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“INDUSTRIAL ACCIDENTS AND REMEDIAL MEASURES WITH REFERENCE TO MANUFACTURING INDUSTRY”



ABSTRACT:-

The ever growing mechanization, electrification, chemicalisation and sophistication have made industrial jobs more and more complex and intricate. This has led to increased dangers to human life in industries through accidents and injuries. Industries are considered as a risky sector due to large amount of accidents. Actually these accidents arise due to inexperienced work lack of training, lack of experience. Many injuries, deaths and property damage caused by workplace electrical, mechanical, chemical hazards can be avoided. The first step in avoiding these hazards begins with safety awareness. Safety means freedom from the occurrence or risk of injury or loss. Industrial safety refers to protection against accidents occurring in the industrial establishments. There are many associations provide awareness of safety measurements in workplace. They help employees for ensuring safe environment.

The purpose of this study is to examine the relationship between worker attitudes, work environment and management concern with accidents at workplace.

KEYWORDS: Industrial Accidents, Safety Measures, Remedial Measures, Industry Environment.

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INTRODUCTION

An employee spends near about 8 hours at the work place during any working day. He must be provided with such types of facilities which will maintain employee's health, wealth & keep him interested in his work. It helps to increase the production & profit of the organization. If workers health is good, they can work with full swing and efficiency and if the workers work efficiently, it will help to increase the profit of the organization. So that organization achieves its desired goals. It will happen only when employees have sound health and they work with full devotion. When the organization is in profit then it provides good wages and other welfare facilities to the employee. Hence employee's health, safety & welfare are correlated to each other. Safety measures are part of welfare services provided by the organization to the worker.

When an accident happens with any worker then that worker and his family suffers from pain and lots of problems. Such accidents impact on employees as well as organization's financial growth. So that industrial accidents, worker's health and his safety are major issues in an organization. Organization provides welfare facilities to the employee to keep their motivational and satisfaction level high. Safety welfare promotes the efficiency of employee so that they work effectively. The basic purpose of employee welfare is to enrich the life of employees and to keep them happy and conducted which helps for development of organization. Hence every organization should take care of employee's health by providing proper safety measures. The aim of this research is to know about industrial accidents and effectiveness of health, safety

measures provided at manufacturing industry.

Safety is a basic and ordinary requirement in a factory. Unless body and mind of workers is secured smooth and proper working cannot be ensured in any factory. As indicated earlier the object of this legislation was to ameliorate working conditions and to provide with effective measures of safety of the workers from accidents causing partial or total disablement and sudden misfortunes affecting the victims and their dependents. The factories act 1948 deals with such security and safety measures under its chapter containing sections 21 to 41. There have been made significant amendment in the provisions dealing with safety so as to make the measures more effective and appropriate. It would be desirable to discuss these safety measures.

LITERATURE REVIEW:

K.L, Chan (2011), Understanding industrial safety signs: implications for occupational safety management in this industrial safety signs in various industries and work environments should be conducted as soon as possible. Safety officers, especially those who are working in the construction industry need to play a more prominent role in ensuring workplace safety, and in transferring safety knowledge to the workers.

Ali A. K. Mohammed AliRahim K. Jassim, Adnan G. Abuarafah (2010) Industrial Safety Training of Line Management: A step ahead towards successful Operation Management in this Industrial safety deals with how to prevent injuries and accidents that occur in the organizations. These injuries and accidents have cost the organization rare values in human resource and information.

Nongiba A. Kheni, Andrew R.J. Daintyand Alistair G.F. Gibb (2005), Health and Safety Management Practices of Subcontractors. In this effective management practices help to significantly improve health and safety in the construction industry. The UK Government's Health and Safety Executive has demonstrated that improved management can prevent around 70 percent of accidents on site.

R. Muthuviknesh, K. Anil Kumar (2014), the effect of Occupational Health and Safety Management on Work Environment: A prospective study in workplace safety is a priority. It is necessary to encourage the employees in various ways in an organization. The goal of occupational health and safety system include fostering a safe and healthy work environment, occupational and non-occupational safety and includes safety for activities outside of work.

