

 $(Affiliated \ to \ Visves varaya\ Technological\ University,\ Belagavi,\ Approved\ by\ AICTE,\ New\ Delhi\ and\ Accredited\ by\ NBA\ and\ NAAC)$

Date: 17/05/2018

CERTIFICATE

This is to certify that Ms. Ranjitha S R bearing USN 1AY16MBA59 is a bonafide student of Master of Business Administration course of the Institute 2016-18 batch, affiliated to Visvesvaraya Technological University, Belgaum. Project report on "A Study on Employee Health, Safety and Welfare Measures" at Kennametal India Ltd., Bangalore is prepared by her under the guidance of Prof. Kisholoy Gupta, in partial fulfillment of the requirements for the award of the degree of Master of Business Administration, Visvesvaraya Technological University, Belgaum, Karnataka.

The King Son

Signature of Internal Guide

Signature of HOD

Signature of HOD

Head of the Department Department of MBA

Acharya halisma of Technology

Soldevenanili, Bangalore-560 107

Signature of Principal PRINCIPAL

ACHARYA INSTITUTE OF TEurnOLOGY Soldevanahalli Bangalore-560 107

Kennametal India Limited CIN: L27109KA1964PLC001546 8/9th Mile, Tumkur Road Bangalore - 560 073 | India T +91 80 22198137 | F +91 80 43281137 www.kenametal.com



19th April 2018 Bangalore

CERTIFICATE

This is to certify that **Ms. Ranjitha S R**, bearing Regd. no: **1AY16MBA59**, MBA Student from Acharya Institute of Technology, Bangalore has successfully completed her Project Work on <u>"A Study On Employee Health, Safety and Welfare measures"</u> in our Organization from 16th January 2018 to 26th March 2018 under the guidance of **Mr. Sidda Reddy, Deputy General Manager - Human Resources.**

During her stay with us, we found her to be sincere and her conduct was good. We wish her all the success in her future endeavors.

H.R.D

For Kennametal India Limited

Sudheer B M

Assistant Manager - Human Resources

DECLARATION

I, RANJITHA S R, hereby declare that the Project report entitled "A STUDY ON

HEALTH, SAFETY & WELFARE MEASURES FOLLOWED AT KENNAMETAL

INDIA LIMITED" with reference to "KENNAMETAL INDIA LIMITED, Bangalore"

prepared by me under the guidance of Mr.Kisholoy Gupta, faculty of M.B.A Department,

Acharya Institute of Technology and external assistance by Mr.Sidda Reddy, Deputy

General Manager-HR, Kennametal India Limited.

I also declare that this Project work is towards the partial fulfillment of the university

Regulations for the award of degree of Master of Business Administration by Visvesvaraya

Technological University, Belgaum. I have undergone a summer project for a period of Ten

weeks. I also declare that this project is based on original study undertaken by me and has not

been submitted for the award of any Degree/Diploma from any other university/Institution

Place: Banglore

Date: 24.05.2018

Ranjitha.S.R

USN:1AY16MBA59

ACKNOWLEDGEMENT

"The successful completion of any task would be incomplete without mentioning the people

who made it possible and whose constant guidance and encouragement secured us our

success".

My sincere thanks to Dr. S.C Pilli Principal and Dr.Mahesh Dean, Academics Acharya

Institute of Technology, Bangalore for the academic support given for pursuing this project.

There is not enough word to offer my vote of thanks to **Dr. Nijaguna.G** Head of Department

of MBA, AIT Bangalore for his help in initiating the project report in advance for the regular

motivation.

I am indebted to Mr.KISHOLOY GUPTA Associate Professor, AIT for his perfect

guidance in every step of my project, which has always been my source of inspiration and

motivation. I extend my sincere thanks for his constant support and guidance.

I would like to express my sincere & heart filled thanks to Mr.SIDDA REDDY, Deputy

General Manager, HR for his perseverance and eagerness to help me in all possible ways and

giving me an opportunity to do my project in this esteemed organization.

RANJITHA S R

USN:1AY16MBA59

TABLE OF CONTENTS

Chapter No's	Chapter Name	Page Numbers
	EXECUTIVE SUMMARY	
1	Introduction	2-17
	1.1 Introduction	2
	1.2 Industry profile and company profile	3
	1.3 Vision, mission and quality policy	7
	1.4 Products profile	8
	1.5 Areas of operation	11
	1.6 Competitor's information	12
	1.7 SWOT Analysis	14
	1.9 Financial Statement	16
2	Conceptual background and Literature review	19-25
	2.1 Theoretical Background of the Study	20
	2.2 Literature Review	20
		21
3	Research Design	26-28
	2.1 Statement of the muchlam	27
	3.1 Statement of the problem 3.2 Objectives	27
	3.3 Scope of the study	27
	3.4 Research methodology	27
	3.5 Hypothesis	27
	3.6 Limitations	28
4	Data Analysis and Interpretation	29-62
5	Summary of Findings, Suggestions and Conclusion	63-66
	5.1 Findings	64
	5.2 Suggestions	65
	5.3 Conclusion	66
	Bibliography	
	Annexure	

LIST OF TABLES

TABLE NO	TITLE	PAGE NO
1.1	Financial Statement	16
4.1	Gender	30
4.2	Designation	31
4.3	Work Experience	32
4.4	Health Measures	33
4.5	Clean and dirt free premises	34
4.6	Training	35
4.7	Washroom Facility	36
4.8	Cleanliness	37
4.9	Ventilation	38
4.10	Lighting	39
4.11	Drinking Water	40
4.12	Washrooms	41
4.13	Safety Measures	42
4.14	Mentioning 2 Safety Measures	43
4.15	Young Employees	44
4.16	100% Protection	45
4.17	Protection Programs	46
4.18	First aid and Ambulance	47
4.19	Crèche	48

4.20	Canteen facility	49
4.21	First aid	50
4.23	Food	51
4.24	Committee	52
4.25	Health checkups	53
4.26	Satisfaction	54
4.27	Actions	55
4.28	Opinions	56
4.29	Effect on Efficiency	58
4.30	Correlation Analysis	59-62

LIST OF CHARTS

Chart	TITLE	PAGE NO
NO		
4.1	Gender	30
4.2	Designation	31
4.3	Work Experience	32
4.4	Health Measures	33
4.5	Clean and dirt free premises	34
4.6	Training	35
4.7	Washroom Facility	36
4.8	Cleanliness	37
4.9	Ventilation	38
4.10	Lighting	39
4.11	Drinking Water	40
4.12	Washrooms	41
4.13	Safety Measures	42
4.14	Mentioning 2 Safety Measures	43
4.15	Young Employees	44
4.16	100% Protection	45
4.17	Protection Programs	46
4.18	First aid and Ambulance	47
4.19	Crèche	48
4.20	Canteen facility	49
4.21	First aid	50

4.23	Food	51
4.24	Committee	52
4.25	Health checkups	53
4.26	Satisfaction	54
4.27	Actions	55
4.28	Opinions	56
4.29	Effect on Efficiency	58

EXECUTIVE SUMMARY

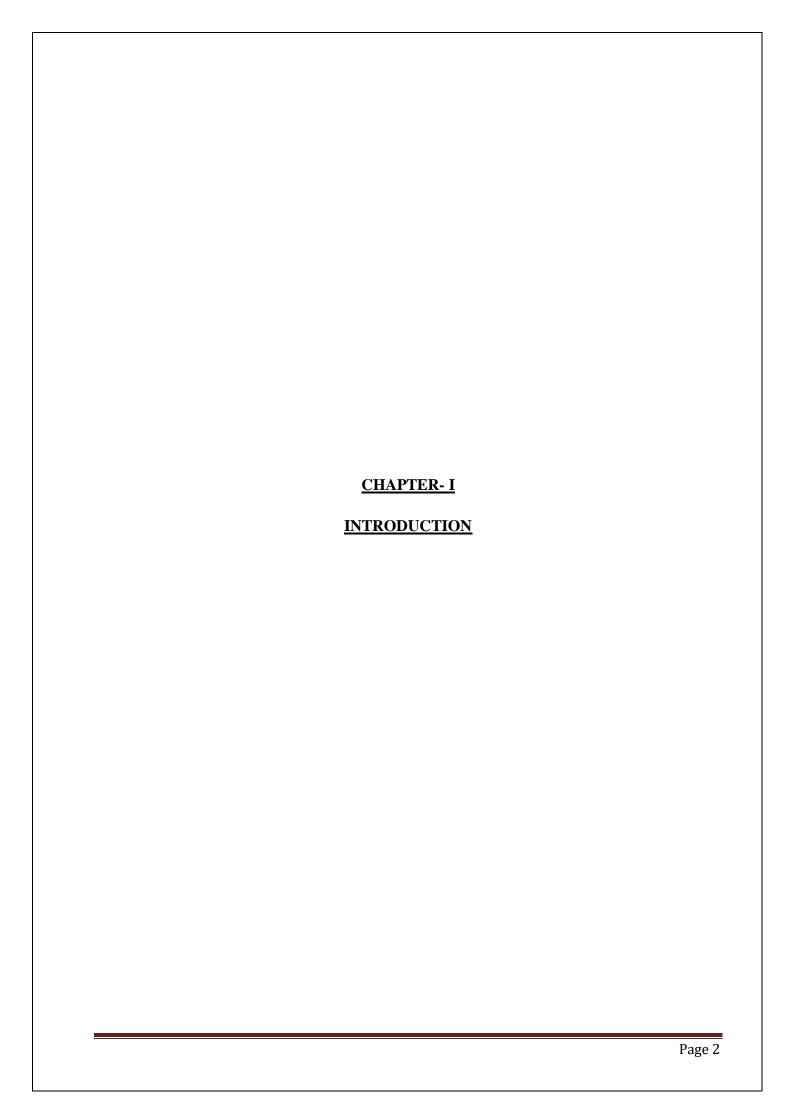
This is a research conducted on HSW Measures (Health, Safety and Welfare) that are followed at KENNAMETAL INDIA LIMITED which is basically a manufacturing company

In today's corporate world Welfare of the employees Heath of the employees and Safety of the employees are very much important and it also benefits the company and increases the productivity. Factories Act 1948 gives detailed information with regard to Employees Health, Safety and Welfare measures that a Factory should follow.

For a company to be successful, employee's satisfaction towards HSW are the key aspects. The satisfaction among employees depicts whether they are happy with the current policies followed by the company. The success of any manufacturing company will be based on the workers, employees will be considered as an asset to the organization. Any slight damage caused to the employee within the premises will lead to major effects.

