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**A STUDY ON AWARENESS OF QUALITY CIRCLE WITH THE MEMBERS OF  
QUALITY CIRCLE IN PC ASAFOETIDA COMPANY, MADURAI**

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*of*

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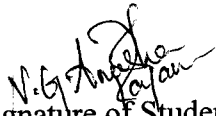
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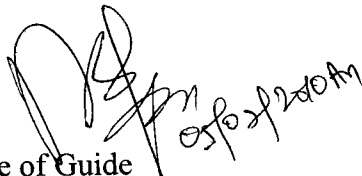
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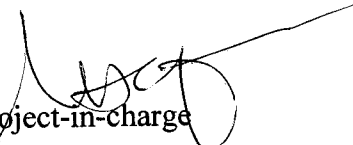
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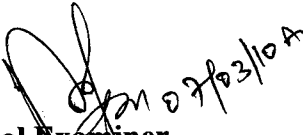
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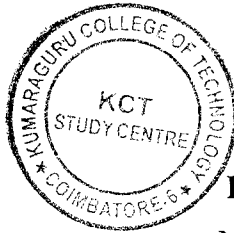
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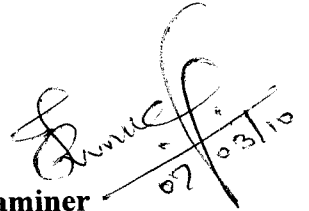
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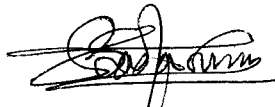
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(V.G.ANUSHA RAJAM)

## ABSTRACT

Quality circle is a small group of 6 to 12 employees doing similar work who voluntarily meet together on a regular basis to identify improvements in their respective work areas using proven techniques for analyzing and solving work related problems coming in the way of achieving and sustaining excellence leading to mutual enlistment of employees as well as the organization. It is “a way of capturing the creative and innovative power that lies within the work force”.

Quality circle is a people – building philosophy, providing self – motivation and happiness in improving environment without any compulsion or monetary benefits. It represents a philosophy of managing people specially those at the grass root level as well as a clearly defined mechanism and methodology for translating the philosophy into practice and a required structure to make it a way of life. It is bound to succeed where people are respected and are involved in decisions, concerning their work life, and in environments where people’s capabilities are looked upon as assets to solve work area problems. The quality circle philosophy calls for a progressive attitude on the part of the management and their willingness to make adjustments, if necessary, in their style and culture. If workers are prepared to contribute their ideas, the management must be willing to create a congenial environment to encourage them to do so.

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# **CHAPTER 1 - INTRODUCTION**

## **1.1. RESEARCH BACKGROUND**

### **PC ASAFOETIDA COMPANY – PROFILE**

#### **EVOLUTION**

The PC Asafoetida company was started in 1964 and got legally registered on 11.12.1979 at Madurai, a Temple City in Southern India. The humble beginning, followed by years of toil, dedication and innovation they march towards their 42 years of growth. Today, it is one of India's leading Asafoetida Company.

#### **ABOUT THE PRODUCT**

##### **P.C. Compounded Asafoetida**

Asafoetida is a milky paste material. It is obtained from a tree ferula. Its native origin places are Afghanistan, Iran and in northern sides of India. In order to suit the varying needs of discerning consumer P.C. Company makes its product available in a variety of forms viz.

1. Blocks or Small pieces
2. Powder
3. Paste form

P.C. Compounded Asafoetida is not only a condiment to spice food with. It is a medicine in its own right. It increases the taste of food and it gives health.

#### **ABOUT THE DEPARTMENTS**

##### **PURCHASE DEPARTMENT**

Under this department purchasing or buying of raw material for packing and packing is made. Most of the raw materials are purchased through agents or intermediate. Purchase department is headed over by Mr.P.C.Elango who is an efficient person. He does his job with great care and most importance is given by him during purchase.

