin Rushdi Azawi Or 00:25:09.620 --> 00:25:12.360 Mirela 49 factories around the world. 00:25:13.600 --> 00:25:19.110 Aylin Rushdi Azawi yeah, I heard that before and I read about it. A lot of employees like 39,000 so. 00:25:19.420 --> 00:25:25.380 Mirela 10,000 we have 10,000 indices, has segment in in climate solutions. 00:25:21.070 --> 00:25:21.550 Aylin Rushdi Azawi Don't know.

00:25:24.400 --> 00:25:26.830 Aylin Rushdi Azawi Oh OK, yeah, OK. 00:25:28.170 --> 00:25:29.060 Aylin Rushdi Azawi Yeah, it's a lot. 00:25:28.570 --> 00:25:36.090 Mirela Let me go back here because you asked me something and I want to show you we're talking about leadership. 00:25:34.480 --> 00:25:34.840 Aylin Rushdi Azawi OK. 00:25:36.320 --> 00:25:39.800 Aylin Rushdi Azawi Yeah, that's important. Only my this is. 00:25:39.360 --> 00:25:46.890 Mirela Yeah, so what we had also done this year we launched a new safety leadership training for all the leaders. 00:25:47.830 --> 00:25:48.460 Aylin Rushdi Azawi OK. 00:25:48.090 --> 00:25:51.800 Mirela For all people, managers, or people that have an employee. 00:25:53.860 --> 00:25:55.050 Mirela And now it's. 00:25:55.670 --> 00:26:07.590 Mirela Through this 2021, it's in the rollout phase, so we are not completely finalized on our location. I think we are around 80% completion in climate solutions. 00:26:08.120 --> 00:26:08.750 Aylin Rushdi Azawi OK. 00:26:09.230 --> 00:26:10.370 Mirela So here we have. 00:26:11.130 --> 00:26:13.100 Mirela Trained, actually the.

00:26:14.400 --> 00:26:22.210 Mirela We took the highest level, then we took the divisions leaders and then all the divisions.

00:26:17.540 --> 00:26:17.990 Aylin Rushdi Azawi Yep.

00:26:23.240 --> 00:26:25.330 Mirela All the factories' managers.

00:26:26.000 --> 00:26:38.880 Mirela

Have been trained and they have to go and stand in front of the next level of management, leadership or supervisors' level and they need to train all their employees, so we get this mindset.

00:26:31.930 --> 00:26:32.260 Aylin Rushdi Azawi You

00:26:39.540 --> 00:26:56.120 Mirela

Uh, I think we have. Also, it doesn't want to open it, but this is a training leadership, uh, presentation with. You know, the concepts in, what they should be, how they should be good role models for their employees?

00:26:49.750 --> 00:26:50.240 Aylin Rushdi Azawi OK?

00:26:56.710 --> 00:26:58.820 Aylin Rushdi Azawi Yeah, because it starts there actually.

00:26:59.030 --> 00:27:03.880 Mirela Yeah, so if you look if we go back to this.

00:26:59.730 --> 00:27:00.080 Aylin Rushdi Azawi Yeah.

00:27:05.450 --> 00:27:20.230 Mirela

We have the frontline leadership. I said they were the three pillars the frontline leadership. So here we have this training for supervisors. Start submitting's and some indicators to measure to measure the performance.

00:27:05.650 --> 00:27:05.890 Aylin Rushdi Azawi Like 00:27:21.390 --> 00:27:24.110 Mirela So we so we do have focus on.

00:27:25.060 --> 00:27:30.000 Mirela As we've said, be behaviour and engagement of the employees. That's one part.

00:27:30.970 --> 00:27:37.140 Mirela

And the other one. It's leadership. And we also going to focus on qualification of the people.

00:27:38.140 --> 00:27:38.580 Aylin Rushdi Azawi OK?

00:27:39.450 --> 00:27:45.600 Mirela So D3 elements that we at least work today, and I don't know if you have seen this before.

00:27:47.930 --> 00:27:48.220 Aylin Rushdi Azawi Right?

00:27:48.090 --> 00:27:48.720 Mirela Uh.

00:27:49.840 --> 00:27:51.420 Mirela Yeah, we want.

00:27:52.660 --> 00:27:59.830 Mirela To be to train our people to become to be this inter dependent so they can.

00:28:00.670 --> 00:28:02.350 Mirela Easily perform a job.

00:28:03.190 --> 00:28:27.400 Mirela Here it's independent where vo

Here it's independent where you can perform your own job independent of the others, but actually a good company should be able to work good in teams actually so, so you start from the reactive to the dependent, independent, and interdependent where you are actually working in in teams. This is what we want to achieve to strengthen our culture.

00:28:06.680 --> 00:28:07.090 Aylin Rushdi Azawi Yeah.

00:28:14.350 --> 00:28:14.670 Aylin Rushdi Azawi Yep. 00:28:28.490 --> 00:28:36.940

Mirela

Yeah, we're here. You are very dependent on supervision than management. It's coming in, you know, telling you all the time you are not drinking, right? You know.

00:28:35.730 --> 00:28:36.000 Aylin Rushdi Azawi Yes.

00:28:37.220 --> 00:28:37.620 Aylin Rushdi Azawi Yes.

00:28:38.090 --> 00:28:39.900 Mirela And I think we are somehow.

00:28:40.650 --> 00:28:56.840 Mirela

In between this we are not reactive. We are also reactive. So, we have elements from all these three. We are not there yet. So, this is what we would like to achieve with these 3 levels of leadership competencies and engagement.

00:28:57.020 --> 00:28:58.630 Aylin Rushdi Azawi And how do you think you will get there?

00:29:00.130 --> 00:29:22.880 Mirela

Yeah, bye what I've shown you are just showing to you, uh, having these programs for the engagement of the employees and what we are trying. It's to build. I think this with the qualification is the more important one to build to map. Actually, their competencies of for different functions to find out what it should be. The minimum requirements.

00:29:24.070 --> 00:29:39.420 Mirela

And treated defied the proper training for the employees. So training, training, training, and it's the same with the engagement because we, as I said we have all this machine safety principles. Here they are some trainings they can already take now.

00:29:40.350 --> 00:29:43.100 Aylin Rushdi Azawi OK yeah.

00:29:43.780 --> 00:29:45.080 Aylin Rushdi Azawi It's really clear.

00:29:46.230 --> 00:29:47.440 Mirela Hopefully I'll.

00:29:47.570 --> 00:29:49.020 Aylin Rushdi Azawi It is, it is like. 00:29:48.490 --> 00:29:53.980 Mirela You had, you had many something Cindy agenda, so I was trying to see if we.

00:29:55.170 --> 00:30:01.390 Aylin Rushdi Azawi Well, I had written down a lot of questions, but are you answering them all?

00:29:58.160 --> 00:29:58.730 Mirela Yes.

00:30:02.660 --> 00:30:03.000 Mirela Yeah.

00:30:02.850 --> 00:30:04.030 Aylin Rushdi Azawi So it's amazing.

00:30:04.450 --> 00:30:12.540 Mirela Yeah, so if we want to go to the policies and so we have only one policy actually indent for us, I don't know if I.

00:30:13.560 --> 00:30:14.750 Mirela Let me see this one.

00:30:15.710 --> 00:30:27.560 Mirela

It's only one policy that contains many policies actually, and you can see it's containing an environmental dense safety policy and health and wellbeing policy.

00:30:17.790 --> 00:30:18.100 Aylin Rushdi Azawi OK.

00:30:24.930 --> 00:30:25.390 Aylin Rushdi Azawi Yeah.

00:30:28.590 --> 00:30:33.190 Mirela And I think we have a special one for environment, but this is not maybe relevant for you.

00:30:34.940 --> 00:30:37.890 Mirela It's just to say here this is the.

00:30:38.770 --> 00:30:49.140

Mirela

Environment health and safety policy. The general one. We want to provide safe and healthy workplace is very general. It's very generic. I will say because it needs to cover the entire.

00:30:49.190 --> 00:30:49.530 Aylin Rushdi Azawi Yeah.

00:30:51.160 --> 00:30:54.660 Mirela What we have besides this it's a.

00:30:57.240 --> 00:30:58.830 Mirela A more detailed.

00:31:01.140 --> 00:31:09.400 Mirela

Supporting policy or call it, but this is more related to the ISO 14,000 and one and 45,000 and one requirement.

00:31:09.960 --> 00:31:11.240 Aylin Rushdi Azawi OK, yeah.

00:31:11.050 --> 00:31:15.250 Mirela Because this is where we want to have all locations certified.

00:31:16.530 --> 00:31:25.890

Mirela

We are not certified on 45,000 and one on all locations at the requirement. It's only four environments because this is a customer requirement.

00:31:26.210 --> 00:31:26.870 Aylin Rushdi Azawi Yes.

00:31:27.020 --> 00:31:39.000 Mirela Customer is not. Some customers are starting to require also to be uh, yeah, certified on 45,000 and one that it's the safety part. The Occupational Health and safety.

00:31:37.670 --> 00:31:37.970 Aylin Rushdi Azawi Yeah.

00:31:39.310 --> 00:31:39.810 Aylin Rushdi Azawi Uh-huh

00:31:40.750 --> 00:31:41.830 Mirela And dumb.