Gary CH Ma, Fenkins LY Chow and Jonathan F Chung (2009), minimum effort and shortest development time to safety and health management system; in this enacted the Factories and Industrial Undertakings (Safety Management) Regulations which requires for organizations to implement a safety management system in organization for ensure the workers safety and health.

Steven Yule and Rhone Fling Andy Muddy (2007) the role of management and safety climate in preventing risk-taking at work. This safety climate is a leading performance indicator that can provide insight into safety performance before accidents have occurred.

Huinee Auyong, Suhaiza Zailani, Lilis Surity (2011), Safety and health management in logistics: The concept of occupational safety and health management is increasingly drawing the attention of researchers and practitioners. The concepts of occupational safety and health vulnerability and its managerial counterpart, occupational safety and health management are still in their infancy.

SURVEILLANCE OF THE WORKING ENVIRONMENT

To ensure a healthy working environment there must be monitoring at the workplace. This involves systematic surveillance of the factors in the working environment and working practices which may affect worker's health, including sanitary installations, canteens and housing, where these facilities are provided by the employer, as well as ensuring the working environment complies with safety and health standards. The employer or management people should be actively involved in the surveillance of the working environment. Basic surveillance is carried out by simple observation, and every worker, from shop floor to senior administration, should be trained to identify those factors (potential or actual) which may affect worker's health. Such training is necessary to enable the worker to report immediately to his or her direct supervisor any situation which can reasonably be thought to present an imminent and serious danger to life or health. In such a situation, the employer cannot require the worker to return to work until any necessary remedial action is taken. Simple a walkthrough survey of work

processes and the working environment is the first step in any surveillance. Such observation may be sufficient in some cases to detect a lack of adequate control measures and exposure of workers to risk. An evaluation based on this type of observation may justify the recommendation of control measures without the need for any more sophisticated determination of the level of exposure. Repeat visits to the workplace and walk-through observation are also necessary to provide an assurance that no deterioration has occurred at workplaces initially evaluated as satisfactory.

Because occupational hazards arise at the workplace, it is the responsibility of employers to ensure that the working environment is safe and healthy. This means that they must prevent, and protect workers from, occupational risks. But employer’s responsibility goes further, entailing knowledge of occupational hazards and a commitment to ensure that management processes promote safety and health at work. For example, an awareness of safety and health implications should guide decisions on the choice of technology and on how work is organized. Training is one of the most important tasks to be carried out by employers. Workers need to know not only how to do their jobs, but also how to protect their lives and health and those of their co-workers while working. Within enterprises, managers and supervisors are responsible for ensuring that workers are adequately trained for the work that they are expected to undertake

OBJECTIVES OF STUDY:

The objectives of the studies are as follows

Study the causes of industrial accidents at industrial organization.

To review present safety measures provided to the workers by organization.

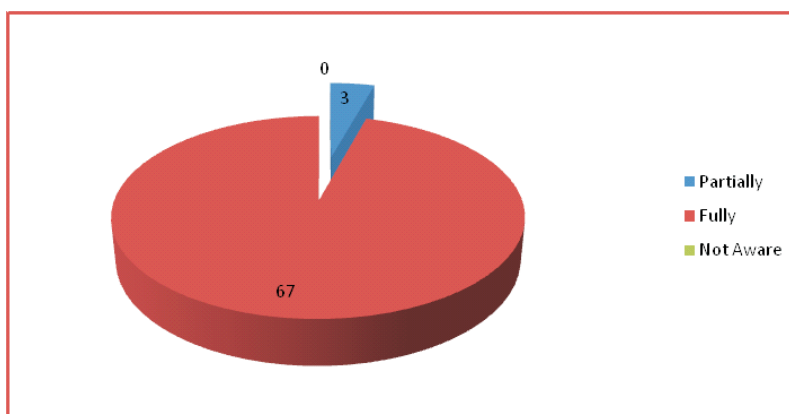
RESEARCH METHODOLOGY:

The presented research study is descriptive type of research. Descriptive type of research includes surveys and fact finding enquiries of different kinds. Researcher was selected the Sona Alloys Pvt. Ltd company which is situated at Lonand MIDC for study purpose. In this study population is 350 employees who are working in the organization. Researcher was selected sample from selected manufacturing industry. Sample is heterogeneous so that Researcher use stratified sampling method and taken 70 worker who are working in selected industry.