This topic was chosen because, as it is a manufacturing company, the chances of accidents are more. Even a small negligence may lead to high impacts and dangerous consequences.

From this survey, it was understood that very few accidents are met in the company premises and almost all employees are aware of the HSW measures that the company is following. As per the overall response of the employees, they are very much satisfied with the policies and practices followed by Kennametal India Limited in order to protect their employees and safeguard them.



1.1 <u>INTRODUCTION</u>

Introduction about the topic

The study was conducted in Kennametal India Limited, Bangalore to find the effect of HSW measures of employees at workplace.

The research was conducted in order to check satisfaction level of the employees on the measures taken by the company and how they boost the employee's morale.

This study indicates the satisfaction among the employees with regard to HSW measures.

DEFINITIONS:

Employees Health implies "the arrangements guaranteeing the health of laborers in the in the conditions under which work is carried on the mechanical offices."

Employees Safety implies "the exercises that look to limit or to take out risky conditions that can cause real damage". Word related safety is worried about dangers in zones where individuals work; workplaces, producing plants, ranches, development locales, and business and retail offices, open safety is worried about perils in the home, in movement and amusement and in different circumstances that don't fall inside the extent of word related safety.

Employees Welfare implies "the push to make life worth living for laborers". At the point when every single fundamental office are given and employees get fulfillment then the profitability can be expanded and advancement of the association will be conceivable.

1.2 INDUSTRY PROFILE

Industrial production first started in 19th century. It generally replaced the the manufacture of the goods by hand by craftsmen. The 'Industrial Revolution' which discovered its origin in the new production strategies was made conceivable through, among different factors, the inventions of the steam engine and the electric motor. These allowed the mechanization of the power wellspring of production machines.

In the metalworking industries the development of machine tools started around then. In India machine tools were manufactured in arly 1890, however quality was poor and needed standardization. After 1930 machine tools of a reasonably good quality started to be delivered in India principally by PN DATTA and company in Calcutta, Cooper engineering works at Satara and the Indian machinery company at Dasanagar in Calcutta. These enterprises which were the pioneer of machine tools making in India made for the most part sliding, surfacing and screw cutting lathe of the head stock types. Be that as it may, every one of the enterprises experienced the competition from built up makers in England.

Growth and development

The outbreak of World War II, India turned into the primary base of supply and production of raw materials for the British and the allies' army in east. There were tools, in spite of the fact that, import of machines tools proceeded on a reduced scale. All through 1936 and 1940 the situation ended up expanding more precarious.

In India machine tool industry started with a production of Rs. 1 crore in 1956 and its output touched Rs. 1200 crore in 1995; the growth in this sector averaged to 18% during the 70s and 13% during the 80s and fell to minus 18% during 1993 due to recession. In 1995 the growth rate touched 15%. The production in this sector is expected to reach a level of Rs. 3000 crore by the year 2000. In 1994 India ranked 18th among major machine tools producing nations. This sector has an investment base of Rs.700 crore for manufacturing facilities. Automobile and Defence Sectors have played key roles in sustaining the industry's growth.

ORGANIZATION PROFILE

Background of the Company

Earlier in 1926, the Krupp group of Industries West Germany, created tungsten carbide economically without precedent for the world. The substance was observed to be hard as diamond and could even substitute it in numerous applications. So the name WIDIA was instituted from WIE-DIAMANT German for 'like diamond'.

WIDIA (INDIA) LIMITED was started in Karnataka having its registered office and was registered on 21st September 1964 with collaboration from KRUPP WIDIA which is in GmbH West Germany for technical and financial assistance

Keeping a track with modernization and emerging trends the products were introduced. They decided to manufacture machine tools including CNC machines

Widia was acquired by Kennametal situated in US on 30th August 2002 which was the top company then.

Widia was later named as Kennametal India Limited which has now turned into a pioneer in metal Industry.

Kennametal is deliberately sorted out along three worldwide specialty units' metal working arrangement and administration group. Propelled materials arrangements group and full administration supply. The organization gives clients an expansive scope of innovatively propelled instruments, tooling sys and building administrations went for enhancing clients, fabricating intensity, KennaMetal items use exceedingly mind boggling and material science in tungsten carbide powders and different materials that is especially impervious to warm, scraped spot, weight and wear.

Kennametal serves a vast array of markets, including industries such as aerospace, automotive, construction farm machinery, power generation and transmission equipment, and home appliance, oil and gas explorations. KennaMetal markets its products and services through multichannel network that includes highly trained and skilled direct sales forces, direct meeting, internet, integrated supply programme and a network of industrial distributors.

Today Kennametal has almost became a generic name, synonymous with tungsten carbide the world ores and has been marketing significant contribution towards the growth of core sector of Indian industries such as automobiles, heavy engineering. Railways, power generation, aviation & mining.

The product range of Kennametal encompasses more than 20,000 products covering metal cutting, metal forming and mining.

Company Overview

Came into existence in 1938

Potential customers of Kennametal are in 60 Countries Worldwide

Workforce of employees are around 14000 employees

Turnover of Kennametal can be expected to an extent of \$2.1 billion

Headquarter of Kennametal is situated in Latrobe, Pennsylvania, USA

Kennametal India Limited (KIL) is a part of Kennametal Inc., and a publicly listed company in India. The company's annual sales are INR 500 plus crores and employee strength is around 1400. KIL has its headquarters in Bangalore and have sale units in Bangalore, Chennai, Pune and Gurgaon. The Bangalore facility houses the Plant, Corporate office and the support functions. Strategically we have aligned our businesses into - Industrial and Infrastructure. Our products and services touch nearly every manufacturing process right from the light switch they turn on to the car they drive. In addition to this, KIL has Machining Solutions Group (MSG) as one of its vertical. MSG is into providing machining solutions, building customized machines and tooling. Kennametal India has another entity, namely Kennametal Shared Services Pvt Ltd. (KSSPL), Bangalore. KSSPL provides Technology and IT support to Kennametal across the globe.

1.3 Mission

Kennametal delivers the productivity to customers seeking peak performance in demanding environments by providing innovative custom and standard wear resistant solutions. This productivity is enabled through their advanced materials sciences and application knowledge.

Vision

To be recognized as a premier, customer driven enterprise that delivers their promise of exceptional value, growth and productivity solutions to their customers, consistent returns for shareholders and rewarding careers to employee.

Quality profile of Kennametal

- We will ensure the QUALITY of our work and products meet customer requirements.
- We will company with the requirements of QUALITY MANAGEMENT SYSTEM and continually improve the effectiveness of it.
- We will establish and review QUALITY OBJECTIVES.
- We will strive from CONTINUAL IMPROVEMENT. In quality of our processes, products and services.
- We will aim to continue as a market leader by SATISFYING CUSTOMER.

1.4 Product Profile

There are 9 Manufacturing plants across the Kennametal India Campus, It is abbreviated as PU (Production Units) and it is named from PU-1 to PU-9

- PU 1:- Powder preparation: In this production unit, tungsten trioxide powder imported from China and Thailand is carburized to obtain tungsten carbide. This is then mixed with cobalt and other pre alloys and sintered to make it hard. This is called Ready Mix Powder (RMP) and is the raw material to be used in other PU's.
- PU2:- Pressing, Shaping and Sintering (INFRASTRUCTURE): In this PU tungsten carbide is pressed to the required shape and then sintered with cobalt as binder. Inputs for this PU are RMP from PU1, worksheet and drawings. Output is finished product part of which is dispatched to customers and part is supplied to PU5 to PU7.
- PU3:- Metal forming tools (INFRASTRUCTURE): The PU does metal forming tools, copper tungsten and lamination dies and products are supplied to Defence units and Blade manufacturing companies and Electrical Industries.
- **PU4:- Round tools**: This plant does products like Gun drills, Gun reamers and other multi points. Both Solid carbide and Brazed tools are done here. CNC machines are conventional machines are used for the operations.
- PU5:- Inserts or Cutting tools and Coating: This PU does pressing of the carbide powder, final sintering insert on thickness and periphery by Diamond Grinding Wheels. Later the components are inspected, Laser etched and packed for dispatch to the customers.
- **PU6:- Carrier bodies:** This PU is concerned with the manufacture of carrier bodies circular saws and brazed tools.
- PU7:- Press tools: The press tools are manufactured and supplied to Pu5 and PU2. The special and conventional machines are used for manufactured process.
- PU8:- Special Purpose machines (INFRASTRUCTURE): These machines are used for in house applications. These machines are exported to China it is expected to make its debut on European market soon.

The product range of Kennametal India encompasses more than 20000 products covering metal cutting, metal forming and mining; PRODUCTS ARE:-

- Metal cutting tools:-
- Metal forming tools:-
- Mining tools:-
- Special purpose machines (SPM):-
- Metalworking toools
 - STELLRAM Cutting tools
 - Holemaking
 - Turning
 - Threading
 - Tooling Systems
 - Global Engineered Solutions







Applications of the Products

- Automobile industry.
- Heavy engineering Industries.
- Steel plants.
- Railways.
- Machine tool manufacturers.
- Light and general engineering.
- Power generation.
- Watch Making.
- Bearing Industries.
- Mining Industries.

1.5 Area of Operation

It is a MNC from operations spread across Asia, Europe and America. It operates in 60 countries and has marketing presence in 120 countries. In India production is carried out only in Bangalore. Sales offices are located throughout the country in various major cities. They are:

Bangalore, Kanpur, Pune, Hyderabad, Baroda, Kolkata, Bhopal, Mumbai, Jmashedpur, Gurgaon, Nagpur, Chennai, Coimbatore, Chandigarh, Delhi

It exports carbide tools and 5PM's to countries like: -

China ,Thailand ,Germany , Malaysia , Australia ,South ,Africa ,Singapore, United Kingdom ,Japan,Silence, Korea , Bangladesh

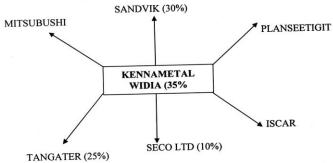
Infrastructural Facilities

Kennametal India is located in Bangalore Tumkur National Highway on a 33 acres land. Each department is situated in a separate building. Moreover each production unit has a separate building. 5S+1 technique are followed not only on the shop floor but also outside in the sense that buildings are white washed every year. There is good communication and transport support to the employees. Also a good information technology support is available. Healthy food is provided free of cost and cleanliness is given utmost importance in canteen, and other facilities like Training hall, overhead projectors, sounds system, library computers accessories, Medical facilities and safety equipment's.