00:31:42.550 --> 00:31:57.550 Mirela

Yeah, we do have many locations, at least in Denmark. All locations are certified. We do also have some of them outside and work, but we are not fully complied. We are compliant as we do many things as you see here.

00:31:57.620 --> 00:31:58.170 Aylin Rushdi Azawi yeah.

00:31:58.940 --> 00:32:07.790 Mirela But they would just don't have this piece of paper. You know a certification in our hand? Yeah, that's the only difference we are. We are saying actually in this standard.

00:32:02.910 --> 00:32:03.290 Aylin Rushdi Azawi Yeah.

00:32:09.120 --> 00:32:10.470 Mirela Did we need to be?

00:32:11.950 --> 00:32:31.610 Mirela

Implement Environment Traverse City compliant. We need they need to be compliant with the requirements, so everybody needs to be compliant so it's what we are doing with all these standards requirements and then plus we are actually trying to keep them compliant with the requirements in 45,000 and one.

00:32:19.350 --> 00:32:19.710 Aylin Rushdi Azawi K.

00:32:34.910 --> 00:32:41.940 Mirela

Yeah, sent your office king, so this is the policy. The two policies and then we have many standards.

00:32:35.580 --> 00:32:36.510 Aylin Rushdi Azawi It's very nice.

00:32:42.910 --> 00:32:43.500 Mirela Over there.

00:32:43.750 --> 00:32:46.320 Mirela But that's I don't know even know exactly if I should.

00:32:47.730 --> 00:32:53.210 Aylin Rushdi Azawi Best time management or leaders know about all of these policies and.

00:32:54.850 --> 00:33:01.610 Aylin Rushdi Azawi How requirements or is it just there and nobody knows about it except you and the safety department? 00:33:00.350 --> 00:33:00.680 Mirela Yeah.

00:33:02.310 --> 00:33:03.820 Mirela It's a good question. Yeah, of course.

00:33:04.740 --> 00:33:08.770 Mirela And, at least in in my segment, I'm keeping a monthly meeting.

00:33:10.010 --> 00:33:11.380 Mirela A monster meeting.

00:33:12.150 --> 00:33:20.760 Mirela Equality just meeting and there all the production directors any chess is invited to this meeting. It's a big community.

00:33:22.440 --> 00:33:31.520

Mirela

It's around 100 people invited each month and then there we keep the let's say latest information.

00:33:26.370 --> 00:33:26.860 Aylin Rushdi Azawi OK.

00:33:32.400 --> 00:33:32.930 Aylin Rushdi Azawi OK.

00:33:32.710 --> 00:33:34.380 Mirela Latest standards?

00:33:35.260 --> 00:33:46.240 Mirela

Uh, plastered. I'm following up on all the problems like I have mentioned, let me see. I have mentioned machine safety a couple of times.

00:33:46.620 --> 00:33:47.190 Aylin Rushdi Azawi Uh-huh

00:33:47.670 --> 00:33:54.480

Mirela

Uh, machine safety. So, this is one of the newest standards that we started to implement this year.

00:33:55.270 --> 00:33:57.390 Mirela And for this one, I have a monthly. 00:33:58.180 --> 00:34:12.120

Mirela

Status from all locations where they are so we can see the percentage of implementation because we have to finalize it by the end of the year so it's not that we are just having some standards we do implement. We follow up.

00:34:12.660 --> 00:34:13.130 Aylin Rushdi Azawi that's.

00:34:12.820 --> 00:34:17.190 Mirela And we are ensuring that they know exactly what they need to do.

00:34:18.050 --> 00:34:20.220 Mirela So just let me show you something.

00:34:22.620 --> 00:34:22.850 Aylin Rushdi Azawi Yeah.

00:34:23.340 --> 00:34:24.050 Mirela Show

00:34:25.100 --> 00:34:26.270 Mirela let me open this one.

00:34:28.660 --> 00:34:31.480 Mirela We have had many incidents in the beginning of the year.

00:34:32.070 --> 00:34:32.600 Aylin Rushdi Azawi Uh-huh

00:34:33.030 --> 00:34:36.760 Mirela So we started actually to follow up and you can see here.

00:34:37.370 --> 00:34:38.090 Mirela In yellow.

00:34:38.980 --> 00:34:44.280 Mirela It's all the locations are reporting on machine safety. This is machine safety.

00:34:44.380 --> 00:34:44.950 Aylin Rushdi Azawi OK yeah.

00:34:45.660 --> 00:34:56.090 Mirela How many machines they have identified how many they have completed the inspection in total and by mouth. So, we need every month to know that there is a progress in this.

00:34:51.750 --> 00:34:52.250 Aylin Rushdi Azawi Yeah.

00:34:56.770 --> 00:34:57.600 Aylin Rushdi Azawi OK.

00:34:58.790 --> 00:35:01.500 Mirela So this is how we ensure that what we.

00:35:02.380 --> 00:35:09.570 Mirela If we have a new standard, it will als

If we have a new standard, it will also be implemented or a new requirement. It's not that it's just left around, nobody knows about it.

00:35:10.000 --> 00:35:10.910 Aylin Rushdi Azawi OK, yeah.

00:35:10.570 --> 00:35:14.660 Mirela So here I will track for example the completion.

00:35:15.470 --> 00:35:22.090 Mirela

Fair division, so I know exactly where they are with the percentage in the implementation and with the number of machines.

00:35:23.040 --> 00:35:30.810

Mirela

And all these statuses it's sent to the management so they can see the progress and if there is no progress that they should react.

00:35:31.310 --> 00:35:33.030 Aylin Rushdi Azawi Yeah, exactly OK.

00:35:34.310 --> 00:35:41.030

Mirela

Yeah, so. It's not that we just develop something. We also ensured that it would be properly implemented afterwards.

00:35:41.300 --> 00:35:42.350 Aylin Rushdi Azawi Yeah, OK, that's

00:35:44.030 --> 00:35:45.210 Aylin Rushdi Azawi that's a good one, yeah? 00:35:46.080 --> 00:35:56.150 Aylin Rushdi Azawi Because MCC at companies that they have a lot of tools, policies and they do a lot of things. But it's just words. It's just documents and.

00:35:57.020 --> 00:36:00.580 Aylin Rushdi Azawi They don't do a lot of with it, so it's really good to see that.

00:36:00.640 --> 00:36:04.600 Aylin Rushdi Azawi So that that fast does a lot, actually about safety.

00:36:05.180 --> 00:36:15.070

Mirela

Yeah, if we have something new, it's completely it will be checked and now we are also developing some. I think it was one of the actions here.

00:36:16.290 --> 00:36:16.640 Mirela Come on.

00:36:17.950 --> 00:36:18.830 Mirela Doesn't want to.

00:36:19.780 --> 00:36:20.660 Mirela I don't know what he's doing.

00:36:23.660 --> 00:36:35.810 Mirela

viireia iko for ovomol

Like for example, this audit requirements where we have folks where we have a site that has many incidents, then we'll call them focus site. It means that we need to pay more attention.

00:36:34.270 --> 00:36:34.640 Aylin Rushdi Azawi OK.

00:36:37.000 --> 00:36:42.590 Mirela

Uh, what we do we audit them? And this is the audit requirements. There will be based on.

00:36:43.580 --> 00:36:52.610 Mirela The standards that we have here that you see. So, we go and check how you are doing this. I don't like you know really in detail and then we can find out where the gaps.

00:36:50.510 --> 00:36:50.880 Aylin Rushdi Azawi OK.

00:36:54.920 --> 00:37:00.420 Mirela

This is one of the locations what I'm showing here is the management system with all the requirements.

00:37:02.350 --> 00:37:10.860 Mirela And it can look it's a lot, at least here in Denmark. We have many standards about everything. You know what you need from. 00:37:11.970 --> 00:37:19.120 Mirela From noise to whatever it is those are in Danish could be also in English. Yeah, they're both Indonesian English. 00:37:14.290 --> 00:37:14.630 Aylin Rushdi Azawi Yeah. 00:37:19.260 --> 00:37:19.930 Aylin Rushdi Azawi OK. 00:37:20.630 --> 00:37:40.720 Aylin Rushdi Azawi Yeah, no, that's I think that's an orapin thing that in Europe it's almost the same because when I was in Holland at there was a lot of standards for wearing clothes, for hearing, for everything like for the smallest thing that we're always standards. So yeah, yeah there's a lot. 00:37:20.780 --> 00:37:21.310 Mirela So. 00:37:38.470 --> 00:37:39.100 Mirela Mantis. 00:37:42.050 --> 00:37:46.940 Mirela Another big problem that we had last year. It's called power industrial vehicles. 00:37:47.780 --> 00:37:48.320 Aylin Rushdi Azawi Oh yeah. 00:37:48.700 --> 00:37:50.420 Mirela And we did the same we had. 00:37:51.000 --> 00:37:51.880 Mirela Made ours. 00:37:52.920 --> 00:37:58.440 Mirela Stackers whatever it's used in the production as a as vehicle we had. 00:37:59.260 --> 00:38:03.490 Mirela Change and make it more safely. It has been a big project.