DATA ANALYSIS AND INTERPRETATION:

1.Awareness about company’s safety measure policies

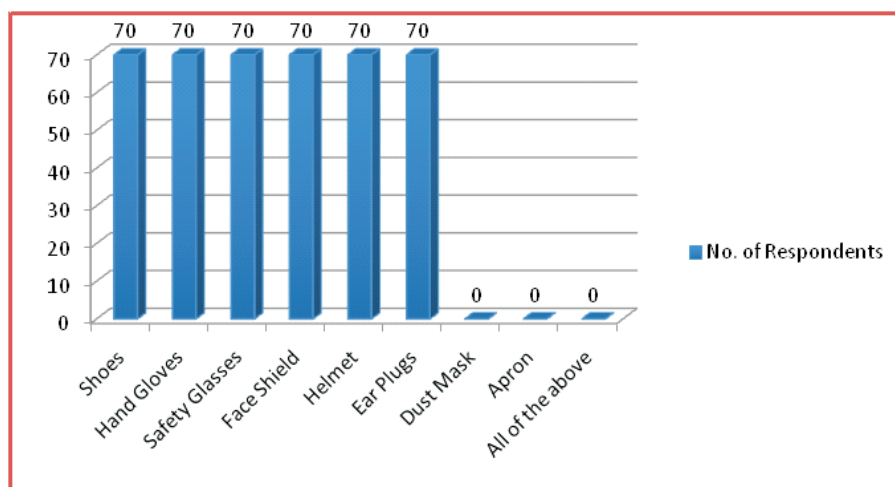
Particulars	No. of Respondents	Percentage
Partially	03	04
Fully	67	96
Not Aware	0	00
Total	70	100



Interpretation: From above table, Researcher observed that there are 67 employees who are aware about company’s safety measure policies and only 3 employees are partially aware about it. There is no employee who doesn’t aware about it.

2. Safety measures provided by company

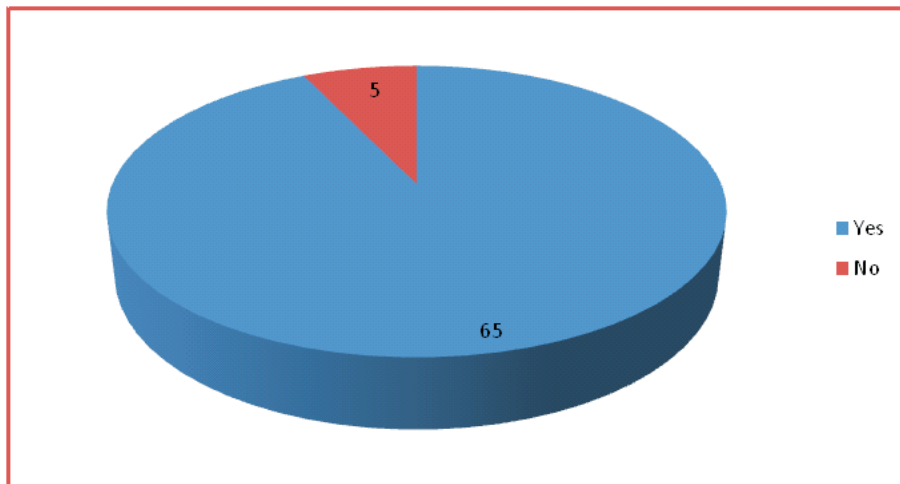
Safety Measures	No. of Respondents
Shoes	70
Hand Gloves	70
Safety Glasses	70
Face Shield	70
Helmet	70
Ear Plugs	70
Dust Mask	0
Apron	0
All of the above	0



Interpretation: From above table, Researcher observed all respondents said that company provides safety shoes, hand gloves, safety glasses, face shield, helmet and ear plugs. All Respondents said that company does not provide Dust mask and apron.