1.6 Major competitors for Kennametal Widia Products

What makes Kennametal Widia different from Competitors? The Special Kennametal Widia

touch is



Some other existing competitors are

1. Caterpillar

Founding date: 1925

Type: Public company

Tags: Financial Services, Manufacturing & Industrial auto parts brokerage components construction equipment distribution engineering components engines equipment finance provider gas generators heavy equipment insurance investment lending machinery mining

Location : Peoria Heights, US; Brisbane, AU; Melbourne, AU; Sydney, AU; Perth, AU ; São Paulo, BREdmonton, CA

Employees: 98,400

2. Lincoln Electric

Founding date: 1895

Type: Public company

Tags: Manufacturing & Industrial construction equipment fabrication tools professional equipment welding

Location: Cleveland, US; Mentor, US; Euclid, US; Euclid, US. Employees: 9,000

3. Liebherr Group

Founding date:1949

Type: Private company

Tags: Manufacturing & Industrial construction equipment mining

Employees: 5,964

4. Ingersoll Cutting Tools

Founding date:1889

Type: Subsidiary company

Tags: Manufacturing & Industrial fabrication tools manufacturing equipment

Location: Rockford, US

Employees: 297

1.7 STRENGTH WEAKNESS OPPORTUNITIES THREATS (SWOT ANALYSIS)

Positive factors Negative factors Internal factors Strengths Weaknesses External factors Opportunities Threats

Strengths

- Wide product range.
- State of the art manufacturing facilities.
- Trained manpower.
- Good marketing network.
- Ores distributors in 9 branches.
- Ores 50 sales engineers.
- In house research & development department for product development.
- Technologies backup from Kennametal.
- Good stocking and service backup.
- Continuous product up gradation.
- Organization is customer driven.

Weaknesses

- Not able to reduce lead time for specials in line with competition.
- Company's response to changes in technology is slow.

Opportunities

- Manufacturing sector on a growth path.
- Growing at over 8%.
- Good demand from key sectors like auto ancillary steal, defense etc.,
- New products are demanded.
- Customers looking are demanded.
- Customers looking for continuous up gradation, shorten cycle times etc.

Threats

- Several Competitions
- Product differentiation getting harrowers.
- Price deciding factor.
- Innovative product from competition.
- Gradual reduction in customer. Duties on imports has further Lowered trade barrier.

1.9KENNAMETAL INDIA's 5 Years Financial Statement

	JUN'17	JUN'16	JUN'15	JUN'14	JUN'13
Parameters	(₹ Cr.)				
EQUITY AND LIABILITIES					
Share Capital	21.98	21.98	21.98	21.98	21.98
Share Warrants & Outstanding's					
Shareholder's Funds	377.08	361.63	333.40	316.33	301.48
Long-Term Borrowings	0.00	0.00	0.00	0.00	0.00
Secured Loans	0.00	0.00	0.00	0.00	0.00
Unsecured Loans	0.00	0.00	0.00	0.00	0.00
Deferred Tax Assets / Liabilities	-10.91	-9.36	-6.44	-1.62	-1.87
Other Long Term Liabilities	0.00	0.00	0.00	0.00	0.00
Long Term Trade Payables	0.00	0.00	0.00	0.00	0.00
Long Term Provisions	222.29	209.86	191.47	181.84	13.31
Total Non-Current Liabilities	211.38	200.50	185.03	180.22	11.44
Trade Payables	71.29	61.50	45.32	58.78	64.18
Current Liabilities					
Other Current Liabilities	40.20	38.09	36.26	30.72	51.53
Short Term Borrowings	0.00	0.00	0.00	0.00	0.00

Short Term Provisions	6.11	5.67	5.73	5.28	5.73
Total Current Liabilities	117.60	105.26	87.31	94.78	121.44
Total Liabilities	706.06	667.39	605.74	591.33	434.36
Non-Current Assets	0.00	0.00	0.00	0.00	0.00
ASSETS					
Gross Block	382.38	358.00	346.72	338.93	322.02
Less: Accumulated Depreciation	275.66	256.62	232.52	213.38	191.49
Less: Impairment of Assets	0.00	0.00	0.00	0.00	0.00
Net Block	106.72	101.38	114.20	125.55	130.53
Lease Adjustment A/c	0.00	0.00	0.00	0.00	0.00
Capital Work in Progress	16.40	5.86	5.22	12.61	10.65
Intangible assets under development	0.00	0.00	0.00	0.00	0.00
Pre-operative Expenses pending	0.00	0.00	0.00	0.00	0.00
Assets in transit	0.00	0.00	0.00	0.00	0.00
Non-Current Investments	0.50	0.00	0.00	0.00	0.65
Long Term Loans & Advances	258.66	235.94	214.31	202.44	25.55
Other Non-Current Assets	0.11	1.08	0.04	0.04	0.06
Total Non-Current Assets	382.39	344.26	333.77	340.64	167.44

Total Reserves	355.10	339.65	311.42	294.35	279.50
Current Assets Loans & Advances					
Currents Investments	0.00	0.00	0.00	0.65	0.00
Inventories	113.30	94.40	95.63	95.02	103.36
Cash and Bank	66.04	94.79	56.60	53.71	44.83
Other Current Assets	3.75	9.18	1.71	2.52	1.92
Short Term Loans and Advances	21.19	13.88	10.20	10.11	13.92
Total Current Assets	323.67	323.13	271.97	250.69	266.92
Net Current Assets (Including Current Investments)	206.07	217.87	184.66	155.91	145.48
Total Current Assets Excluding Current Investments	323.67	323.13	271.97	250.04	266.92
Miscellaneous Expenses not written off	0.00	0.00	0.00	0.00	0.00
Total Assets	706.06	667.39	605.74	591.33	434.36
Contingent Liabilities	31.86	29.70	24.60	19.60	14.00
Total Debt	0.00	0.00	0.00	0.00	0.00
Book Value (in ₹)	171.56	0.00	151.68	143.92	137.16
Adjusted Book Value (in ₹)	171.56	0.00	151.68	143.92	137.16

CONCERNAL DACKCROUNDS LITTED A DEVIDE DEVIEW
CONCEPTUAL BACKGROUND& LITERARTURE REVIEW

2.1 THEORETICAL BACKGROUND

FACTORIES ACT OF 1948

In India first Factories Act was passed in 1881. Later the First Factories Act was followed by new Acts in 1891, 1992 and 1934. With an intention of developing modern activities in the Country one more Act was passed in 1948. This Act of 1948 came to action from the First day of April in the year 1949.

Objective of the Factory Act 1948

- To protect the workers who are employed in Factories or Manufacturing sectors against Industrial Hazards.
- To oblige the owners to secure the working conditions of the workers in order to protect the Employees Health and Safety.

HEALTH, SAFETYAND WELFARE MEASURES

The Act makes provisions under Chapter III, IV and V of the Act with respect to different issues identifying with health, safety and welfare of the laborers. These provisions force upon the occupiers or supervisors certain obligations.

- To shield workers from accidents, and
- To secure for them in employment, conditions helpful for their health, safety and welfare.

2.2 LITERATURE REVIEW

- 1. Todd [1933] -'society welfare' broke down that the work welfare is the voluntary efforts of the employers to build up, inside the current industrial framework, working and at times living and cultural conditions of the representatives past what is required by law, the custom of the industry and the conditions of the market.
- 2. Alexander and Michael [1998]- 'Employment safety' The audit concentrated vigorously on distributed reports, fundamentally drawn from the period 1980 through 1996, wherein training was utilized as an intercession push to lessen danger of business related damage and malady. Eighty (80) such reports were found and gave overpowering proof to demonstrate the benefits of preparing in expanding specialist learning of employment dangers, and in affecting more secure work rehearses and other positive activities in a wide exhibit of worksites. Reports from select overviews and examinations of laborer wounds and work environment fatalities were likewise gotten to with numerous involving absence of preparing as a contributing variable to the disasters.
- 3. Jane et.al.[2001] 'Employment health and safety after privatization' the paper states that whether work status after employment misfortune because of privatization impacts health and utilization of health administrations and whether money related strain, psychosocial measures, or health related practices can clarify any discoveries. The finish of the examination is Insecure re-business and joblessness after privatization result in increments in minor mental horribleness and interviews with a general specialist, which are conceivably because of the expanded minor mental dreariness.
- 4. Sabarirajan, Meharajan.t [2001] 'Employee Morale' analyzed the investigation on specialist welfare in Textile industry. The investigation shows that 15% of the laborers are representatives are content with their welfare measures. 39 % of the representatives is ordinary with their welfare measures. 16% of them are in significantly disappointed level. This examination hurls light on the impact of welfare measures on QWL among the specialists of material production lines in Salam region." While portraying the Welfare in Indian INDUSTRIAL SECTOR

- **5. Ken.w**[2007] 'Uncertainty-Welfare Economics of Medical Care' the objective of this research project was to develop a formal safety program that addresses these problems, then to develop a method to promote the new program. The development of the new program was to be accomplished by analyzing the current safety program and comparing this program to others that the consultant had developed, and similar industries. As a result of the review of the current program, it is recommended by the consultant that the current program not be scrapped in favor or a new program. It would be more beneficial to modify the current program rather than to attempt to start over with a new safety program.
- 6. Abdullah, Spickett, Rumchev&Dhaliwal [2007]- 'labor safety and measures' study on organizational factors on safety in Taiwan and Japan reported that the impact of organizational factors in the two nations were diverse because of disparate culture. For instance, they discovered that Taiwanese leadership style was "Top-Down Directive" where top management conveyed safety strategies and associated with safety exercises while Japanese safety leadership was more focused on "Bottom-Up Participative" where top management promoted representatives' investment in any safety exercises.
- 7. Ragin [2007]- 'Employee health & safety' health and safety is a widespread component that should be contemplated particularly in little and medium enterprises as it is turning into a noteworthy issue for employers on the planet. Tailor (1998) continues including that health and safety of specialists in little and medium endeavors has long being dismissed in Africa and thusly there are growing occasions of disasters occurring in close to nothing and medium endeavors. There is for the most part nonattendance of organization reinforce in pretty much nothing and medium endeavors as the dominant part of them look at opening up of advantages rather than upgrading the working conditions therefore the results are shortcoming and safety of the delegates.
- **8. Joseph et.al.** [2009]- 'Privatization and employee Relations' examined in the article calls attention to that the structure of a welfare state lays on its government managed savings texture. Government, employers and trade unions have completed a considerable measure to promote the betterment of worker's conditions.
- **9. Josephine .M Rudolph L. [2011]-** 'Safety practices in small enterprise' The purpose of this research is to understand the views of different employees in small and medium enterprises about what can be done to improve the health and safety in work places. From

the findings, it shows that when good health and safety practices are not put in place, accidents, major and minor injuries can happen, and it is what most of the employees in other companies have so far experienced. This implies that if health and safety is not managed effectively, both the two parties being employees and the organization would suffer because for the organization to function effectively, it needs employees and for the people to survive, they need to work