00:38:01.720 --> 00:38:02.130 Aylin Rushdi Azawi Uh-huh

00:38:04.640 --> 00:38:15.930 Mirela So this, uh, it we had similar implementation last year, so it's again when we have a new requirement. Believe me it will be checked and implement it properly.

00:38:16.610 --> 00:38:17.960 Aylin Rushdi Azawi OK yeah.

00:38:17.560 --> 00:38:21.880 Mirela With the follow up, at least in my segment, I'm going to implement it.

00:38:21.930 --> 00:38:28.460 Mirela It's a in a detailed way which numbers of figures reporting until I see the full implementation.

00:38:29.280 --> 00:38:30.410 Aylin Rushdi Azawi OK wow.

00:38:30.460 --> 00:38:30.670 Aylin Rushdi Azawi So.

00:38:32.450 --> 00:38:40.290 Aylin Rushdi Azawi Let's say it's really. It's really nice to hear from a safety background that's nice to hear it at the end. Closest like that.

00:38:41.490 --> 00:38:43.540 Mirela For example, I will.

00:38:44.600 --> 00:38:46.200 Mirela To see if it's loading.

00:38:48.080 --> 00:38:49.590 Mirela For each safety action.

00:38:51.930 --> 00:38:56.860 Mirela

I have here all these safety actions are all the standards that you have seen like machine safety and PIV.

00:38:57.000 --> 00:38:57.410 Aylin Rushdi Azawi Yeah. 00:38:57.810 --> 00:39:01.520 Mirela I will create an implementation plan.

00:39:01.980 --> 00:39:02.470 Aylin Rushdi Azawi Uh-huh

00:39:03.130 --> 00:39:04.460 Mirela I then would follow up.

00:39:05.760 --> 00:39:08.470 Mirela Thanks to this are the implementation plan.

00:39:09.300 --> 00:39:36.070 Mirela

And I will follow up with all the locations and I know if I'm missing something then I need to follow up with this location like we can see here monitoring each location where they are with how many machines identified and so on. So, we do we do. We do follow up and I know for example you can see here in red we have some big issues because of the layout or because I think we have two issues.

00:39:36.760 --> 00:39:39.850 Mirela Where we cannot implement and dumb.

00:39:38.930 --> 00:39:39.270 Aylin Rushdi Azawi OK.

00:39:40.690 --> 00:39:44.790 Mirela We have a plan here for Q1 so, so we are delayed.

00:39:45.980 --> 00:39:53.660

Mirela

Because IT required a big change of layout in the entire production, and it was a big investment.

00:39:52.250 --> 00:39:52.830 Aylin Rushdi Azawi Thank you.

00:39:55.860 --> 00:39:57.630 Aylin Rushdi Azawi What happens if they don't?

00:39:58.330 --> 00:39:59.300 Aylin Rushdi Azawi Change or.

00:39:59.710 --> 00:40:00.340 Mirela They have to. 00:40:00.890 --> 00:40:01.790 Aylin Rushdi Azawi Yeah, it's OK.

00:40:01.770 --> 00:40:03.300 Mirela True so discussion.

00:40:02.840 --> 00:40:03.840 Aylin Rushdi Azawi They don't have a price.

00:40:04.620 --> 00:40:07.070 Mirela Uh, we typically can give a.

00:40:07.890 --> 00:40:16.670 Mirela Let's say a waiver. We call it for a short time off period, like in this case, but then they need to find a solution and implement it.

00:40:09.860 --> 00:40:10.310 Aylin Rushdi Azawi E.

00:40:17.100 --> 00:40:17.660 Aylin Rushdi Azawi Yeah, OK.

00:40:17.300 --> 00:40:25.630 Mirela

Or it could be that the management will accept this, but until now the Benchman have said we need to do it. It's one company. One way we do it is the same.

00:40:26.100 --> 00:40:26.580 Aylin Rushdi Azawi OK.

00:40:26.900 --> 00:40:31.750 Mirela So, yeah, it's typically raised the management and then it will be implemented.

00:40:32.080 --> 00:40:37.450 Aylin Rushdi Azawi OK, that's a good number. Management is so involved in it.

00:40:38.580 --> 00:40:49.120 Mirela

Yes, yes, they are. Yeah actually. And they like to see all these figures that I'm showing you. Like for example this one. I'm sending them monthly and showing them the figures. See the progress and if there is.

00:40:47.550 --> 00:40:47.950 Aylin Rushdi Azawi Hello. 00:40:50.410 --> 00:41:03.440 Mirela

No progress or if they see there's actually in competition right now because they have finalized. But actually, the ones that have finalized, maybe they had not so many machines as in the other sector divisions.

00:41:04.420 --> 00:41:06.030 Mirela So depending also on the.

00:41:06.770 --> 00:41:09.420 Mirela On the number. So, I'm showing both the numbers and the.

00:41:10.370 --> 00:41:12.180 Mirela The percentage of the implementation.

00:41:11.330 --> 00:41:11.560 Aylin Rushdi Azawi Yeah.

00:41:14.240 --> 00:41:15.810 Aylin Rushdi Azawi Yeah, it's super interesting.

00:41:17.300 --> 00:41:17.790 Aylin Rushdi Azawi I'm.

00:41:18.910 --> 00:41:22.480 Mirela Let me go back to your email and see if we have.

00:41:25.580 --> 00:41:31.310

Mirela

Yeah, incident management system. We are reporting system, you know, we didn't discuss that much.

00:41:32.560 --> 00:41:33.820 Aylin Rushdi Azawi Yeah, UM.

00:41:34.080 --> 00:41:34.680 Mirela It's here.

00:41:35.290 --> 00:41:36.150 Aylin Rushdi Azawi Yeah, OK.

00:41:35.980 --> 00:41:40.540 Mirela Let me see it's I have it all the time opening like almost daily. 00:41:44.410 --> 00:41:44.850 Aylin Rushdi Azawi How?

00:41:44.500 --> 00:41:45.510 Mirela Uhm?

00:41:48.080 --> 00:41:51.010 Mirela Yep, this is the system, but we do have.

00:41:54.120 --> 00:42:01.210 Mirela

It's here, it's showing the dashboard. We have dashboards showing exactly where we are, with the number of incidents.

00:42:01.530 --> 00:42:02.180 Aylin Rushdi Azawi Miller

00:42:02.940 --> 00:42:08.930 Mirela So tracking frequency tracking you know everything that we number of incidents.

00:42:11.300 --> 00:42:14.410 Mirela Uhm, typically those are the key P eyes.

00:42:15.320 --> 00:42:17.190 Mirela But then we also analyzed the data.

00:42:22.570 --> 00:42:31.100

Mirela

So here we can see those are the incidents. Let me pass pointers here. You can see all these statistics that I also shown to you.

00:42:32.370 --> 00:42:38.580 Mirela

And we can analyse, for example, activity when these incidents have happened. If it's machine.

00:42:39.330 --> 00:42:43.490 Mirela Machining and assembly. Where are the biggest you know problems that we have?

00:42:43.160 --> 00:42:44.160 Aylin Rushdi Azawi yeah, exactly.

00:42:45.370 --> 00:42:54.280

Mirela

We can analyse by work shift and see if it's during night or when it's mostly happening and is normally it's happening during the day shift.

00:42:55.410 --> 00:43:01.820 Aylin Rushdi Azawi Yeah, you would think that at night most things happen because people are sleeping or talent.

00:43:00.930 --> 00:43:07.700 Mirela Yeah, it's only this small part and I think they're nine cases this year during 90-night shift.

00:43:03.280 --> 00:43:03.600 Aylin Rushdi Azawi Yeah.

00:43:08.110 --> 00:43:10.290 Aylin Rushdi Azawi Yeah, I was surprised, I thought.

00:43:09.910 --> 00:43:14.880 Mirela Because there you don't have so many supervisions. So, people are more creative than normal.

00:43:17.860 --> 00:43:19.870 Aylin Rushdi Azawi That's like another problem, I think.

00:43:19.990 --> 00:43:26.120 Mirela Yeah, I think it's less supervision so they can have fun. You know, do things differently than they should.

00:43:26.580 --> 00:43:27.940 Aylin Rushdi Azawi Yeah, exactly.

00:43:28.990 --> 00:43:31.520 Mirela Then it's about injury by position.

00:43:32.650 --> 00:43:38.870 Mirela And it's typically the blue colours that are getting most, uh, injured.

00:43:33.080 --> 00:43:33.350 Aylin Rushdi Azawi Yeah.

00:43:40.130 --> 00:43:44.250 Mirela Uhm, what we can see here. Injury by work function.

00:43:45.320 --> 00:43:55.730

Mirela

Administer if you are in administration or whatever, but again, the operators are the highest and I think this is not selected. This one.

00:43:50.130 --> 00:43:50.700 Aylin Rushdi Azawi Help, right?

00:43:56.440 --> 00:44:02.320 Mirela It's not a mandatory field, so we wanted to make the systems to be also easy to use if we.

00:44:03.100 --> 00:44:10.990

Mirela

One to have perfect statistics, then we have to put all fields mandatory and then it'll be a big job for them so.

00:44:05.730 --> 00:44:05.980 Aylin Rushdi Azawi E.

