

A Study on Minimization of Defective Product at Wacker Philippines, Inc.

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Table of Contents

	Page
Title Page.....	i
Approval Sheet.....	ii
Certification.....	iii
Acknowledgment.....	iv
 Chapter 1:	
1.1 Background of the Study.....	1
1.2 Company Profile.....	3
1.3 Statement of the Problem.....	4
1.4 Objectives of the Study.....	5
1.5 Significance of the Study.....	5
1.6 Scope and Limitations.....	6
1.7 Methodology.....	6
1.8 Definition of Terms.....	7
 Chapter 2:	
2.1 Presentation of Related Literature.....	9
 Chapter 3:	
3.1 Presentation of Gathered Data.....	18
 Chapter 4:	
4.1 Analysis of Data	
(Problem Tree).....	23
(Objective Tree).....	26
 Chapter 5:	
5.1 Presentation of Alternative Courses of Action.....	28

5.2 Cost and Benefit Analysis.....	35
Chapter 6:	
6.1 Presentation of Conclusion and Recommendation.....	37
6.2 Detailed Plan of Action.....	38

Appendices

Bibliography



1.1 Background of the study

The Wacker Corporate management has been concentrated in Munich since 1951. The history of Wacker's success revolves around its corporate headquarter. In 1957, Wacker Corporation expanded to the United States, where the head office is located in Menomonee Falls, near Milwaukee. Wacker Asia Pacific serves its Asian customers from its offices in Hong Kong.

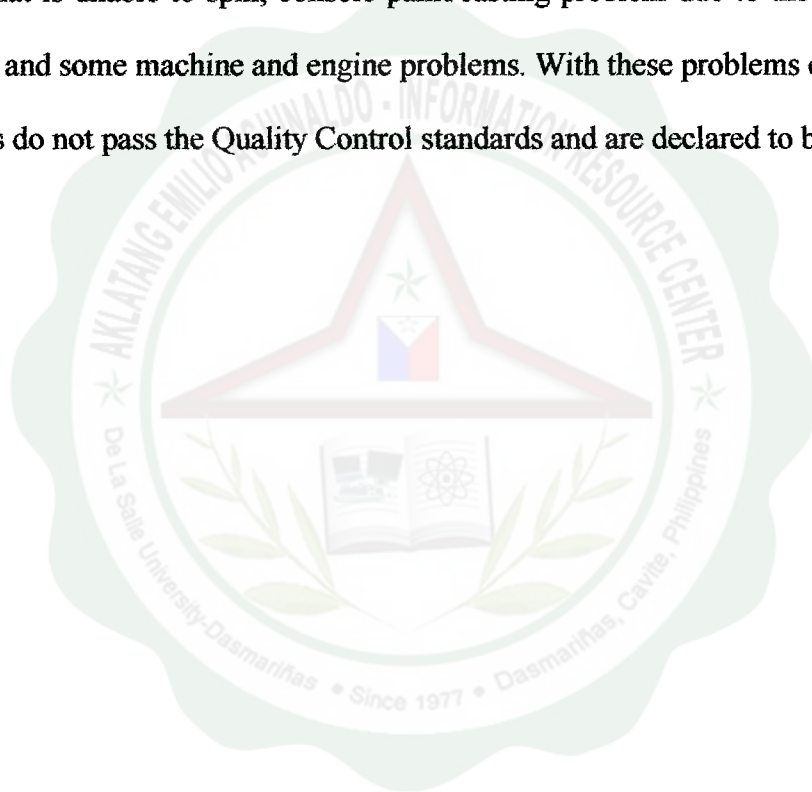
Wacker Corporation has 33 affiliates and 3 are in manufacturing. They are located in more than 160 countries and cities all over the world. The number of products of Wacker is more than 200.

Wacker Philippines, Inc. is the one of the manufacturing companies of Wacker Corporation. It manufactures only 4 products which consist of Vibratory plates, Wacker plates, Truss screed, and Floor saw. Vibratory Truss Screed (TS) are designed for precise strike-off and consolidation of concrete surfaces up to 25 cm thick where critical flatness is desired. Vibratory Plates offer functionality and performance at a value price. The compact design allows compaction of mixed soil in the most narrow of spaces even in extremely narrow trenches. Gasoline Floor Saw combines dimensions and a light design, thus making its weight of hardly any importance during transport.

The researcher conducted the study in Vibratory Asplath Plate which features a tough, wear resistant, ductile iron base plate offering high strength and shock resistance. It is also designed for the compaction of granular and mixed material with some cohesive content in confined areas such as parking lot, highway and bridge construction.

Wacker Philippines, Inc. working hours is from 7am-6pm Mondays to Thursdays and 7am-4pm on Fridays. The researcher focused its study in Quality Control and by observation, they noticed some defects from the supplier and sometimes from the process or machines.

However, Wacker Philippines, Inc. has a problem of defective products due to different contributions like carburetor problem, deformed base plate, console crack, clutch that is unable to spin, console paint/casting problem due to the negligence of the workers and some machine and engine problems. With these problems encountered, these products do not pass the Quality Control standards and are declared to be rejects.



1.2 Company Profile

As an expression of its optimism in the growth potential of the Asian region, Wacker Werke of Germany inaugurated a manufacturing facility in the Philippines – Wacker Machinery Philippines, Inc. located at the First Cavite Industrial Estate in Dasmariñas, Cavite. This occasion marks as a milestone in the global partnership that Wacker has built over 15 decades of challenges and successes that evolved the company from its Munich headquarter today. The fortitude of its founder, Christian Wacker, so appropriately symbolized by the anvil of inspiration that forged the destiny of the company, is the inspiration and guidance that propels the vigorous growth of Wacker's prominence in the light construction equipment market worldwide.

