

SAFETY ANALYSIS ON HIGH RISK INJURY
CATEGORIES WITHIN STEEL INDUSTRIES

THESIS

VINZEN JOSHUA D. ARGONZOLA
HOWARD LEL P. ORQUENA

College of Engineering and Information Technology
CAVITE STATE UNIVERSITY
Indang, Cavite

May 2017

✓
SAFETY ANALYSIS ON HIGH RISK INJURY CATEGORIES
✓
WITHIN STEEL INDUSTRIES

An Undergraduate Thesis
Submitted to the Faculty of the
College of Engineering and Information Technology
Cavite State University
Indang, Cavite

In partial fulfillment
Of the requirements for the degree of
Bachelor of Science in Industrial Engineering



00011740

*Safety analysis on high risk injury
categories within steel industries*
658.3 Ar3 2017
T-7174

VINZEN JOSHUA D. ARGONZOLA
HOWARD LIEL P. ORQUINA
April 2017



Republic of the Philippines
CAVITE STATE UNIVERSITY
Don Severino de las Alas Campus
Indang, Cavite
☎ (046) 4150-010 / (046) 4150-013 loc 206
www.cvsu.edu.ph

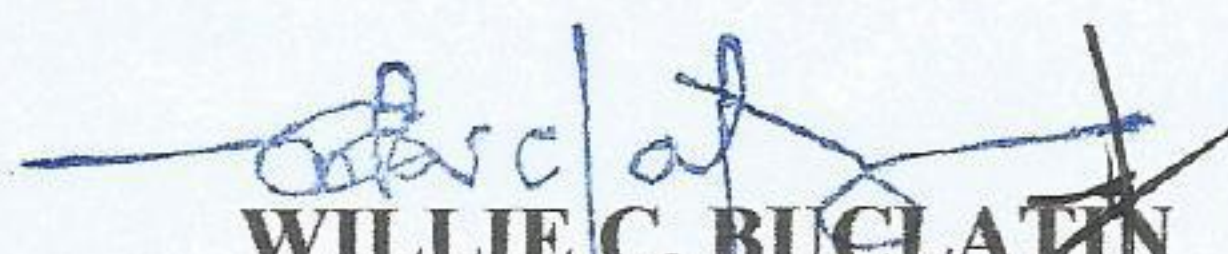
COLLEGE OF ENGINEERING AND INFORMATION TECHNOLOGY

Department of Industrial Engineering and Technology

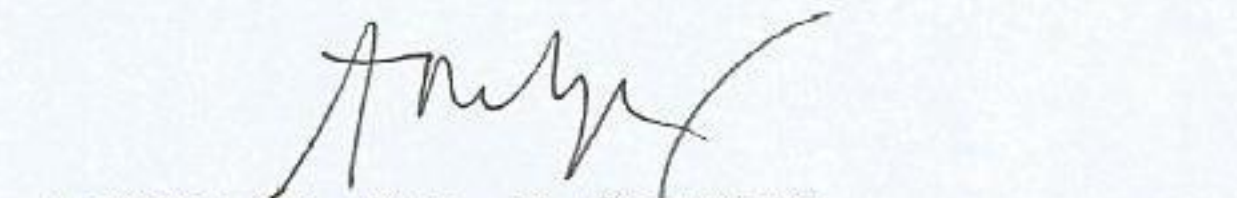
AUTHORS: VINZEN JOSHUA D. ARGONZOLA and HOWARD LIEL P. ORQUINA

TITLE: SAFETY ANALYSIS OF HIGH RISK INJURY CATEGORIES WITHIN STEEL INDUSTRIES

APPROVED:


WILLIE C. BUCLATIN
Adviser

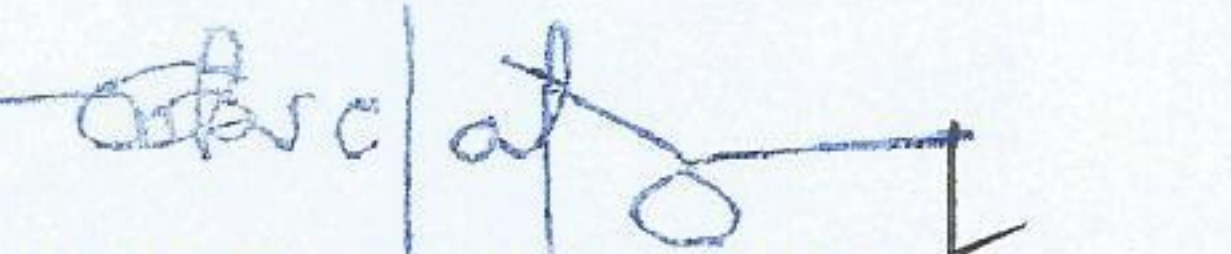
Date


AIVAR M. LOPEZ
Technical Critic

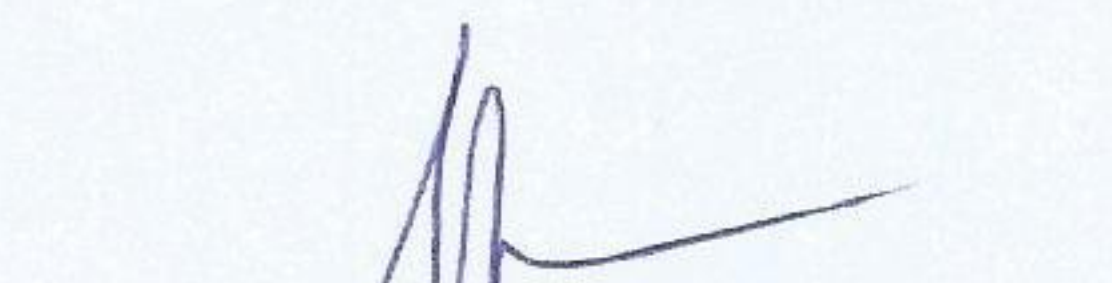
Date


GERRY M. CASTILLO
Unit Research Coordinator

Date


WILLIE C. BUCLATIN
Department Chairperson

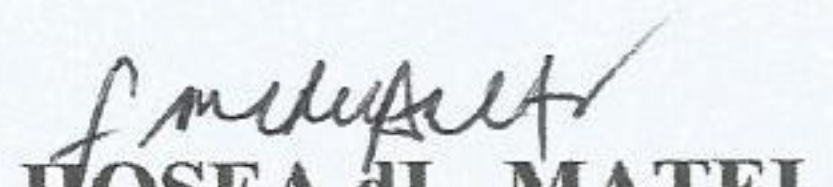
Date


RENATO B. CUBILLA
College Research Coordinator

Date


MARILYN M. ESCOBAR 5/4/17
Dean

Date


HOSEA dL. MATEL
Director for Research

MAY 09 2017

Date

OCT 18 2017

ABSTRACT

ARGONZOLA, VINZEN JOSHUA D. and ORQUINA, HOWARD LIEL P.,
Safety Analysis on High Risk Injury Categories within Steel Industries. An
Undergraduate Thesis. Bachelor of Science in Industrial Engineering. Cavite State
University, Indang, Cavite. May 2017 Adviser: Engr. Willie C. Buclatin

This study was primarily conducted to determine the high-risk injuries that are present within the steel company and to find out if there are significant effects to the worker's performance. To achieve the research purpose, the study has undertaken enough reviews from other related studies in order to make sure that the flow and inputs of the study is reliable and accurate.

Data were gathered through consultation of workers in the steel industries and by surveying using likert-scale method. The survey was conducted from three steel manufacturing companies which are Ishida Philippines Corporation, Industrial Galvanizer Corporation and Jea Steels Corporation. By using slovin's and stratified sampling, the researchers determined the number of respondents per company. In order to determine if there are significant effects between high risk injuries and worker's performance the study uses a statistical package for the social sciences (SPSS) which is a computer processed statistical computation.

The outputs of this study are accurately determined in order to help future researchers to discuss a deeper study along steel industries.

TABLE OF CONTENTS

	Page
BIOGRAPHICAL DATA	iii
ACKNOWLEDGMENT	iv
PERSONAL ACKNOWLEDGMENT	v
ABSTRACT	vii
LIST OF TABLES	x
LIST OF APPENDICES	xi
INTRODUCTION	1
Statement of the Problem	3
Significance of the Study	3
Objectives of the Study	4
Time and Place of the Study	4
Scope and Limitation of the Study	4
Definition of Terms	5
Conceptual Framework of the Study	6
REVIEW OF RELATED LITERATURE	7
METHODOLOGY	21
Research Design	21
Sources of data	21
Data Gathering Procedure	23
Research Instrument	23

Data Analysis and Statistical Treatment	24
RESULT AND DISCUSSION	27
Demographic Profile of the Respondents	27
High risk injury categories that can be seen within steel industries	28
Significant effects of high risk injuries to the performance of the workers	30
SUMMARY, CONCLUSION AND RECOMMENDATION	41
Summary	41
Conclusion	41
Recommendation	42
REFERENCES	44
APPENDICES	49