00:44:11.360 --> 00:44:13.160 Aylin Rushdi Azawi OK, it's easy.

00:44:12.510 --> 00:44:16.960 Mirela This is, yeah, this is not a military field, and this is not filled out.

00:44:18.780 --> 00:44:19.330 Aylin Rushdi Azawi Then

00:44:19.000 --> 00:44:35.410 Mirela

This one it's interesting. It's experienced in position because it can show if it's in your employees or not, but I want to tell you something because the last couple of days this is what I spend my time because I found out actually that this field was misunderstood.

00:44:21.090 --> 00:44:21.440 Aylin Rushdi Azawi yeah. 00:44:36.110 --> 00:44:36.780 Aylin Rushdi Azawi OK. 00:44:38.100 --> 00:44:41.770 Mirela Uh, so I'm in the processing collecting the data. 00:44:43.220 --> 00:44:45.420

Mirela As they have it was a.

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00:44:46.670 --> 00:44:51.600
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Mirela

Yeah, but you can see it. You will believe that 10 to 19 months has all the employees have.

00:44:52.280 --> 00:44:53.000 Mirela And yeah.

00:44:53.750 --> 00:44:57.810 Mirela Blow experience or somehow, it's in under yeah?

00:44:56.360 --> 00:44:56.810 Aylin Rushdi Azawi Exactly.

00:44:58.700 --> 00:45:06.100 Mirela

Uh, and that was my reaction, and I should have set some corrective action, but then I had to investigate if the data was correct, and I found out that is not.

00:45:07.110 --> 00:45:07.530 Aylin Rushdi Azawi Welcome.

00:45:09.280 --> 00:45:20.210

Mirela

There is a box explaining that if you don't know these numbers, you should estimate it and people have taken this explanation for estimation and use that one.

00:45:15.840 --> 00:45:16.140 Aylin Rushdi Azawi Well.

00:45:20.890 --> 00:45:23.500 Mirela But actually, you need to go to HR, find the right.

00:45:24.450 --> 00:45:27.650 Mirela You know data and putting the system afterwards corrected.

00:45:28.290 --> 00:45:32.220 Mirela But people have not done this, so I mean the processing correcting this data.

00:45:32.920 --> 00:45:33.290 Aylin Rushdi Azawi OK.

00:45:33.890 --> 00:45:43.820 Mirela

So this is unfortunately rock. Today I thought I found something clearly that we need to improve, but it's not right.

00:45:44.460 --> 00:45:50.840 Aylin Rushdi Azawi I thought yeah, maybe cause they're just working, so not long enough so they're probably making all of this takes, but. 00:45:49.630 --> 00:46:07.670 Mirela Yeah, we wanted to see this. We want to actually do what we want to get with this field. If it's completely new employees like under half a year or if it's sometimes also the most experience once can also get injured. 00:46:04.820 --> 00:46:05.630 Aylin Rushdi Azawi Yeah, exactly. 00:46:08.110 --> 00:46:12.940 Aylin Rushdi Azawi Yeah, because like, well, we talked, in the beginning, like there very alert and then it's just. 00:46:13.430 --> 00:46:13.850 Mirela Uh-huh 00:46:13.830 --> 00:46:14.640 Aylin Rushdi Azawi So yeah. 00:46:15.370 --> 00:46:15.670 Mirela yeah. 00:46:16.040 --> 00:46:16.480 Aylin Rushdi Azawi OK. 00:46:17.950 --> 00:46:23.630 Mirela So this one, unfortunately, it's not. It's, we are in the processing correcting the data. 00:46:20.400 --> 00:46:20.970 Aylin Rushdi Azawi Don't worry. 00:46:23.670 --> 00:46:23.940 Aylin Rushdi Azawi OK. 00:46:25.110 --> 00:46:30.010 Mirela I think I have received at least 50 miles from yesterday to today. 00:46:31.510 --> 00:46:32.120 Mirela Yes. 00:46:32.890 --> 00:46:34.340 Mirela A course of events.
00:46:34.380 --> 00:46:34.890 Aylin Rushdi Azawi Yeah.

00:46:35.420 --> 00:46:39.090 Mirela Uh so. So here it's showing actually.

00:46:39.530 --> 00:46:41.190 Aylin Rushdi Azawi Cuts mostly.

00:46:40.750 --> 00:46:50.230 Mirela

Yeah, what happened if it's fallen a different level, you can see here or if it's contact with electrical current, something electrocution.

00:46:50.970 --> 00:47:08.000 Mirela Uh, squeeze between stock aga also fall. We are looking for this

Uh, squeeze between stock against so, so there are some different categories that you could also fall. We are looking for this falling at the same level or a different level, and this is a big chunk of it. It's the slip and trip category.

00:46:59.570 --> 00:46:59.920 Aylin Rushdi Azawi Yeah.

00:47:07.580 --> 00:47:08.920 Aylin Rushdi Azawi Yeah exactly yeah.

00:47:09.520 --> 00:47:09.950 Mirela Yeah.

00:47:11.710 --> 00:47:16.450 Mirela And then we have the cut by, and we know those cuts are crazy.

00:47:11.740 --> 00:47:12.130 Aylin Rushdi Azawi OK.

00:47:16.640 --> 00:47:19.920 Aylin Rushdi Azawi Yeah, because they work of course. Would machines and their hands so.

00:47:20.260 --> 00:47:25.440 Mirela Yeah, and it's sharp, sharp products we are handling.

00:47:20.870 --> 00:47:21.580 Aylin Rushdi Azawi Is Batman? 00:47:23.760 --> 00:47:24.030 Aylin Rushdi Azawi Yeah. 00:47:26.050 --> 00:47:27.720 Aylin Rushdi Azawi OK, yeah, exactly so. 00:47:29.160 --> 00:47:29.680 Aylin Rushdi Azawi Correct? 00:47:30.120 --> 00:47:38.410 Mirela Then you can see the part of the party harmed so you can again see hands or fingers. This is the finger. Yeah, it was. 00:47:35.460 --> 00:47:36.560 Aylin Rushdi Azawi Yeah, yeah. 00:47:39.370 --> 00:47:43.000 Mirela Uh, where is the arm? Typically, the arm is not that big. 00:47:43.380 --> 00:47:47.300 Aylin Rushdi Azawi No, yeah, it's mostly yet the hands or fingers because yeah. 00:47:48.680 --> 00:47:52.460 Mirela Going to see the big ones these two are handled, singers. 00:47:54.020 --> 00:47:57.600 Mirela So the hand is here, and the finger is there. 00:47:58.520 --> 00:47:58.700 Aylin Rushdi Azawi Right? 00:47:58.720 --> 00:48:04.290 Mirela So that's this is the highest, but we do know that hands are also we can call our tools today. 00:48:05.400 --> 00:48:06.050 Avlin Rushdi Azawi OK. 00:48:05.510 --> 00:48:13.180 Mirela So this is how we call it. Our hands are out to us, so we need to take care of overheads. Be careful.

00:48:12.310 --> 00:48:12.970 Aylin Rushdi Azawi Yeah so.

00:48:14.150 --> 00:48:20.750 Aylin Rushdi Azawi So maybe invest in really good hands there or stuff like that or train.

00:48:17.460 --> 00:48:17.800 Mirela Yeah.

00:48:20.260 --> 00:48:27.740 Mirela

We have training here. We have a hand injury prevention program that we have been driving for a couple of years now.

00:48:28.420 --> 00:48:35.310 Aylin Rushdi Azawi OK, it's super nice how you like to use the data and like action yeah leaving yeah.

00:48:31.770 --> 00:48:34.240 Mirela Yeah, and then we make programs for it, yes?

00:48:35.730 --> 00:48:42.170 Mirela

And slip and trip the same here initiatives every year we are refreshing the initiatives so.

00:48:37.680 --> 00:48:38.120 Aylin Rushdi Azawi Speaker.

00:48:42.900 --> 00:48:53.610

Mirela

Uh, machines, we know that machines are one of the biggest we had. Also, this program. So, for all these where we find out this is a risk we go and do something about it. We analyse the data and then we.

00:48:52.220 --> 00:48:52.450 Aylin Rushdi Azawi It's. 00:48:54.780 --> 00:48:58.320 Mirela Wait, act on it. So, let's go back. 00:48:56.850 --> 00:48:57.250 Aylin Rushdi Azawi Yeah. 00:49:01.020 --> 00:49:09.520 Mirela Yeah, this is also you can see the type of injury if it's a sprain. We do have made some of them. 00:49:10.120 --> 00:49:10.470 Aylin Rushdi Azawi Yeah. 00:49:10.750 --> 00:49:14.680 Mirela And laceration, it's also it's here where you get cuts and. 00:49:15.020 --> 00:49:15.400 Aylin Rushdi Azawi Yeah. 00:49:15.280 --> 00:49:16.790

00:49:15.280 --> 00:49:16.790 Mirela Yeah, yeah.

00:49:17.000 --> 00:49:18.570 Mirela Those at the ticket takers.

00:49:19.520 --> 00:49:30.830 Mirela And the last one you have seen with the workplace design that causes. But here you see the entire. What I showed you. It was climate solution. This is the analysis for entire.