- 10. Zanko, M. & Dawson, P. [2012].- assessing occupational training and0 health&safety' In examining the research literature on word related health and safety (OHS), this paper contends that the development in the quantity of specialists in OHS has brought about an accentuation on approach and practice a long way from more educational concerns effectively tended to by scholastics in the controls of brain research and human science. A rest has happened, and this is demonstrate by the general nonattendance of moves in administration, despite the way that OHS is continuously observed as a key operational and key stress of business associations.
- 11. Ramanigopal. C [2012]-'Industrial Relations'finished up the organization has given greatest exertion and commitment to actualize the work laws and directions and it has prevailing with regards to executing powerful safety and health administration thinking about the kind of safety and health issues, mishaps, representatives and innovation in its hierarchical settings and additionally great level of satisfaction among representatives in regards to healthy and safety has been accomplished.
- 12. Sindhu [2012]- 'Employee Welfare' expressed the employee welfare measures increment the profitability of association and advance healthy mechanical relations there by keeping up present day peace. Business houses give various such statutory and non statutory things systems to keep up satisfactory level of their employee. When they hint at improvement bottle workplaces, incredible water to drink, clean restrooms, clean and cleanliness wash rooms and latrines, standard therapeutic checkups, health protections, Employee help program, grievance taking care of division, better workplaces to sit or awesome work put gives employee an anomalous condition of satisfactory level. This gives an association to develop considerably quicker.
- 13. Upadhyay and Gupta [2012] 'organizational welfare measures' reason that communication plays a noteworthy part in increasing the satisfaction of a representative. Satisfied employees are accounted for to have high assurance. Welfare measures and work encounter does not necessarily identifies with satisfaction . Therefore its suggested that company ought to

accommodate satisfactory welfare measures yet ought not trouble itself by increasing the cost part of it in greed to procure the competitive edge and announce itself as most wanted company. Different variables like great and open communication, giving inspiring components, strengthening and so forth ought to be mulled over for increasing the representative satisfaction level.

- 14. Resma and Basavraju [2013]-'employee Welfare' expressed the representative welfare is an extensive term including diverse administrations, advantages and offices offered to employees of the association. This investigation enlightens the possibility of welfare measures; it moreover includes the worker's recognition regarding the diverse statutory welfare measures gave by the Donimalai Iron Ore Mine
- 15. Bellary. Logasakthi and Rajagopal [2013] 'Employee Satisfaction' charmed the workers appreciate the satisfaction of their occupations and additionally unique workplaces given by the organizations. The works extend their most prominent help for the difference in the association. The individual division manages the aggregate HR in the association.
- 16. Srinivas [2013] 'welfare measures' recognized welfare facilities and worker's satisfaction level about welfare facilities embraced at Bosch limited, Bangalore. It is found that the greater part of the, welfare facilities like helpful, bottle, working condition, security measures et cetera., are given by the association and the greater part of the employees are happy with the welfare facilities embraced by the association towards the worker's welfare.
- 17. Nanda and Panda [2013] 'Welfare and Impact' communicated the Rourkela Steel Plant has embraced a superior sort of welfare exercises which make a viable workplace and in this way better profitability. There is diverse sort of welfare schemes like medical allowance; demise relief fund, insurance, lodging and transportation offices entertainment club et cetera are given by the association to the representatives to keep up the industrial relation better one .The premises and the divisions are cared for sound. Furthermore legitimate wellbeing measures have been gotten in the affiliation. All issues relating to security, wellbeing and welfare of representatives are legitimately executed.
- **18. Prabakar .S** [2013]-'Employee Satisfaction and Welfare Measures' the purpose of the study is employees satisfaction &welfare measures and to know if employees are aware of

welfare factors. The studies conclude that not all employees are satisfied with the present welfare measures. Hence, taking the global reality, the management may review the problem with a soft mind.

- 19. Sulaiman .J ,Alaguthankamani[2013]-' a study on employee health and satisfaction' The examination is to know the general welfare of a worker with unique inclination to Safety and Health programs, at bike save parts fabricating industry in Chennai. Studies are directed to know how the Safety, Health and Environmental Improvements measures are taken by the business. The aftereffect of this investigation demonstrates that majority of the employees perceive the present efforts taken by the two wheeler spare parts manufacturing industry in Chennai, on safety measures and work environment is satisfactory.
- **20. Tiwari.U** [2014]-' a study on employee welfare facilities and its impact' the essential propose of representative welfare is to advance the life of workers and to keep them upbeat and directed. Welfare measures might be both statutory and non-statutory; laws require the business to stretch out specific advantages to employees in addition wages or pay rates.

<u>CHAPTER- III</u>	
RESEARCH DESIGN	
	Page 26

3.1 Problem Statement

The research problem of the study is "to measure the HSW[Health measures safety measures and welfare measures] of the employees of Kennametal India Limited"

3.2 Objective of the study:

- Understanding measures followed by Kennametal India Ltd with respect to Health ,
 Safety and Welfare
- To evaluate the employee satisfaction with regards to HSW
- To analyze if HSW affects efficiency positively

3.3 Scope of the study

This study is on measures followed at Kennametal India Limited, Bangalore plant for employees, with regards to Health, Safety and Welfare

There are 1013 employees at the Bangalore pant of which the researcher interviewed 100 employees across designations from General Manager to Officers to technicians to apprentices.

3.4 Research Design

Two methods of data collection are:

- ➤ Primary Data: Questionnaire is used as a primary data collection tool and the respondents were chosen on convenient basis. the questionnaire was design according to the objectives of my study.
- ➤ Secondary Data: It is the data which is already collected or exists in the organization in the form of past records, websites and related journals, and the data was collected from the books, company website, Google and other related records.

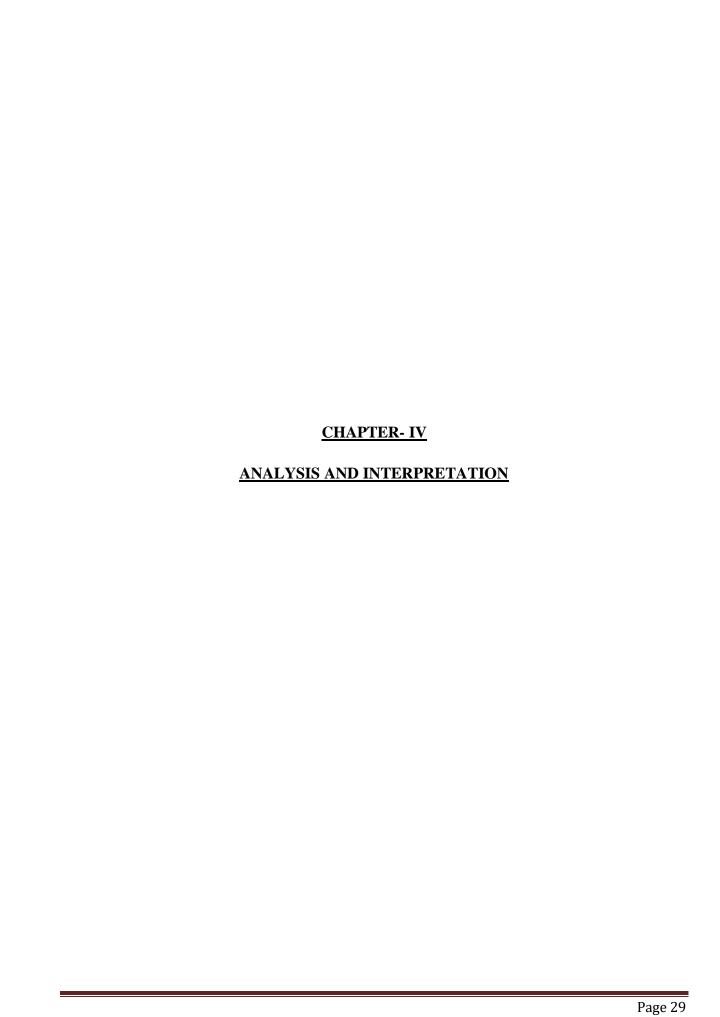
3.5 Hypothesis Framework

H₀: There is no significant relationship between level of satisfaction Health Safety & Welfare and level efficiency of the employees at KIL

H₁: There is significant positive relationship between level of satisfaction Health Safety & Welfare and level efficiency of the employees at KIL

3.6 Limitations to the Study

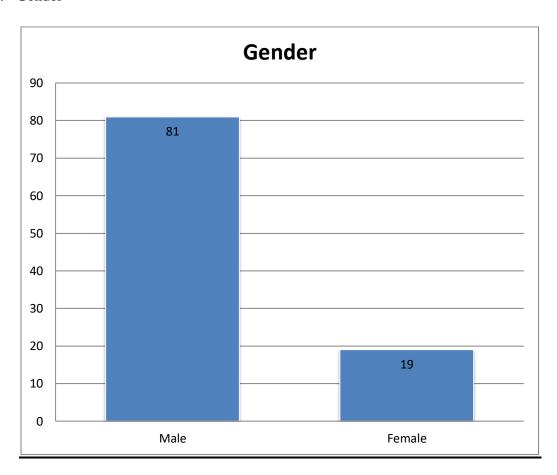
- 1. The study was limited to Kennametal Bangalore Plant only and the survey was done in a 10 week of limited time period
- 2. Sample size taken was 100 samples and it may not represent the whole population, as sample size was 10% of the overall population at Kennametal Bangalore Plant due to time constraints
- 3. Kennametal India Limited is globally operated in many countries and this study id limited to Bangalore office only
- 4. Sample size is limited to 100 employees from whole 1013 employees in the Bangalore plant
- 5. Employees may not have given the right answers for the questionnaire because he does not want be unfavourable to the organization
- 6. The employees may have got influenced from their peers and may have answered as same as them.
- 7. Secondary sources information may not be accurate as it may not be updated



The questionnaire is basically divided into 4 parts

The first part of the questionnaire consisted of Demographic details of the employees

1. Gender

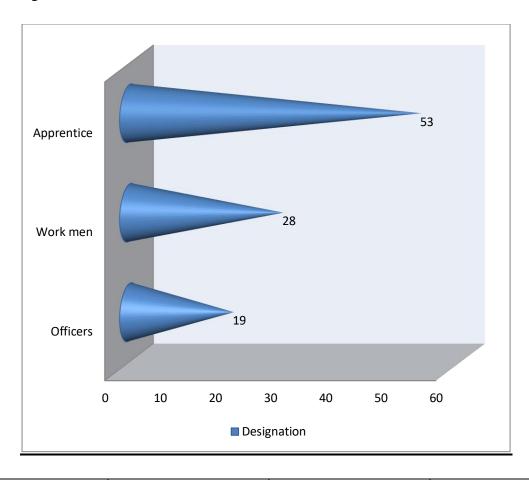


	MALE	FEMALE
No of respondents	<u>81</u>	<u>19</u>

Interpretation

As Kennametal is a manufacturing sector, Male employees are more in number when compared to Female employees. Female employees are more found in Admin departments and very less in shop floor.