3. Response of employees toward safety measures

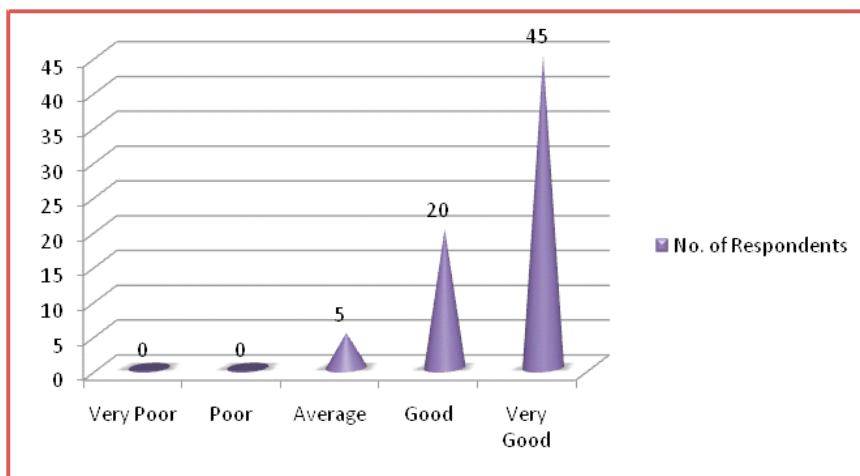
Particulars	No. of Respondents	Percentage
Yes	65	93
No	05	07
Total	70	100



Interpretation: From above table, Researcher observed that 65 respondents said that employees use safety measures provided by company and only 5 respondents said that employee do not use safety measures.

4. Ventilation and light facilities on shop floor area

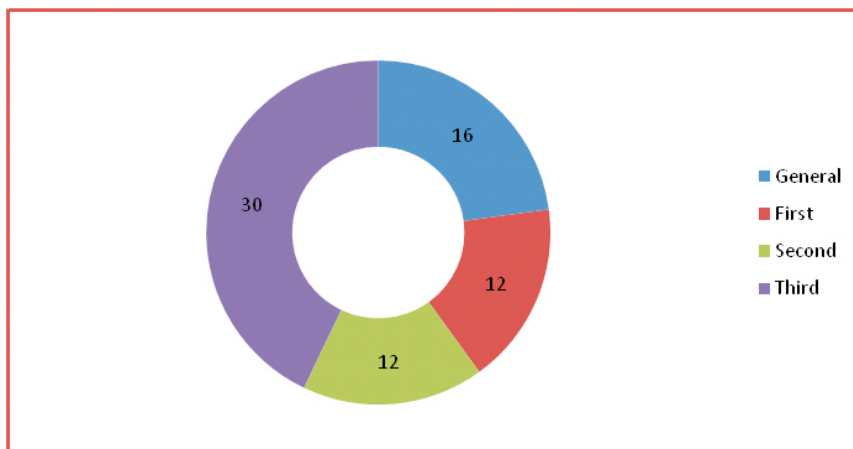
Particulars	No. of Respondents	Percentage
Very Poor	00	00
Poor	00	00
Average	05	07
Good	20	29
Very Good	45	64
Total	70	100



Interpretation: From above table, Researcher observed that 45 respondents said that ventilation and light facility in working area is very good and 20 respondents said that it is good and 5 respondents said that it is average.