00:49:21.740 --> 00:49:22.610 Aylin Rushdi Azawi The causes.

00:49:31.330 --> 00:49:34.600 Aylin Rushdi Azawi That is human behaviour order most yeah.

00:49:34.590 --> 00:49:42.130 Mirela Yeah, here it's human behaviour. So, when we take globally then we see and the last 12 months then it's human factors.

00:49:42.620 --> 00:49:43.850 Aylin Rushdi Azawi OK well.

00:49:44.810 --> 00:49:47.100 Mirela Yeah, so actually it may be.

00:49:45.450 --> 00:49:45.790 Aylin Rushdi Azawi So.

00:49:48.640 --> 00:49:50.220 Mirela Can they reset confirming? 00:49:50.850 --> 00:49:51.350 Aylin Rushdi Azawi It.

00:49:50.980 --> 00:50:06.120 Mirela This word yeah what you have in the beginning that I'm actually pushing a lot my locations not to choose human factors. As I told you it's oldest underlying other factors, most important factors. And if we've all the time.

00:49:53.760 --> 00:49:54.240 Aylin Rushdi Azawi Yeah.

00:50:06.970 --> 00:50:11.530 Mirela Have a first name you know blaming the employee. If you didn't do it right, you know.

00:50:10.400 --> 00:50:10.660 Aylin Rushdi Azawi In

00:50:12.170 --> 00:50:17.140

Mirela

Try to really investigate in deep and you'll always find you know gaps.

00:50:14.600 --> 00:50:14.880 Aylin Rushdi Azawi yeah

00:50:16.420 --> 00:50:16.980 Aylin Rushdi Azawi something.

00:50:17.650 --> 00:50:18.030 Aylin Rushdi Azawi Yeah.

00:50:18.870 --> 00:50:20.630 Aylin Rushdi Azawi Yeah, maybe if it is true, yeah?

00:50:21.290 --> 00:50:22.970 Aylin Rushdi Azawi I think it's not only.

00:50:23.640 --> 00:50:30.630 Aylin Rushdi Azawi Our folks as can also beat environment or the stuff we were quit. Or there's always something more than just our behaviour.

00:50:27.710 --> 00:50:28.010 Mirela Yeah. 00:50:31.340 --> 00:50:36.090 Mirela I wanted to show you actually one more thing. It may be the last thing.

00:50:37.010 --> 00:50:37.380 Aylin Rushdi Azawi Yes.

00:50:37.170 --> 00:50:42.560 Mirela

I couldn't, I couldn't open this safety leadership training, but it's maybe important to show to you.

00:50:48.320 --> 00:51:06.700 Mirela

So here I see it's a lot, but it's just to tell you what are the expectation of leaders? What are the roles and responsibilities? But it's asking their self. You know exactly what the safety performance in your area is. Do you know you know really challenging them getting them to?

00:51:07.540 --> 00:51:08.950 Mirela To be proactive, let's say.

00:51:10.690 --> 00:51:12.400 Mirela What do your safety mindset?

00:51:13.400 --> 00:51:14.870 Mirela And about communication.

00:51:17.160 --> 00:51:23.170 Mirela And what I wanted to show you this, you have seen before this one.

00:51:25.990 --> 00:51:28.000 Mirela But I had another good slide, this one.

00:51:32.910 --> 00:51:34.410 Mirela So when we find.

00:51:35.220 --> 00:51:41.410 Mirela Let's say an incident we do start to find corrective actions to analyse this one.

00:51:42.720 --> 00:51:46.110 Mirela What is import? I don't know how big your screen is. If you see pop.

00:51:45.490 --> 00:51:48.710 Aylin Rushdi Azawi Yeah, if I can see it, I guess I'm just looking at really focusing. 00:51:48.040 --> 00:51:52.540 Mirela OK, good, uh, I'll make it sound like this speaker.

00:51:54.040 --> 00:52:00.550 Mirela You can see by giving them protective equipment, it's only 20% effective.

00:52:01.310 --> 00:52:01.980 Aylin Rushdi Azawi OK.

00:52:01.550 --> 00:52:04.840 Mirela So you can imagine that does not sufficient.

00:52:06.340 --> 00:52:15.470 Mirela

By having administrative controls to this, then you will have more, and I think I have here some good examples in in the.

00:52:16.770 --> 00:52:25.340

Mirela

Let me share A to change the people they work; you know to have you know really good ESO peas.

00:52:25.990 --> 00:52:26.510 Aylin Rushdi Azawi Uh-huh

00:52:26.160 --> 00:52:31.650

Mirela

Risk assessment and you know all these and training and all this disease in this category here.

00:52:32.890 --> 00:52:42.000

Mirela

Then you go to engineering controls. Here you try to isolate the people from the risk you know by having safeguards on the machine whatever is necessary.

00:52:43.880 --> 00:52:49.910

Mirela

And then you have substitution. You need to remove, or at least to substitute the risk with the less.

00:52:50.500 --> 00:53:08.000

Mirela

Or the UM, let's say lower risk, so you have a high risk you know you cannot remove it, but you can maybe substitute the risk and then on top. Here you have the elimination. You remove it completely, but it's a very difficult one because there you maybe have to change completely.

00:53:09.630 --> 00:53:15.080

Mirela

Ah, the machine, the design, the layout, everything you need to change completely.

00:53:16.100 --> 00:53:27.810

Mirela

But I think this is important. This is why I'm trying all the time to advocate for this one, because he's not sufficient to give PPS and actually it's a combination of all these layers, you know.

00:53:28.350 --> 00:53:29.010 Aylin Rushdi Azawi yeah and then.

00:53:28.510 --> 00:53:32.780 Mirela And when you have gaps in all of them, it's clearly that it will happen.

00:53:33.810 --> 00:53:45.940 Mirela So it's not working only with one level. You need to have the different you know levels and safety barriers. We call it to avoid if you if you have you know.

00:53:46.590 --> 00:53:54.850 Mirela

Let's say this one is. It's actually you have a good training of the employees then this is not happened because it will stop here.

00:53:50.940 --> 00:53:51.310 Aylin Rushdi Azawi Yeah.

00:53:55.060 --> 00:53:55.980 Aylin Rushdi Azawi Yeah, exactly.

00:53:55.630 --> 00:54:05.440 Mirela

Order this if you had a piece. Maybe he'll get injured, but less so you still have a chance to avoid, but in most of the cases you didn't have any of this.

00:54:08.090 --> 00:54:12.750 Aylin Rushdi Azawi Yeah no. I remember getting this at the school. The cheese.

00:54:13.280 --> 00:54:14.630 Aylin Rushdi Azawi Yeah, yeah.

00:54:13.400 --> 00:54:17.200 Mirela Which is more than yeah, sweet Swiss cheese model. We called it.

00:54:16.090 --> 00:54:16.510 Aylin Rushdi Azawi Yes.

00:54:18.670 --> 00:54:20.040 Mirela Yeah, you should know it best. 00:54:20.540 --> 00:54:20.970 Aylin Rushdi Azawi Yeah.

00:54:21.890 --> 00:54:30.210 Aylin Rushdi Azawi No, it's really interesting, but like everything that I learned is actually using in the at work at that company, so that's really good to know.

00:54:30.760 --> 00:54:34.960 Mirela Yeah, so that's why I wanted to share because.

00:54:31.880 --> 00:54:32.450 Aylin Rushdi Azawi Uhm?

00:54:33.080 --> 00:54:33.480 Aylin Rushdi Azawi Yeah.

00:54:36.160 --> 00:54:41.520 Mirela This is why if we have control on this, we should not talk human error actually.

00:54:39.280 --> 00:54:39.740 Aylin Rushdi Azawi Yeah.

00:54:41.930 --> 00:54:42.580 Aylin Rushdi Azawi Yeah no.

00:54:42.150 --> 00:55:12.550 Mirela

It should be impossible for them to get injured. It's of course if they don't follow the procedures then then it it's and it's happening. Sometimes we have to be honest, it's also happening, and you can see it in the in the root cause analysis, but I think we have attendance and in being too fast and putting the human error first and I'm all the time challenging my location. I mean the investigation I need to receive the root cause analysis from them.

00:54:49.310 --> 00:54:49.930 Aylin Rushdi Azawi Let's start.

00:55:02.360 --> 00:55:02.870 Aylin Rushdi Azawi Here.

00:55:12.920 --> 00:55:26.020 Mirela

And then I would challenge them. I said no, no, no, no, no, this is not good. Go back. Don't tell me that everything is in place and when I'm starting to ask them, I can see that it's not. They are also missing other elements.

00:55:19.390 --> 00:55:20.190 Aylin Rushdi Azawi Benefits.

00:55:24.420 --> 00:55:24.750 Aylin Rushdi Azawi Yeah.

00:55:26.690 --> 00:55:29.450 Mirela So This is why sometimes we use.

00:55:30.890 --> 00:55:50.840 Mirela

The human error as a contributing cause because it can contribute, but if you do not have this other layer in place then then human error. It's just contributing because you can't be in a day where you are in a rush. You can. So, this is what I'm saying. This is for me the last when you have all this in place.