##### **Functions of purchase manager**

1. Quality raw material has to be purchased.
2. Purchase price should be reasonable.
3. Adequate raw material should be purchased.
4. To meet critical situations more than normal raw material should be stocked, which should also not lead to over stocking.
5. Smooth relationship should be maintained with purchasing agents.
6. Amount settlement, credit period with seller should be properly made.

## **PRODUCTION DEPARTMENT**

Production department is under the control of Mr.Shankar who is acting as manager in it. He is in the post for about 10 years.

### **Functions**

1. He has entire control over the department.
2. Supervisor and laborers have to work as what production manager says.
3. Production orders are dealt by him.
4. The time to produce and quantity to be produced is said by the production manager.

### **Supervisor**

There are two supervisors under the manager to control the workers and production work in the department. Mr.Robert concentrates on the block form of the production and Mr.Rajaram concentrates on powder form of production.

### **Functions**

1. He should act according to the production manager.
2. Laborers are under the control of him.
3. He looks after how laborers work.
4. He also checks the products at production.
5. Until the goods are packed they are under his supervision.

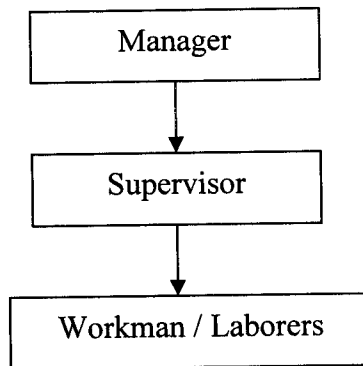
### **Laborers**

Laborers are the persons who directly involve at the production process of Asafoetida. There are 75 laborers under this department.

## Functions

1. They should finish the work given by supervisor.
2. They should be clean before starting work.
3. They should wear hand, hair gloves which leads to produce quality product.
4. They should come only in uniforms to work.

## Hierarchy



## MARKETING DEPARTMENT

*“A market is the set of actual and potential buyers of product”*

*-Philip Kotler*

Sales and marketing are called as the life and blood of the organization. Marketing means Human activity that takes place in relation to markets. Marketing means working with markets to actualize potential exchange for the purpose of satisfying human needs and wants.

The selling holds that consumers will not buy enough of the organization's products unless the organization undertakes a substantial selling and promotion effort.

### Functions

The sales and marketing has become one of the most vital functions of the business and an integral part of the management. The main function of the marketing is creating awareness, generating new business for improving the sales scenario, because of increased competition and increasing number of concerns. It also includes the program of selling, sales promotion, advertising and public relations.

## **FINANCE DEPARTMENT**

Finance department is under the control of Mr.P.C.Manohar, who is one of the partners of the company. He deals fully regarding finance. He allocates money to all departments.

### **Accounts**

Accounts are maintained properly by the company and audited every end of the year and tax is paid properly.

One chief accountant and two assistant accountants are doing accounting work. Accounts are maintained in manual and also fed into computer. Accounts such as cashbook, bankbook, journal and balance sheet are maintained. Separate partners account is also maintained.

Thus accounting work are done daily, each and every money transaction are noted properly and maintained through accounting it.

## **PERSONNEL DEPARTMENT**

The name of the department itself defines its work. The personnel relationship with individual working in factory and individual records are recorded. Mr.P.C.Rajasekar as a manager handles this department and he has one assistant.

<b>Department</b>	<b>No. of people</b>
Production (laborers)	46
Billing section	2
Packing section	6
Accounting	6
Drivers	4
Watchman	4
Sales representatives	11
Department managers	5
<b>Total</b>	<b>84</b>

## Categories of employees

S.No	Category	No. of employees
1.	Skilled	46
2.	Unskilled	38
	<b>Total</b>	<b>84</b>

## Pay structure

Posting	Monthly Pay in Rupees
Department managers	8,000
Supervisors	6,000
Chief Accountant	5,500
Assistant Accountant	3,500
Billing Section	4,000
Sales Representative	2,250 + allowances
Laborers	40 (daily) + allowances
Drivers	1,450 + allowances
Watchman	1000

## Compensation Plan

### *Employee State Insurance*

The following table shows the benefits rented by the company on the employees.