2. Designation

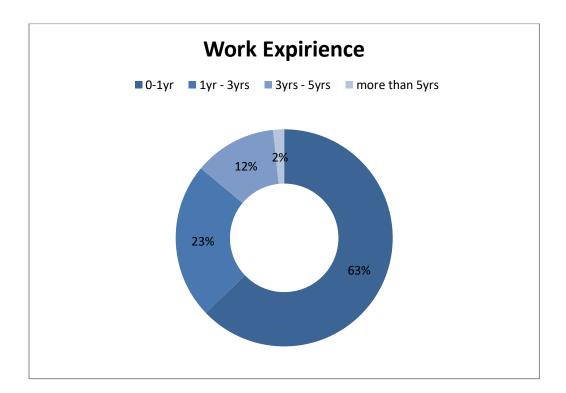


<u>Designation</u>	Apprentice	Workmen	Officers
N of respondents	53	28	19

Interpretation

As the survey is based on Health, Safety and Welfare measures of the employees, responses were mostly collected from Apprentice and Workmen when compared to Officers because Apprentice and Workmen are the employees who are working on machinery and not officers.

3. Work Experience



Experience	0-1	1-3	3-5	More than 5yrs
No of	63	23	12	2
respondents				

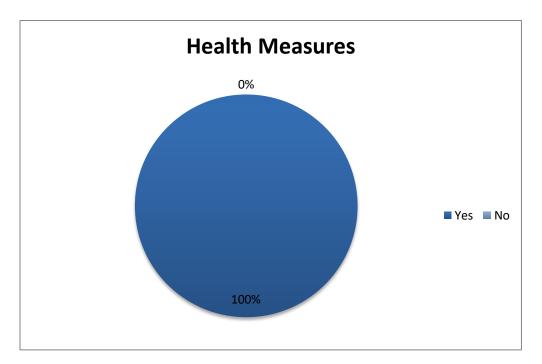
Interpretation

As most of them are Apprentice among the respondents, apprenticeship is for one year. Hence the highest percentage is 0-1year.

Health Measures

The second part of the questionnaire is regarding the health measures that are followed at Kennametal

1. Does your company ensure good Health of the employees?

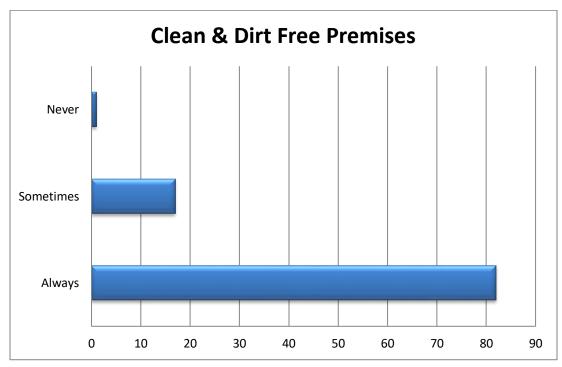


Health measures	Yes	No
No of respondents	100	00

Interpretation

Kennametal gives a lot of importance to Health of the Employees and they keep a regular check on Employee's Health. Hence, not even single respondent said 'no' to the above question.

2. Does your company has clean and dirt free premises?



Clean & dirt free	Always	Sometimes	Never
premises			
No of respondents	82	17	1

Interpretation

Kennametal is very much careful about cleanliness in the factory premises. But is obvious to find 100% in the shop floor and that is why some of them have voted for sometimes and never.

3. Are you provided with training before working on dangerous machinery?

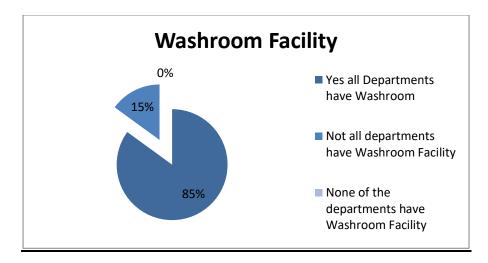


<u>Training</u>	Yes	No
No of respondents	89	11

Interpretation

No special training classes are conducted at Kennametal but workers are taught how to work with the dangerous machineries. But no training classes are conducted

4. Does every department in the factory has washroom facilities?



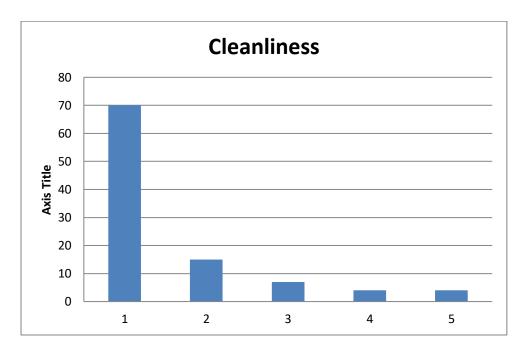
Washroom facility	Washroom facility Yes all department		None of the
	have	have washroom	department have
		facility	washroom facility
No of respondents	<u>85</u>	<u>15</u>	<u>0</u>

Interpretation

When this survey was conducted, it was found that all departments are not provided with washrooms. It is also surprising that not all employees know the fact that no washrooms are there in some departments such as purchase, stores etc.

Employees who work at Stores, Purchase Departments will have to come to some other nearby department for using washroom. Other than these departments, all other departments have washrooms in each floor.

- 5. How do you rate the following aspects followed at Kennametal from 1-5, 1 being best and 5 being worst?
- a. Cleanliness

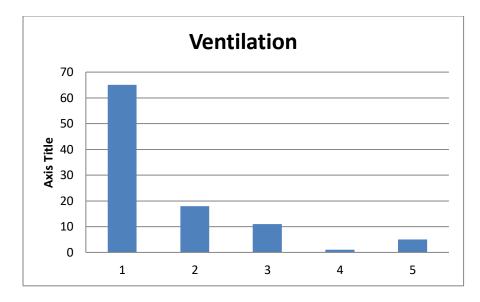


CLEANLINESS	1	2	3	4	5
No of	70	15	7	4	4
respondents					

Interpretation

As mentioned in above questions, Cleanliness is given very much important and is very well maintained

b. Ventilation

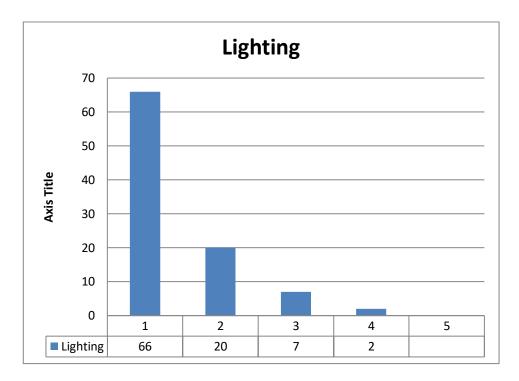


Ventilation	1	2	3	4	5
No of	65	18	11	1	5
respondents					

Interpretation

In shop floor more heat is produced as the manufacturing process emits more of heat and other than shop floor ventilation is very good in Kennametal

c. Lighting

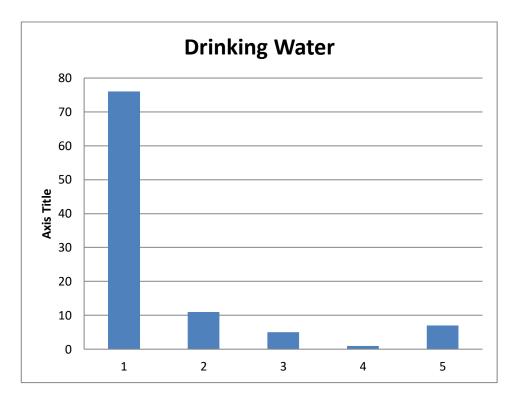


Lighting	1	2	3	4	5
No of	66	20	7	2	0
respondents					

Interpretation

Lighting is pretty good at Kennametal premises and all departments, employees and apprentice who works in shop floor will have a little less lighting.

d. Drinking Water



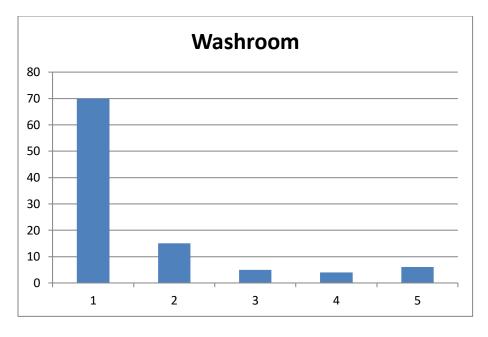
Drinking	1	2	3	4	5
Water					
No of	76	11	5	1	7
respondents					

Interpretation

Water facilities are provided almost in all the departments and in all the floors.

Apprentice trainees have their classes and in their classrooms they do not have drinking water facility.

e. Washrooms



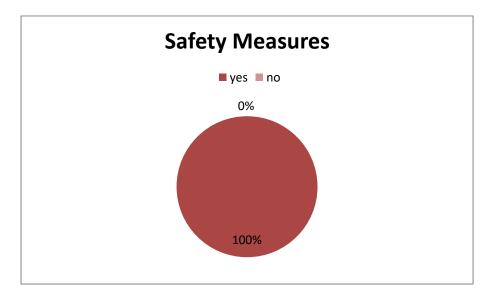
Washrooms	1	2	3	4	5
	70	15	5	4	6

Interpretation

Washrooms are provided in almost all the departments. Some departments like Stores,
Purchases do not have washroom facility and they will have to go to the nearby department
which has washroom facility

SAFETY MEASURES

1. Does your company follow any safety measures?



Safety measures	Yes	No
No of respondents	100	00

Interpretation

Kennametal follows safety measures very strictly. Safety of the employees is very much important for the Company

2. If your answer for first question is Yes, Mention any two Safety Measures that is followed at Kennametal India Limited?