00:55:51.110 --> 00:55:51.560 Aylin Rushdi Azawi Uh-huh

00:55:52.020 --> 00:55:54.520 Mirela The behaviour parts come into play.

00:55:55.220 --> 00:56:14.770 Mirela

We dissave start program that we are at least trying to see if it's something for we don't know yet. Maybe we'll conclude, no way we need to have control on this, and we go back from this behaviour, but we do see it. Some in some location that we have a challenge with the with the behaviour part.

00:56:03.350 --> 00:56:03.780 Aylin Rushdi Azawi name

00:56:11.870 --> 00:56:12.280 Aylin Rushdi Azawi OK.

00:56:16.220 --> 00:56:18.450 Aylin Rushdi Azawi Wow Oh my God. Well, I've

00:56:18.020 --> 00:56:20.270 Mirela It has been so much information in one hour.

00:56:19.490 --> 00:56:19.810 Aylin Rushdi Azawi yeah.

00:56:20.950 --> 00:56:28.120 Aylin Rushdi Azawi No, it's so easy like I wrote so many questions and you answer them all like I'm even after his death.

00:56:21.370 --> 00:56:21.730 Mirela Yeah. 00:56:27.220 --> 00:56:27.570 Mirela OK.

00:56:29.740 --> 00:56:30.980 Aylin Rushdi Azawi Thank you so much.

00:56:31.410 --> 00:56:32.140 Mirela OK.

00:56:32.570 --> 00:56:35.680 Aylin Rushdi Azawi That was a really good thank you so much.

00:56:32.940 --> 00:56:33.290 Mirela I.

00:56:37.090 --> 00:56:45.870

Mirela

Yeah, this is why I'm saying and I'm also looking forward to seeing. Of course, if you find something else that we have not thought about because.

00:56:46.560 --> 00:56:46.890 Aylin Rushdi Azawi Yeah.

00:56:47.230 --> 00:56:53.510

Mirela

We are sometimes we are thinking we are doing all these great things. You know why we don't see this?

00:56:54.470 --> 00:57:08.000

Mirela

Increase in in we do. We do see a decrease in the incident, but we still struggle. You know to perform at the level that maybe it switched by the management to say this. Vision zero. We are so close to zero as possible.

00:57:08.640 --> 00:57:16.380 Aylin Rushdi Azawi Yeah, so maybe someone from the outside can just look in and see something, but the company doesn't see you never know.

00:57:16.770 --> 00:57:32.400

Mirela

Yeah, we talk sometimes also take excellent companies to help locations where they are in

trouble, and we can see a big increase in the incident then we do ask also external companies to help them to provide an analysis of their yeah performance.

00:57:19.910 --> 00:57:20.210 Aylin Rushdi Azawi Yeah. 00:57:32.990 --> 00:57:33.580 Aylin Rushdi Azawi OK. 00:57:34.530 --> 00:57:36.740 Aylin Rushdi Azawi Well, yeah well. 00:57:34.540 --> 00:57:34.910 Mirela Yeah. 00:57:36.790 --> 00:57:37.250 Aylin Rushdi Azawi So. 00:57:38.560 --> 00:57:44.230 Aylin Rushdi Azawi Thank you so much for your time. I really appreciate it like this is going to help me so much with my thesis. 00:57:44.560 --> 00:57:44.950 Mirela Great. 00:57:45.460 --> 00:57:47.470 Aylin Rushdi Azawi Uh, I don't know. Do you want to? 00:57:47.530 --> 00:57:52.550 Avlin Rushdi Azawi So like when I finish at one A1 to see it read it, I can. 00:57:52.110 --> 00:57:55.910 Mirela I would like actually I would be interested. Yeah, I would like to see. 00:57:54.820 --> 00:57:55.230 Aylin Rushdi Azawi OK. 00:57:57.140 --> 00:58:08.980 Mirela

It's so long time I have making my Massachusetts that I don't remember. I remember it is challenging to yeah, find sufficient data for this. And where are you being? It's Aalborg university.

00:58:03.950 --> 00:58:04.800 Aylin Rushdi Azawi It is.

00:58:09.840 --> 00:58:12.540 Aylin Rushdi Azawi It's also in a very city, but I study in SPN.

00:58:13.050 --> 00:58:17.420 Mirela OK, and which area of?

00:58:13.910 --> 00:58:14.940 Aylin Rushdi Azawi I love you sleep well.

00:58:18.390 --> 00:58:19.760 Mirela How is school your master?

00:58:20.770 --> 00:58:22.590 Aylin Rushdi Azawi A risk is safety management.

00:58:23.090 --> 00:58:27.230 Mirela OK, I don't think I remember this one that was.

00:58:26.640 --> 00:58:26.910 Aylin Rushdi Azawi It's.

00:58:28.130 --> 00:58:30.690 Aylin Rushdi Azawi Quite new, I think it's not super cold, but.

00:58:31.560 --> 00:58:31.900 Aylin Rushdi Azawi Bye.

00:58:32.060 --> 00:58:38.970 Mirela I started I also I also from Aalborg University have a master's in environmental management systems.

00:58:39.450 --> 00:58:42.270 Aylin Rushdi Azawi Oh wow, no, I don't. I've never.

00:58:40.810 --> 00:58:41.060 Mirela That

00:58:41.870 --> 00:58:45.980 Mirela that was in that point in in, yeah, one of the. 00:58:44.520 --> 00:58:45.040 Aylin Rushdi Azawi OK.

00:58:46.620 --> 00:58:53.990 Mirela Closest to they didn't have anything to safety, and then I took the environmental part and then I build it on this.

00:58:55.040 --> 00:58:56.400 Mirela This information, yeah.

00:58:56.100 --> 00:58:57.980 Aylin Rushdi Azawi It is in amazing job I think so.

00:58:59.160 --> 00:59:03.070 Mirela It's interesting and I'm challenge every day. That's clearly let's ask.

00:59:00.210 --> 00:59:00.610 Aylin Rushdi Azawi It's.

00:59:02.360 --> 00:59:15.870 Aylin Rushdi Azawi At this really yeah, no, uh, yeah, I'm doing a risk and safety. I have like 2 months ago and then I'm done as challenging because I have. I just got a baby so I'm doing this. Thank you.

00:59:13.940 --> 00:59:17.810 Mirela Congratulations, I didn't know how old he or she is.

00:59:18.310 --> 00:59:25.960 Aylin Rushdi Azawi He is today four months, so it's really challenging. So, I put starts in September and this.

00:59:20.760 --> 00:59:21.510 Mirela Ah.

00:59:22.900 --> 00:59:23.300 Mirela Yeah.

00:59:25.570 --> 00:59:31.510

Mirela

Yeah, it's a challenging way off of finalizing your messages and taking care for a small baby, I assume.

00:59:31.010 --> 00:59:35.570 Aylin Rushdi Azawi Yeah, yeah it is. But I'm doing my best so hopefully. 00:59:32.670 --> 00:59:32.930 Mirela Sure.

00:59:35.040 --> 00:59:52.280 Mirela

I've yeah, I wish you good luck. And of course, if you still are let's say you have some question, you can write me an email if you say you said something about this, you know, and you want to know more and just don't hesitate. Just write many mails and then I will.

00:59:51.670 --> 00:59:53.720 Aylin Rushdi Azawi That's super sweet of you. Thank you.

00:59:53.360 --> 01:00:07.170 Mirela Yeah, yeah, I know it's challenging to sit there, and you know alone with all this analysis and not knowing exactly how to, it's not an easy task to finalize a master thesis. Yeah. But.

01:00:06.520 --> 01:00:07.080 Aylin Rushdi Azawi Every night.

01:00:08.380 --> 01:00:09.180 Aylin Rushdi Azawi So.

01:00:09.200 --> 01:00:13.340 Mirela We show big, good luck with this and then hope you.

01:00:14.000 --> 01:00:14.830 Aylin Rushdi Azawi Thank you so much.

01:00:14.370 --> 01:00:18.640 Mirela Yeah, yeah you will find a great job afterwards.

01:00:18.970 --> 01:00:20.600 Aylin Rushdi Azawi Thank you and I will see.

01:00:19.900 --> 01:00:32.930 Mirela We are looking actually for some soft somebody, uh, for safety in in actually in Silkeborg they were looking for a profile, but they have found one. Let's see if.

01:00:32.380 --> 01:00:34.700 Aylin Rushdi Azawi I saw I saw on the LinkedIn, yeah.

01:00:35.850 --> 01:00:40.760 Aylin Rushdi Azawi So maybe you know who knows, maybe later yeah. 01:00:36.160 --> 01:00:36.590 Mirela And.

01:00:39.030 --> 01:00:39.430 Mirela Yeah.

01:00:40.440 --> 01:00:41.670 Mirela Yes, good.

01:00:40.820 --> 01:00:47.890 Aylin Rushdi Azawi But there is so much I will send you document. If uh, when I finished just that can read it.

01:00:43.190 --> 01:00:43.880 Mirela You're welcome.

01:00:46.570 --> 01:00:47.060 Mirela Yes.

01:00:48.500 --> 01:00:56.790 Mirela Yeah, I was soon. This transcript when I stop right now you will have this, uh, this, let me stop the recording.

01:00:59.590 --> 01:01:01.040 Mirela Let me know if you have.