Wacker Machinery Philippines, Inc. exemplifies the high quality standards of the global Wacker organization. Its advanced technology is evident at its modern production facility, which is supported by a superior research and development function, a proactive training program and a customer – oriented after sale service. The facility is manned by well – trained and technically competent personnel.

The company's market presence in the Asian region is consistent with its corporate strategy of exploring for high quality standards innovative technology and a responsible, tightly – knit customer service network.

Its Philippine subsidiary will strengthen Wacker's image projection globally through the export of its locally manufactured machineries, which are made under strict procedure and guidance of Wacker's production standards.

Mr. Heinz Gengnagel, President and Chief Executive Officer of the local subsidiary, will provide over the initial venture of Wacker in Asia, during this trying times of economic slow down. He has continued to identify prospects amidst the viability of Wacker Machinery Philippines, Inc. as a partner in the development of the Philippines, Asia and the world.

Wacker Corporation, which introduced the electric rammer in 1930, knows that sometimes you've got to tear it down before you build it up. The company makes equipment for soil and asphalt compaction, concrete production, demolition technology, and pumps, power and light equipment. The company's products include the aforementioned rammers, as well as rollers, trowels, and rotary hammers. Wacker also provides rental options and repair services (the rental business is more pervasive in the company's native Germany). Manufactured in Germany, the US, and the Philippines, Wacker products are sold in about 40 countries. Wacker Corporation was founded as a blacksmith shop in Dresden, Germany in 1848. Wacker has been in operation since 1848 and currently employs around 2,500 people worldwide. Construction machines from the development and manufacturing centers in Germany, the USA and the Philippines are being sold with great success at 163 separate locations in 40 different countries.

1.3 Statement of the Problem

Wacker Philippines, Inc. is experiencing 0.598% defective product loss which amounts to Php 4.8M per annum.

1.4 Objectives of the study

General:

- To minimize the defective products at Wacker Philippines, Inc.

Specific:

- To avoid the production process delays that cause the low output of the product.
- To improve the performance of the employees so as to lessen the defects of the product.
- To identify skills and knowledge of employees in performing their functions.

1.5 Significance of the Study

The finding of this study could be a great help to the following:

To the Organization:

May give them idea in solving company problems and make a proposal to be implemented in order to reduce the number of defects that would greatly affect the quality of service.

To the Students:

This study aims to enhance the skills of the students in conducting company study. Furthermore, it will help them in the field where they can apply different techniques that they have learned in solving a similar problem.

To the Readers:

May have a preview and additional information regarding the problems encountered within the organization.

1.6 Scope and Limitation

The researcher focuses this study in Quality Control of Wacker Philippines, Inc. of Vibratory Asphalt Plates. There are 4 machines being manufactured but the researcher focuses only on one machine which is Vibratory Asphalt Plate. This machine is consists of different models and the researcher's limitation is only on WP1550AW model because the researcher found out that model experiences more defects than the other model of Vibratory Asphalt Plates.

The study is conducted on defects of the products of Wacker Philippines, Inc. from June - November 2005.

1.7 Methodology Used for the Study

The researcher got information through conducting interviews and collecting data from the company in making this study possible. By having this interview the researcher sights the problems and thinks of the possible solution on having the defects experiencing by the workers in Quality Control.

Wacker Philippines, Inc. to reach the zero defects because defects of the product in every month would be a big profit loss for the company.

All data are gathered through observation and active participation in the production area. Conducting an interview to some operators and production managers is a great factor in completing this study and thinking of the possible solutions to the problems.

Definition of Terms

The following terms were used and defined in the context of this study:

Corrective Action Reports - It is the report to point out an error from the supplier that needs an action.

Gasoline Floor Saw (BFS 130 RM) - It combines an excellent cutting performance with compact dimensions and a light design, thus making its weight of hardly any importance during transport. The engine, on the other hand, is extremely impressive, as it runs tenaciously and with reliability even under the most difficult conditions due to its enormous power reserves.

Material Management - It is the group responsible for confirming the reject parts or products routed to material section which are labeled with proper disposal - whether "scrap" or "for return to supplier".

Non-conforming - These are the rejected or defect parts / product

Quality Management - The group in charged to review the rejection rate and the critical defects, to determine the need for the issuance of corrective action report to

the process owner, and to investigate the process prior to corrective and preventive action in order to avoid recurrence of non conformities.

Vibratory Asphalt Plate (WP) - These premium vibratory asphalt plates feature a tough, wear resistant, ductile iron base plate offering high strength and shock resistance. This computer designed base plate has a tapered bottom and edges for high speed and excellent maneuverability. Designed for the compaction of granular and mixed materials with some cohesive content in confined areas such as parking lot, highway and bridge construction, next to structures, curbs and abutments.

Vibratory Plates (VP) - The compact designed used for compaction of mixed soils in the most narrow of spaces – even in extremely narrow trenches. The guide handle with vibration damping means longer working hours and less fatigue for the operator.

Vibratory Truss Screeds (TS) - It designed for precise strike-off and consolidation of concrete surfaces up to 25 cm thick where critical flatness is desired. The bottled construction throughout the screed sections allow for fast assembly without special tools. The T-bolt adjuster provides quick, precise adjustment for flat, crowned or inverted strike-off.