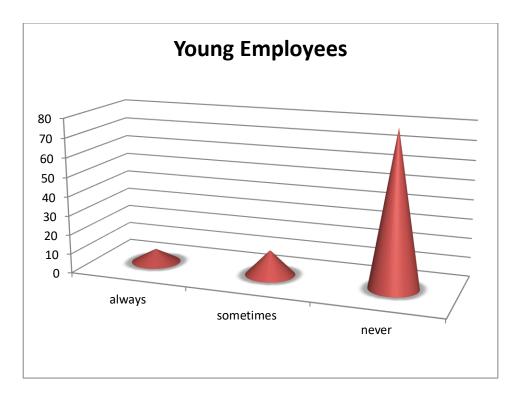


Safety measures	Safety goggles	Safety shoes	Safety induction	Fire safety
No of	89	86	11	14
respondents				

Interpretation

Safety shoes and safety goggles are the most commonly given answer. Employees without safety shoes are not even allowed into the premises. They are given brief safety induction at the time of their joining.

3. Have you noticed any young employee working on dangerous machinery?

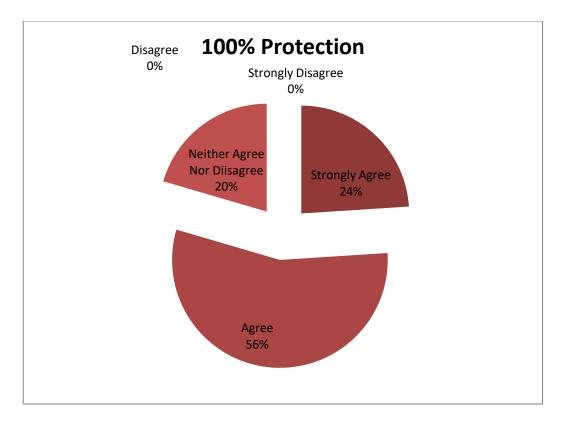


Young Employees	Always	Sometimes	Never
No of respondents	7	13	80

Interpretation

Apprentices who are joined will be 1 year or 6 months less for 18 years. Other than this, no other employees are less than 18 years of age

4. Kennametal aims at 100% Protection against Employee Health and Safety.

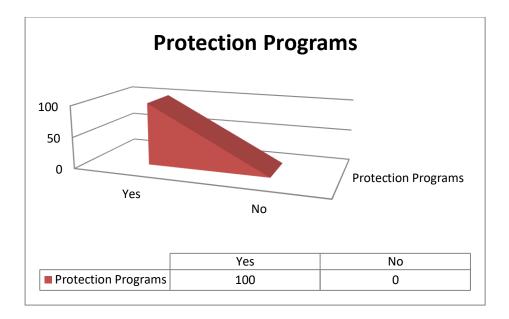


100%	SA	A	Neither	D	SD
protection			Agree /		
			Disagree		
No of	24	56	20	00	00
respondents					

Interpretation

It is very true that Kennametal takes 100% protection against Employee Health and Safety. Kennametal does not compromise with Health, Safety and Welfare of the Employees.

5. Does Kennametal initiate program that promotes Safety of the Employees?



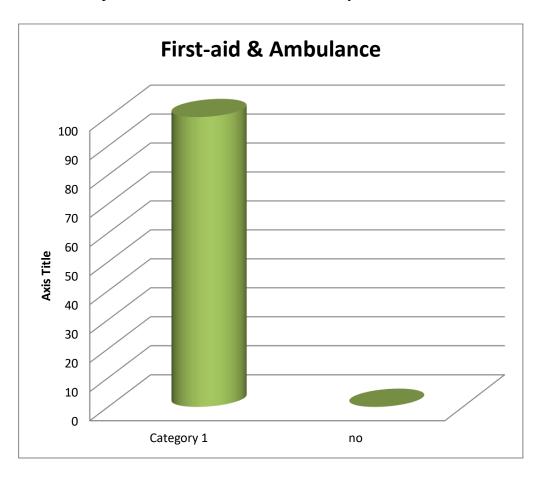
<u>Protection programs</u>	Yes	No
No of respondents	100	00

Interpretation

Kennametal initiates protection programs to the employees like safety briefing at the time of their joining and many other programs. They do special programs for especially for women employees regarding their safety in the company premises.

WELFARE MEASURES

1. Does Kennametal provide first-aid and ambulance facility?

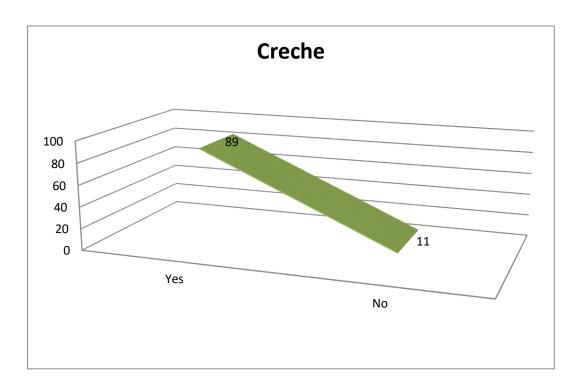


First aid & ambulance	Yes	No
No of respondents	100	00

Interpretation

Kennametal makes sure that all employees' welfare is taken care off. As there are 1000 plus employees in this particular plant first aid and ambulance must be mandatory and they have followed it as per Factories Act

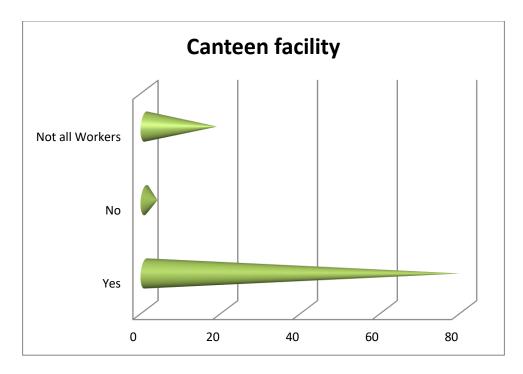
2. Are women employees provided with crèche facility?



<u>Crèche</u>	Yes	No
No of respondents	89	11

Interpretation

Even though women employees are very less when compared too men employees Crèche facility is also provided by the company to women employees 3. Are all the workers eligible for free canteen facility?

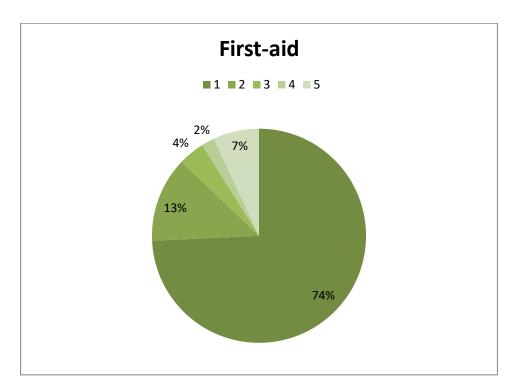


Canteen facility	Yes	No	Not all workers
Not all workers	79	3	18

Interpretation

Apprentices are not allowed in the main canteen, they have a different canteen below their department. This is the reason some of them have said not all workers are eligible

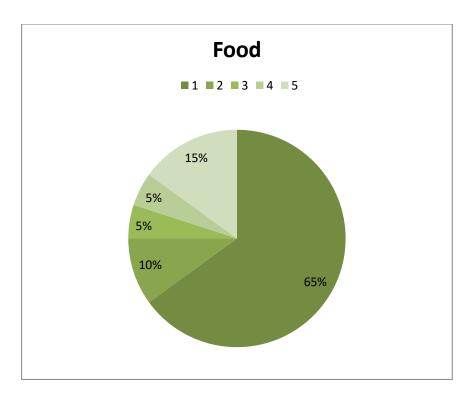
- 4. How do you rate the following welfare measures followed at Kennametal India Limited? 1 being the best and 5 being the worst
 - a. First-aid



First aid	1	2	3	4	5
	74	13	4	2	7

Interpretation

First-aid treatment is immediately provided to the injured. Doctor will be available 24*7. Ratings are based on effectiveness of treatment which dint seem to impress some employees

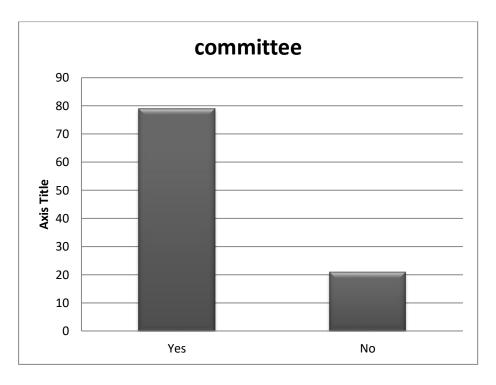


Food	1	2	3	4	5
No of	65	10	5	5	15
respondents					

Interpretation

Food is provided twice a day. Breakfast and lunch/ dinner based on their shift timings. Variety of food will be provided and are typical south Indian style food, as some employees are from north India, they don't like this type of food style.