01:01:05.740 --> 01:01:06.090 Aylin Rushdi Azawi Thank you.

10.3 Interview 2

00:00:04

Speaker 1: this interview is about security awareness; do you know what it means?

80:00:00

Speaker 2: Yes, that's just yes or the people with consciousness with safety.

00:00:12

Speaker 1: Yes, so you are aware of risks around you and yes also down here. So, I'm just going to ask some questions.

00:00:22

Speaker 2: All right.

00:00:23

Speaker 1: What are the most common causes of incidents here? Like fire, sliding danger? Hazardous Substances.

00:00:37

Speaker 2: Yes, dangerous substances. mmm. What else do we have?

00:00:43

Speaker 1: do you also know what causes people to have to deal with incidents?

00:00:48 Speaker 2: Oh no wait.

00:00:49

Speaker 2: What do you mean? But I have not experienced any incidents

00:00:52

Speaker 1: not for you either, maybe you're like oh what went "just" well.

00:01:02

Speaker 2: no, I can't think of it right now.

00:01:04

Speaker 1: I was downstairs and then someone had his gloves completely torn and then I thought. Yes, if dangerous substance gets on his skin...

00:01:13

Speaker 2: oh yes people should become more aware of safety more often. I hear myself.

00:01:16 *Speaker 1:* ok

00:01:22

Speaker 1: Okay on a scale of 1 to 5 so 5 is super careful and good and 1 super bad. What place does the safety awareness employees have?

00:01:33 Speaker 2: hmm

00:01:35

Speaker 1: Do you think they are really very aware of all the risks.

00:01:39 *Speaker 2:* No.

00:01:40 *Speaker 1:* So actually.

00:01:41 *Speaker 2:* I think I think two and a half.

00:01:45

Speaker 1: Yes, I honestly thought I had. Which places do you want to go to, so do you want us to pay very close attention here and that you know all the risks and things like that, or do you think it is good?

00:01:59 *Speaker 2:* No, that could be a little clearer, that's okay.

00:02:02 Speaker 1: Yes.

00:02:02

Speaker 2: I got my VCA yesterday. This is, for example, hazardous substances brake cleaner all those aerosols that stand yellow box. They have to be in a special cupboard, but so what? What does it actually do to you?

00:02:16 *Speaker 1:* Okay.

00:02:17

Speaker 2: That's not there.

00:02:20

Speaker 2: and I think is busy making a book, with everything that should be in it. The aerosol or cleaner pack. What does it actually do to you if you work without a mouth cap?

00:02:31

Speaker 1: It's actually you want to know more. It is a thing here a lot of people know the risk is really not. For now, just for a while is not bad if you do that every day for years.

00:02:42

Speaker 2: Yes, the same with working in noise. At first, I thought it would be okay. But someone said to me dude you have to download such an app for the noise and then you have to keep track of that.

00:02:55

Speaker 2: And that's actually not good for you at all. Now when I go to work, I grab headphones.

00:03:02

Speaker 1: So actually, someone has to make you aware of the risks, then you only consider oh! Still important.

00:03:09

Speaker 2: It's only a small piece. And indeed, every day for 10 minutes in that noise, you become deaf.

00:03:15

Speaker 1: Yes indeed. So how do you rate the safety awareness of the employees? Of your fellow colleagues, do they think they are aware of risks? Or do they think it will, very soon, will be fine, dude?

00:03:34

Speaker 2: That's it yes you want to and then I think also because of the pressure because so busy people go faster quick Fast.

00:03:39

Speaker 1: the security systemic area so what I mean by that is the tools. And is your environment well designed so that you can get through very quickly, for example with a car?

00:03:56

Speaker 2: Inside yes, but outside I find it really busy.

00:03:59

Speaker 2: accidents were there, accidents can happen quickly.

00:04:02

Speaker 1: And the quality of your tools and your clothes.

00:04:08 Speaker 2: good is just ok.

00:04:11

Speaker 2: In terms of stuff, only glasses safety glasses, earplugs are easy to get here, there is stuff everywhere. But really to help you with other things. So yesterday I learned how to try to tackle the problems at the source.

00:04:26

Speaker 2: And what are we doing here? No, here's some stuff.

00:04:29 Speaker 1: Mmm.

00:04:30

Speaker 2: What you are doing is unsafe here you have the stuff to protect yourself, but you have to try to deal with that so that they have to use less stuff to protect themselves.

00:04:40 Speaker 1: Yes, I get that.

00:04:42 Speaker 2: Get to the source

00:04:44

Speaker 1: yes, you can give people something. Yes, if you're not going to do anything with it or if they don't understand why.

00:04:49

Speaker 2: Yes, exactly.

00:04:50

Speaker 1: So actually, training is very important.

00:04:54

Speaker 2: Yes, it happens far too little.

00:04:56

Speaker 1: Far too little.

00:04:59 *Speaker 2:* Your predecessor did that too.

00:05:01 Speaker 1: yes Tessa

00:05:02

Speaker 2: And at a certain point we walked in groups through the building. Looking for dangerous things. Happened once and then never again and we would do that every year. It was meant to be.

00:05:15

Speaker 1: A little watered down here. How is the safety awareness? The management area.

00:05:32

Speaker 2: As I say you have the feeling of it being settled or. It doesn't matter what it costs, but if the control finds out then it's okay, it's actually going well. Treat people well. There is no final check.

00:05:49

Speaker 1: it is not secured? New.

00:05:50

Speaker 2: So, it would be with those training sessions when the fire alarm goes off. There are so many people who have SPR here.

00:05:59

Speaker 2: But who actually does what? Everyone just walks out, and a few are wearing a yellow vest. But I also have it why it never said to me go and look there. That's your job or?

00:06:14

Speaker 1: from an organizational point of view, it is not well organized yes ok yes it should actually be done from above or from someone from the management, but nobody feels responsible.

00:06:24

Speaker 2: Everyone is sent to those emergency response training sessions. But. Do you do anything with it afterwards? I got such a bag then but haven't looked at it for 3 years.

00:06:33

Speaker 2: no one ever said you should check if your stuff is okay or not. Whether something needs maintenance or a lamp that and another battery.

00:06:41 Speaker 1: No.

00:06:42 Speaker 2: Never.

00:06:44

Speaker 1: Then you have to check every time.

00:06:46

Speaker 2: I don't know. There is also no central place downstairs when the alarm goes off. That you can grab a bag there, a walkie-talkie and a vest. We don't have that.

00:07:00

Speaker 1: So, it's a little bit out of hand here. Safety. I personally think so.

00:07:07

Speaker 2: And that's why I say the stuff is there, but there is no plan.

00:07:12

Speaker 1: Okay. Yes, because everything is easy to get here. I get it. What would work to turn the awareness among other employees so what yes everyone just training?

00:07:26 Speaker 2: Yes.

00:07:27 Speaker 1: But what else?

00:07:28 *Speaker 2:* The control.

00:07:29 Speaker 1: Control and training. And why do you think that helps?

00:07:36 *Speaker 2:* Yes, we do nothing now.

00:07:38 Speaker 1: Yes.

00:07:39

Speaker 2: becomes an emergency response officer, okay that's good, but why yes for the evening because if something happens, someone needs an emergency response

officer. But I never did anything with it after that. I'll get something sent every 2 years we got your new pass. Never do anything with it.

00:08:07

Speaker 1: How do management discuss the subject of safety among themselves?

00:08:20

Speaker 2: no idea, they never invite us to meetings

00:08:21

Speaker 1: No, but not downstairs either, for example, if John says something or your team manager says they have ever said anything about safety.

00:08:28 *Speaker 2:* no

00:08:29 Speaker 1: Okay also not work safe or?

00:08:31

Speaker 2: Yes, they do that at the monthly lunch.

00:08:35 *Speaker 1:* Okay that's all.

00:08:36

Speaker 2: Then it is said security issues than maybe something happened. That was said of you have to work it safely. The look is everywhere.

00:08:44 Speaker 1: Yes.

00:08:45 *Speaker 2:* But yes, do that and hang down.

00:08:48 *Speaker 1:* But if you don't check for it.

00:08:49

Speaker 2: Even without the glasses stepped already grinding then. I don't think 1 of them. You put your glasses on there. That should be much more.

00:08:58

Speaker 1: Yes, no I noticed that too, I was downstairs with management. And someone walked without safety shoes. And it was said, ey come on.

00:09:05

Speaker 2: that's not possible

00:09:06

Speaker 1: someone from management who says that then you have to yes then you are not setting a good example.

00:09:14

Speaker 1: no attention is paid very much to the mechanics. If you take on the role of management. Great in transferring safety or that is important, or do you think they are not going to listen, are they? How do you view their role?

00:09:33

Speaker 2: They should be much more active.

00:09:37

Speaker 1: Okay. Now it really means nothing.

00:09:40 *Speaker 2:* No, not at all.

00:09:44

Speaker 1: Yes, clearly. Are we going to a policy Have policy instruments or tools been implemented? For safety.

00:09:54

Speaker 2: Mm you like so those kinds of courses.

00:09:59

Speaker 1: Yes. Have you ever had a toolbox?