5. Shift in which accidents happened

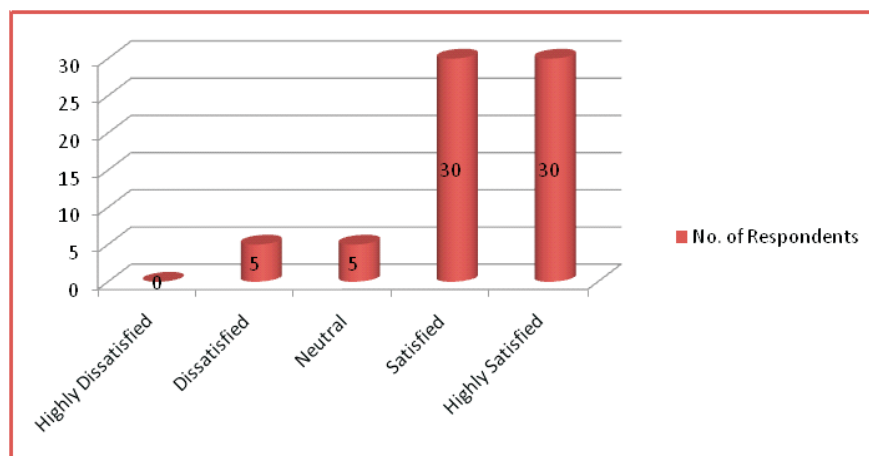
Particulars	No. of Respondents	Percentage
General	16	23
First	12	17
Second	12	17
Third	30	43
Total	70	100



Interpretation: From above table, Researcher observed that 30 respondents said that most of accidents happened in third shift and 12 respondents said that in first and second shift.

6. Management safety policies

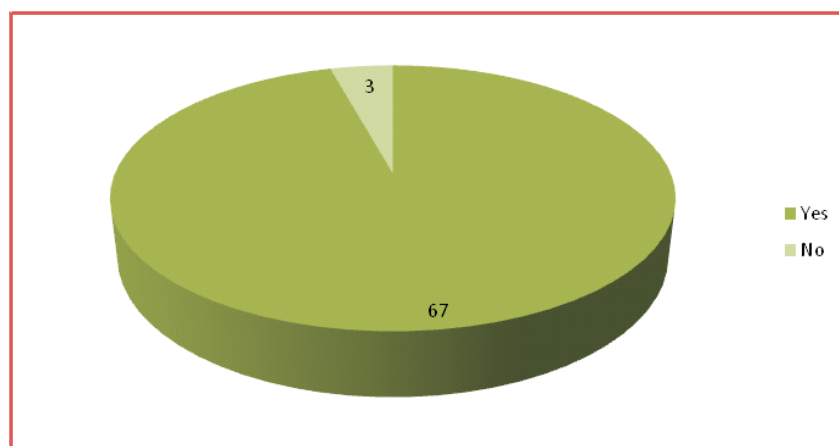
Particulars	No. of Respondents	Percentage
Highly Dissatisfied	00	00
Dissatisfied	05	07
Neutral	05	07
Satisfied	30	43
Highly Satisfied	30	43
Total	70	100



Interpretation: From above table, Researcher observed that 30 respondents said that they are highly satisfied with safety policies and 30 said that they are only satisfied with safety policies. 5 respondents are neutral and 5 respondents are dissatisfied with safety policies.

7.Site safety inspection

Particulars	No. of Respondents	Percentage
Yes	67	96
No	03	04
Total	70	100



Interpretation: From above table, Researcher observed that 67 respondents said that company conduct site safety inspection but 3 respondents said that there is no site safety inspection in company.

SUGGESTIONS:

After data collection and careful observation following suggestions are suggested by the Researcher are as:

- a. Company may conduct seminars on the safety policies to make all the employees be aware of it.
- b. As the accidents occur during welding, cutting, polishing, painting, drilling, the company may provide the extra safety facilities to the employees.
- c. Though company provides safety appliances to workers but some workers are not cautions about it. There employees should be fine for non use of safety appliance at work place.
- d. Safety appliances should be replaced from time to time.

CONCLUSION

Most of the employees were satisfied with safety management policies provided by the manufacturing company. Changes are required according to the changing scenario of manufacturing industries. The safe working environment has a great impact on the employee’s safe and sound life. Respondents think that accident rating is less in SAPL and safety management process of Sona Alloys Pvt. Ltd. is excellent. SAPL provides safety measures which are necessary for employees while working. Employees were satisfied with all policies and compensation facility provided by company. Current safety remedial measures are efficient as per respondents but few suggested improvements can be incorporated. The research work carried out has given an insight of and understanding of an application of theoretical concepts in company. The work carried out was beneficial for the company and some suggestions are made for improvement that should be implemented by the company.

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