1. Does Kennametal have a separate committee to monitor Employee's Health, Safety and Welfare?

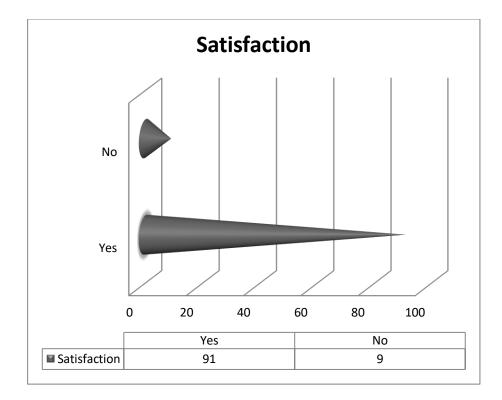


Separate committee	Yes	No
No of respondents	79	21

Interpretation

Kennametal has a separate committee known as Employee Health and Safety- EHS

2. Are you satisfied with the work environment?

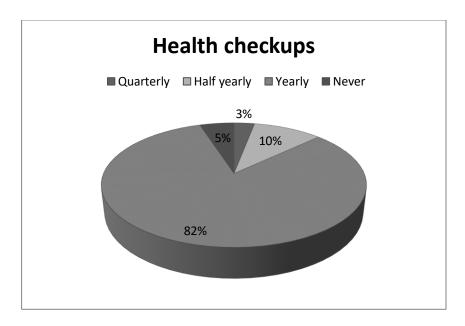


<u>Satisfaction</u>	Yes	no
No of respondents	91	9

Interpretation

 $3/4^{th}$ of the sample size is happy with the work environment and rest is not that satisfied with the work environment

3. How often does your company offer health checkups?

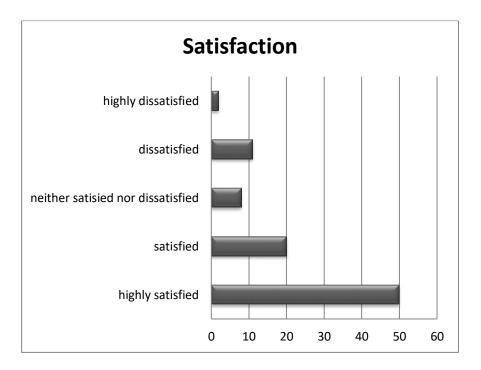


Health checkups	Quarterly	Half years	Yearly	Never
No of respondents	3	10	82	5

Interpretation

Kennametal offers health checkup yearly once and for contract employees or apprentice , health checkups are conducted at the time of their joining

4. How satisfied are you with Health, Safety and Welfare measures followed at Kennametal India Limited?

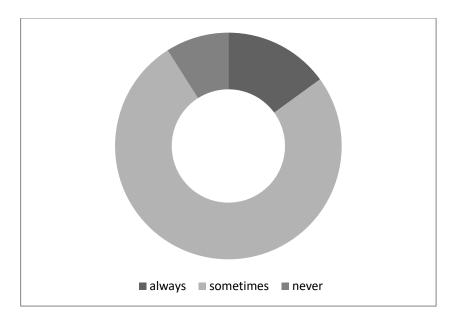


Satisfaction	Highly	Satisf	Neither	Dissat	Highly
	Satisf		Satisfied/dissatisfied		dissat
No of	50	20	8	11	2
respondents					

Interpretation

Employees are mostly highly satisfied and satisfied. Some have mention that they are somewhat satisfied and very few have mentioned that they are dissatisfied

5. Does your company take any actions on those who do not follow rules?

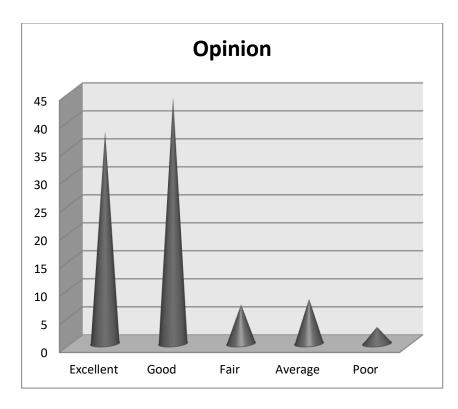


Action	Always	Sometimes	Never
No of respondents	76	9	15

Interpretation

Kennametal's policy is to warn at first for those who do not follow the rules and if it is repetitive then action will be taken against them

6. What is your overall image about HSW measures followed at Kennametal India Limited?

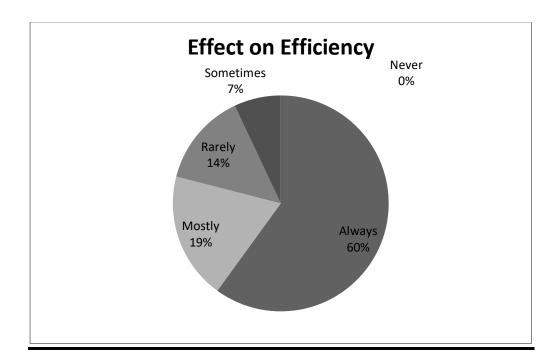


Opinion	a	b	c	d	e
No of	38	44	7	8	3
respondents					

Interpretation

Overall opinion of some employees were that Kennametal has excellent Employee health safety and welfare measures and high percentage of employees stated that it has good measures and others stated that it is average and poor

7. Does Efficiency of your work depend on the health, safety and welfare measures followed at Kennametal?



Effect of	Always	Mostly	Rarely	Sometimes	Never
<u>efficiency</u>					
No of	60	19	14	7	0
respondents					

Interpretation

Most of the employees were of opinion that their efficiency is dependent on the health, safety and welfare measure.

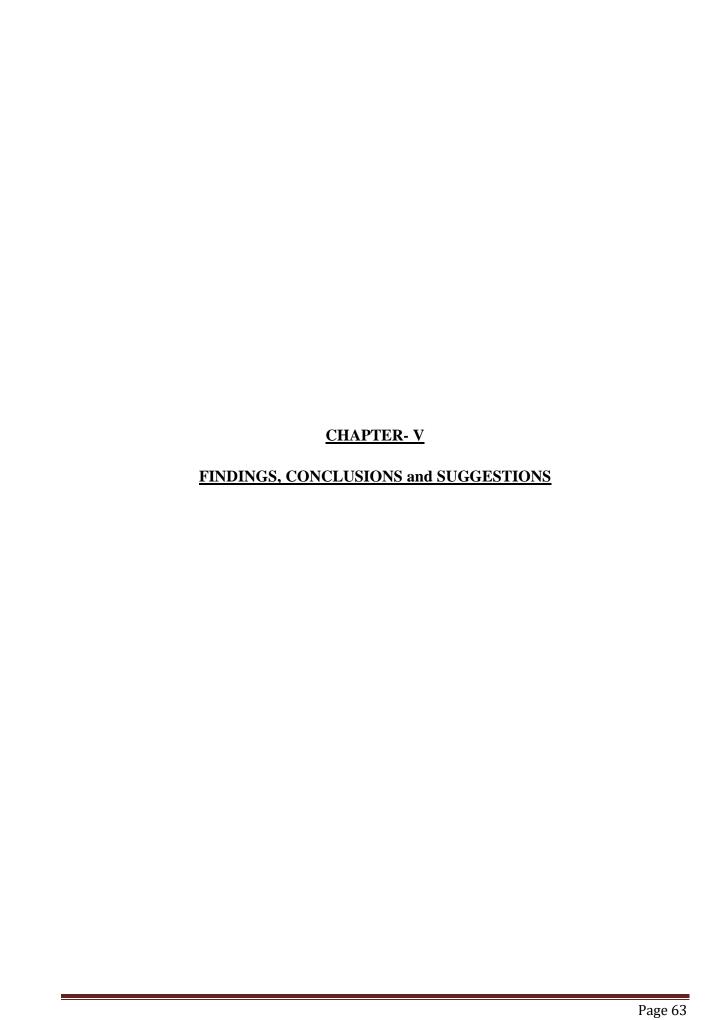
CORRELATION ANALYSIS

Respondents	Designation	Safety 4	Gen 4	Gen 7	corr between
		100%	Satisfaction	Efficiency	Sat v/s eff
		protection	HSW	Dependant	
			Independent		
	App =1	5= Strongly	5= highly sat	5= always	
	Worker = 2	agree	1= dissat	1= never	
	Off= 3	1= Strongly			
		disagree			0.97
1	3	4	5	4	
2	3	3	2	2	
3	3	5	5	5	
4	3	5	5	5	
5	3	5	5	5	
6	3	5	5	5	
7	3	5	5	4	
8	3	3	2	2	
9	3	5	2	2	
10	3	5	5	5	
11	3	4	2	2	
12	3	5	5	3	
13	3	5	2	2	
14	3	5	5	5	
15	3	5	5	5	
16	3	5	5	5	
17	3	4	5	5	
18	3	3	3	3	
19	3	5	5	5	
20	3	4	5	5	
21	2	5	2	2	
22	2	3	3	2	

23	2	5	5	5	
24	2	4	5	5	
25	2	5	5	5	
26	2	5	2	2	
27	2	5	2	2	
28	2	5	3	3	
29	2	5	5	5	
30	2	4	2	2	
31	2	5	5	5	
32	2	4	3	3	
33	2	4	3	3	
34	2	5	2	2	
35	2	5	5	5	
36	2	5	5	5	
37	2	4	3	3	
38	2	5	5	5	
39	2	5	5	5	
40	2	5	5	5	
41	2	5	5	5	
42	2	4	3	3	
43	2	4	4	4	
44	2	4	4	4	
45	2	4	4	4	
46	2	4	4	4	
47	2	4	5	5	
48	1	5	5	5	
49	1	5	5	5	
50	1	5	5	5	
51	1	5	5	5	
52	1	5	4	4	
53	1	4	3	3	
54	1	5	4	4	
55	1	5	4	4	

56	1	5	4	4	
57	1	4	4	4	
58	1	5	5	5	
59	1	5	5	5	
60	1	5	4	4	
61	1	5	5	5	
62	1	5	5	5	
63	1	5	5	5	
64	1	5	5	5	
65	1	5	5	5	
66	1	5	3	3	
67	1	3	3	3	
68	1	4	4	4	
69	1	5	4	4	
70	1	4	4	4	
71	1	5	4	4	
72	1	5	5	5	
73	1	5	5	5	
74	1	5	5	5	
75	1	5	5	5	
76	1	5	5	5	
77	1	5	5	5	
78	1	5	5	5	
79	1	5	5	5	
80	1	5	5	5	
81	1	5	5	5	
82	1	5	5	5	
83	1	5	5	5	
84	1	5	5	5	
85	1	5	5	5	
86	1	5	5	5	
87	1	5	5	5	
88	1	5	5	5	

89	1	5	5	5	
90	1	5	5	5	
91	1	5	5	5	
92	1	5	5	5	
93	1	4	4	4	
94	1	4	4	4	
95	1	4	3	3	
96	1	5	5	5	
97	1	4	4	4	
98	1	5	4	4	
99	1	5	4	4	
100	1	5	4	4	
		467		423	
total avg		4.67			
average of off		4.5			
average of					
work		4.5			
average of app		4.8			



FINDINGS:

From the data analysis it can be interpreted that 81% employees are male and 19% employees are female.

In this factor it can be concluded that training before handling difficult machine is highly satisfied factor among all and transport facility is highly dissatisfied factors.

From the data collection and analysis it can be conclude that organization is doing well for the employees and providing most of HSW related atmosphere for the employees which helps in the betterment of themselves and also the organization.

From the study it can be concluded that company is using factory act legislation and it also implement this same in organization. Most of the factors are provided by the company like safety and welfare policy, first aid treatment etc.