00:10:04 Speaker 2: no

00:10:05 Speaker 1: do you want one?

00:10:06 *Speaker 2:* A toolbox meeting, you mean?

00:10:11

Speaker 2: The last time with the one with that exercise. Then there was someone from the outside who said what went wrong. That then I gave all things. Then I think yes, but then we have to do something, don't we? We don't really do anything anymore.

00:10:25 Speaker 2: No.

00:10:25 *Speaker 1:* No.

00:10:26

Speaker 2: I never heard from you again. Everything went wrong or why we are outside with 40 SPR and only 3 walking around inside. Who does what? You hear everywhere from the company of no when the alarm goes off then there is 1 someone responsible who then sends the people's turn. 'I'll walk you there are you two going?

00:10:52

Speaker 2: Check all rooms, do we have everyone yes, we have never counted those people who are outside. Never.

00:10:58

Speaker 1: Never really never counted. Do you feel responsible for counting?

00:11:05

Speaker 2: No, but that's what no one ever said to me, so you have to put on a vest, or you have to and then you are in charge, or you have to be emergency services.

00:11:14

Speaker 1: It's not very well organized and that's it.

00:11:17

Speaker 2: Yes. In the evening we also have maybe 4 people we have SPR.

00:11:22

Speaker 2: There we are trained. But that is not certain. Then if something happens you are responsible for it so you direct people or you go. Check here and someone else goes to the other, Reception or upstairs.

00:11:36

Speaker 2: There isn't one. You do whatever.

00:11:39

Speaker 1: Yes, I hear that often.

00:11:46

Speaker 2: And then I think of. Yes, and it fell when the alarm went off, incidentally, all doors have to open. Only when the saga did not open, I also indicated that, but I don't know what they did with it.

00:11:56

Speaker 1: Hearing no feedback either.

00:11:58

Speaker 2: No not at all. Check that coincidentally went in order. I don't know what to do anymore but the alarm goes off all doors should just be open.

00:12:08

Speaker 1: what kind of policy are you missing Here I mean you get a booklet working safely here.

00:12:24 Speaker 2: Yes.

00:12:25

Speaker 2: In the beginning, I think so.

00:12:28

Speaker 1: But you really want something, do you already know where all the measures and the risks are? Do you think so?

00:12:36 *Speaker 2:* Michelin here.

00:12:37

Speaker 1: Especially if the security policy actually.

00:12:40

Speaker 2: Yes there. I forgot the name of partners, so in that training, they are like if you had a battery and drove a bus. What are the dangers and what?

00:12:52 *Speaker 1:* Are the risks.

00:12:55 *Speaker 2:* Have in.

00:12:59

Speaker 1: Very much here. It really is what you want. Safety's book, therefore, with the risk measures. And actually.

00:13:10

Speaker 2: Yes, you could almost say it does. Once a month there you don't have to go to a classroom or whatever together AEGON downstairs.

00:13:16 Speaker 1: No.

00:13:17

Speaker 2: Boys happened then you are responsible, or you do this you grab your own he just took it. People from above if the alarm goes off do I have to go upstairs or do we also have people from BMW upstairs.

00:13:32

Speaker 1: Okay. It's good that.

00:13:35

Speaker 2: There are no clear agreements.

00:13:37

Speaker 1: Yes, I've had that too and then I can 1. Then I can make my recommendations, but we are also working a bit up there, so that too.

00:13:48

Speaker 2: Yes, I may have Jacob back or they also have too many things to do.

00:13:53 Speaker 1: Yes, a lot.

00:13:55

Speaker 2: Maybe we need people. I'm sure of that with all the security, in general, these days.

00:14:01

Speaker 1: Yes, because if I wasn't there that nobody, I happened to have made safety policy for all employees. But if I wasn't there, he would never have done it because he is so busy with all those other things a lot. And which aspects of safety management do you think

are important for Christmas, so do you give consultation training? What do you think is important right now? Here, regulations share a consultative piece of training.

00:14:41 *Speaker 2:* Yes.

00:14:43

Speaker 1: So, have learned when you're downstairs yes that one.

00:14:48

Speaker 2: Dick. You know what I say we can give a book every week my friends. It must all be consciously involved. To mention.

00:14:58

Speaker 1: And I think mechanics are more practical. Targeted, so they don't mean at least that we prefer to be busy instead of reading.

00:15:08

Speaker 2: I also once said why we never do a drill here a fire drill a small fire drill. We never have.

00:15:14 *Speaker 1:* No.

00:15:15 Speaker 2: Oh. Are you one time?

00:15:17 *Speaker 1:* Favourable.

00:15:18

Speaker 2: Then it's putting out a fire somewhere inside, yes that's the same on grass. Done differently. Why by never doing something here or one? Paul that. I believe you can go for those actors too, right?

00:15:32 *Speaker 1:* In the yesterday about indeed.

00:15:36 *Speaker 2:* Practice.

00:15:37 Speaker 1: So now it is if you follow scenarios. Yes. if.

00:15:44

Speaker 2: Maybe next time I had alarmed Jacob about it then indicates a few people let people sit in an office but is not checked so if you think so. That's not good, but you're right against 100 scoops, there's someone else here, so he was dead.

00:16:00

Speaker 1: May have been burned.

00:16:02 *Speaker 2:* Or something.

00:16:03 *Speaker 1:* Yeah, okay good to know what is a really good one.

00:16:06 *Speaker 2:* With the exercises, huh.

00:16:07 *Speaker 1:* Yes.

00:16:08 *Speaker 2:* He does.

00:16:09

Speaker 1: You think if more is invested there that there will be fewer accidents or fewer incidents, more aware of the risks.

00:16:18 *Speaker 2:* Yes.

00:16:19

Speaker 1: So that would help mechanics. So basically, a booklet with I have to it doesn't help just workouts exercises down.

00:16:28 Speaker 2: Practice.

00:16:29 *Speaker 1:* Yeah okay.

00:16:32

Speaker 2: And that information that you can't get to easily can't be put on an m with a g. I don't know where I can. I think there is.

00:16:42 Speaker 1: Yes.

00:16:45

Speaker 2: But just one and act on it. Because you also hear you have first aid kits that you are not allowed to use.

00:16:53

Speaker 1: No, but they will be.

00:16:54

Speaker 2: They are now used as it grabs stock so there is also pain.

00:16:59 Speaker 1: Count who? 00:17:01

Speaker 2: Know how to find.

00:17:02

Speaker 1: Or only if something really serious happens and you.

00:17:08

Speaker 2: Yes, Joost said that if he says I have 2 one that is sealed with seals then you are not allowed to arrive then you come alone is an accident you cut your finger or did you a painkiller a pill of what he says I have the green cupboard Jan down again and they can just unpack the stuff there. Then everyone can come. But if you are in an accident then you grab that cover have something go out you have to empathize with someone of listening, he is no longer complete.

00:17:36

Speaker 1: It's a good one because yes, but that rule is of course different in every department. For that orange checked they are all OK. If I use my fingers.

00:17:49

Speaker 2: He's got a prize.

00:17:51

Speaker 1: Then you have to report again.

00:17:54

Speaker 2: Is that a first aid conflict material for debate otherwise so I have to? Otherwise, I have to keep reporting, but you can also say I'll put a box of plasters down somewhere. Then you don't have to keep reporting a plaster used when giving a plaster no, right?

00:18:08

Speaker 1: Yes, it is. Not including a point at all is very good. What should be done to increase and improve safety awareness? Now how are we going to take the next step for everyone? To make more aware.

00:18:29

Speaker 2: We are training.

00:18:30 *Speaker 1:* Training is number 1.

00:18:32

Speaker 2: Yes, and then practice. Yes, please.

00:18:38

Speaker 1: Because I had already noticed that SPR or think you have not given. Everyone is almost asleep during the PowerPoint but once I also had a scenario with the map and kids in the back, but everyone was suddenly awake, and everyone feels nice. Really if you do something that's going to help. Okay, what opportunities and bottlenecks are there taking jobs? If we look now. Well, safety awareness and we are still talking about that. So, what are the bottlenecks now? Why are people not aware?

00:19:14 Speaker 2: Yes.

00:19:16

Speaker 1: Bush not or something.

00:19:17

Speaker 2: But he is his. The alarm does not go off I think yes then there will not be, but you have to do that, so I also walk outside after the rest.

00:19:30

Speaker 1: So, the responsibility.

00:19:31

Speaker 2: Yes, this is none. There isn't one. Nobody feels responsible. Different way too much further than everyone from each other and well he does it as if we are 40 men. And a third of them have.

00:19:45

Speaker 1: Have you ever seen that video where someone is beaten up and then there are 10 people and if I have 10 people of course nobody anything because they wait for the others if you are on your own then you have to. Yes, you are the case here.

00:19:58

Speaker 2: Yes. I would almost say of well a large roster on and that one in that week, then so-and-so and those and those in that week. This person and then you hey this week I have. If something happens, I am responsible for myself.

00:20:15 *Speaker 1:* Okay.

00:20:16 *Speaker 2:* Then 10.

00:20:18

Speaker 1: That's basically what you're going to say now is training is important exercises and responsibility times with the mechanics that way you can make people aware of the risks and safer. That was it thank you