From the study it concludes that training provided before handling difficult machine is more satisfied factors. And the transportation facility is dissatisfied factor for the employees. Company has to provide transport facility for the betterment of employees

SUGGESTIONS

- Some employees suggested the admin department to provide cab facility even for apprentice
- Suggestions about food quality were given that, that quality can be better.
- Not all departments have Washroom facilities. Departments such as Stores, Purchases must be provided with the Washroom Facility
- There are many women employees. But when compared to male employees, female
 employees are very less. To create a comfortable working environment, more number
 of women employees must be hired.
- As per Apprentice, especially ITI Apprentice. Accommodation and transportation
 facility should be provided by the company as the stipend provided to ITI Apprentice
 is 7000 per month. And it is very difficult for apprentice to lead a normal life with that
 stipend.

CONCLUSIONS

According to Analysis (Correlation) between satisfaction of employees regarding Health, Safety and welfare measures followed at KIL and the effectiveness of employees in their work shows a positive correlation of 0.97. This implies that according to respondents more the satisfaction with regards to measures followed at KIL more the efficiency of employees towards the work

Thus the Hypothesis below:

H_o: There is no significant relationship (POSITIVE) between level of satisfaction Health Safety & Welfare and level efficiency of the employees at KIL

H₁: There is significant positive relationship between level of satisfaction Health Safety & Welfare and level efficiency of the employees at KIL

Has been proven undoubtedly to the extent 0.97

BIBLIOGRAPHY

BOOKS

- 1. RUSTUM S DAVAR, Book 'Personnel management & Industrial Relations',
 - Year: 1988, Publishers: Himalaya publishers
- 2. G S BAIN GS WOOLVEN, Book 'Industrial Relations', Year: 1978
- 3. KUMAR, ANIL, Book 'Labor Welfare and Social Security',

Publishers: Deep & Deep Publication, New Delhi, Year: 2003.

ARTICLES

- 1. Alexander Cohen, PhD Michael J. Colligan(1998), "assessing occupational safety & health training" D.H.H.S [NIOSH] publication number-98-145.
- 2. j.sulaiman, m.alaguthnkamani, '' a study on employees satisfaction & safety measures" Indian journal of applied research [march 2013]Volume : 3 Issue : 3 ISSN 2249
- 3. Jane, E. Et. al "Employment status and health after privatization in white collar civil" BMJ VOLUME 322 ,(march 2000)
- 4. Josephine moeti, lysson& Rudolph," safety practices in small & medium size enterprises."E3 journal of business management & economics (sep 2011)ISSN 2141-7482
- 5. S.prabakar, 'employee satisfaction & welfare measures.'

Re-engineering of Indian economy opportunities & challenges[24th October 2013] Volume: III,Special Issue: X

6. Ushatiwari," a research on employees welfare facilities and its impact on employees efficiency." Journal of research in management & technology (2014)Online ISSN-2320-0073.

WEBSITES www.kennametal.com www.google.com www.scribd.com

ANNEXURE

MBA Research Project Questionnaire

Topic – A STUDY ON HEALTH, SAFETY AND WELFARE MEASURES FOLLOWED at KENNAMETAL INDIA LIMITED

Hello, I am RANJITHA S R pursuing MBA in Acharya Institute of Technology. I am conducting a survey on the above mentioned Topic. This survey is led as my examination venture, which should be submitted as a major aspect of satisfaction of the Master of Business Administration degree

If it's not too much trouble attempt to answer the greater part of the inquiries as genuinely and precisely as could be expected under the circumstances. The discoveries from this survey is only for scholarly reason

The survey will take less than 15 minutes. Your participation is very much appreciated.

- 1. Name :
- 2. Gender :
- 3. Designation:
- 4. Work experience
 - a. Less than an Year
 - b. Between 1Year to 3 Years
 - c. Between 3 years to 5 Years
 - d. More than 5 years

HEALTH MEASURES

1.	Does your compan	y ensure	good Health	of the employees?

- a. Yes
- b. No
- 2. Does your company has clean and dirt free premises?
 - a. Always
 - b. Sometimes
 - c. Never
- 3. Are you provided with training before working on dangerous machinery?
 - a. Yes
 - b. No
- 4. Does every department in the Factory have washroom and drinking water facilities?
 - a. Yes, all the departments have these facilities
 - b. Not all departments have these facilities
 - c. None of the departments have these facilities
- 5. How do you rate the Health measures that are followed by Kennametal India Ltd from 1-
 - 5, 1 being highest and 5 being least

	1	2	3	4	5
Cleanliness					
Ventilation and					
temperature					
Lighting					
Drinking water					
facilities					
Washrooms					

SAFETY MEASURES

1.	Does your company follow any safety measures?
	a. Yes
	b. No
2.	If your answer for 1st question is 'Yes', mention any 2 safety measures that are followed
	by Kennametal (ignore if your answer for 1 st question is 'No')
3.	Have you noticed any young employee (under the age of 18) or women employees
	engaged in working on dangerous machinery in your department
	a. Always
	b. Sometimes
	c. Never
4.	Kennametal aims at 100% protection against employees HSW of employees &
	environment
	a. SA[Strongly Agree]
	b. A[Agree]
	c. NAND[Neither agree nor disagree]
	d. D[Disagree]
	e. SD[Strongly disagree]
5.	Does Kennametal initiate any programs that promote safety of the employees?
	a. Yes
	b. No
<u>ىلك</u>	FARE MEASURES

<u>WE</u>

- 1. Does Kennametal provide First-aid appliances and Ambulance facilities to the workers?
 - a. Yes it does provide
 - b. No it doesn't provide
 - c. Not aware whether it provides or not

2.	Does women employees are provided with Creche facility in the factory premises?					
	a. Yes					
	b. No					
3.	. All workers in the factory are eligible for free canteen facilities?					
	a. Yes					
	b. No					
	c. Not all wor	rkers are eligib	le			
4.	How do you rat	te the welfare	measures follo	owed at Kennar	metal India Lto	d from 1
	being highest and	d 5 being least				
		1	2	3	4	5
	First-aid					
	treatment					
	Canteen-food					
1.	Do you have ser			ors the Health, S	Safety and Wel	fare mea
1.	Do you have sep that are followed a. Yes it ha	l by Kennameta s a separate co	al India Ltd?	ors the Health, S	Safety and Wel	fare mea
1.	Do you have septhat are followed a. Yes it hab. No there	l by Kennamet	al India Ltd?	ors the Health, S	Safety and Wel	fare mea
	Do you have septhat are followed a. Yes it hab. No there	I by Kennameta s a separate con is no such com aware about it	al India Ltd? mmittee nmittee			
	Do you have septhat are followed a. Yes it hab. No there c. I am not	I by Kennameta s a separate con is no such com aware about it	al India Ltd? mmittee nmittee			
	Do you have septhat are followed a. Yes it hat b. No there c. I am not	I by Kennameta s a separate con is no such com aware about it	al India Ltd? mmittee nmittee			
2.	Do you have sept that are followed a. Yes it hat b. No there c. I am not Are you satisfied a. Yes	I by Kennameta s a separate con is no such com aware about it I with the work	al India Ltd? mmittee nmittee cing environme	ent provided at l		
2.	Do you have sept that are followed a. Yes it hat b. No there c. I am not Are you satisfied a. Yes b. No	I by Kennameta s a separate con is no such com aware about it I with the work your company	al India Ltd? mmittee nmittee cing environme	ent provided at l		
2.	Do you have sept that are followed a. Yes it hat b. No there c. I am not Are you satisfied a. Yes b. No How often does	I by Kennameters a separate consist no such compaware about it with the work your company	al India Ltd? mmittee nmittee cing environme	ent provided at l		
2.	Do you have sept that are followed a. Yes it hat b. No there c. I am not Are you satisfied a. Yes b. No How often does a. Quarterly	I by Kennameta s a separate con is no such com aware about it I with the work your company	al India Ltd? mmittee nmittee cing environme	ent provided at l		

- 4. How satisfied are you with the Health, Safety and Welfare measures followed at Kennametal India Ltd?
 - a. Highlyy satisfied
 - b. Satisfied
 - c. Neither satisfied nor dissatisfied
 - d. Somewat satisfied
 - e. Dissatisfied
- 5. Does the company take any actions against those who do not follow the Safety and Health measures?
 - a. Always
 - b. Sometimes
 - c. Never
- 6. As an employee, What is your overall image about the HSW measures that are followed by Kennametal India Ltd?
 - a. Excellent
 - b. Good
 - c. Average
 - d. Poor
- 7. Does Efficiency of your work depend on the health, safety and welfare measures followed at Kennametal?
 - a. Always
 - b. Mostly
 - c. Sometimes
 - d. Rarely
 - e. Never

- 8. Your efficiency of work has been improved because of the health, safety and welfare measures followed at Kennametal India Limited.
 - a. SA[Strongly agree]
 - b. A[Agree]
 - c. NAND[Neither agree nor disagree]
 - d. D[Disagree]
 - e. SD[Strongly disagree]
- 9. Any suggestions with regard to Health, Safety and Welfare measures followed at Kennametal India Limited?



ACHARYA INSTITUTE OF TECHNOLOGY DEPARTMENT OF MBA WEEKLY PROGRESS REPORT(16MBAPR407)

Name of the Student: Ranjitha S R

Internal Guide: Prof. Kisholoy Gupta

USN No: 1AY16MBA59

Specialization: Human Resource

Title of the Project: A Study on Employee Health, Safety and Welfare measures

Company Name: Kennametal India Limited

Week	Work undertaken	External Guide Signature	Internal Guide Signature
15-01-18 to 20-01-18	Introduction about Kennametal < India Limited and its products	Thanker Jubbard	Bi
22-01-18 to 27-01-18	Learning about different types of products and services by Kennametal India Limited	have Jub beit	B
29-01-18 to 03-02-18	Orientation and gathering information about the growth of the company	[have a Jubboird	B
05-02-18 to 10-02-18	ANALYSIS of the position of the company	hanger Subbarial	B
12-02-18 to 17-02-18	Research problem identification	Though Subbaid	B
19-02-18 to 24-02-18	Preparation of the research instrument for data collection	Transparsubbarial	B

26-02-18 to 03-03-18	Theoretical background of the study	hangs Subbara	B
05-03-18 to	Data collection and data		
10-03-18	Analysis	Junye Subbair	Si
12-03-18 to 17-03-18	Interpretation of the data gathered during the survey	Though Subboried	5-
19-03-18 to 24-03-18	Final report preparation and submission	January Subbin	ge

emizage.