Particulars	Percentage on Basic Pay + D.A
Labor contribution	1.75%
Management Contribution	4.75%

### *Employee Provident Fund*

Employee Provident Fund	Percentage on Basic Pay + D.A
Labor contribution	12% (directly goes to EPF a/c)
Management contribution	12% (8.33% goes to EPS a/c (3.67% goes to EPF a/c)

## **Bonus**

The company also provides bonus to workers without fail every year. The percentage of bonus is 8.33%

## **Leave**

According to the Factories Act employees are provided with leave. Every Sunday is a holiday for the company. Then according to the Government holidays, 9 days will be left for a year. The local holiday(election, bondth) also is granted.

## **Other benefits**

1. Medical expenses will be provided by the company up to a certain limit.
2. During emergency period advance will be provided by the employer to the employees.
3. During occasions such as for marriage also amount will be given.
4. For education of employee or employee's child will be given up to certain limits.

## **Fringe benefits**

Traveling allowances, dearness allowance is given to the workers, (i.e.) laborers, sales representatives and drivers.

## **Welfare facilities**

### ***First aid facility***

To protect the employees from any cause, first aid facilities are applicable. Therefore, health care is taken on employees.

### ***Water facility***

Facilities have been made in such a way that the employees can get sufficient water for their use. Lon exchange machine have been fit for drinking water.

### ***Safety measures***

Safety measures have been taken such as to protect from fire accidents and other theft. There are two exit doors.

### ***Preventive measures***

1. The nature of raw material may cause irritation to eyes. To protect the employee's special type of glass, hand gloves are provided.
2. While dough making the workers have to wear leg gloves.



During production the employees in production department wear hair gloves to protect hair falling and better quality product.

### **Functions of personnel manager**

1. To maintain good relationship with workers in the factory.
2. Individual record should be maintained.
3. Welfare facilities are provided by him.
4. Fringe benefits, compensation plan are made by him.
5. Workers are motivated and promoted.

## **1.2. PROBLEM STATEMENT**

Quality Circle is considered as a vehicle to enhance the organizational effectiveness in terms of quality products and also in terms of participative work culture. However, the active contribution from the members of the quality circle cannot be taken granted. The awareness and involvement of members of the quality circle has a major impact on the successful functioning of a quality circle. Hence the researcher identifies research questions as follows:

1. Does the company promotes a participative culture with the functioning of quality circle.
2. Whether the quality circle justifies its importance in terms of educating the workers
3. Whether the employess have understood the purpose of quality circle in their organization, and
4. What are their contributions to the quality circle performance

### **1.3. NEED FOR THIS STUDY**

In the early days most of the organizations practiced a thumb rule management that the employees were “log in the machine”. Now a days the management has realized the importance of the human resource in the industry. They are considered as the top factor of the 5M’s (Men, Money, Machine, Material, Method) of all organization. Thus HRM is gaining power in the present scenario. As a means of teamwork, the formations of quality circles play a vital role in the organization. This current status had highly implied to undertake a study on quality circle and to analyze the effectiveness of quality circle.

### **1.4. OBJECTIVES OF THE STUDY**

- To study the involvement of employees in the Quality Circle.
- To find out the attitude of the members towards Quality Circle activities.
- To assess the work performance of the employees who have been involved in Quality Circle activities.
- To find out the problem solving ability of Quality Circle members.
- To study the mode of developing skills to involve in Quality circle activities.

### **SCOPE OF THE STUDY**

The scope of this study is limited to the PC Asafoetida Company, Madurai. The operational boundary is within the quality circle members of the organization.

### **1.5. DELIVERABLES**

- Awareness of Quality Circle for the members of Quality Circle in PC Asafoetida Company, Madurai
- Suggestions for improvement

## CHAPTER 2 – LITERATURE STUDY

### 2.1. REVIEW OF LITERATURE

#### 2.1 REVIEW OF LITERATURE

**Geehr, Jill L (1995)**<sup>1</sup> conducted a study with with 206 federal government employees reveals that degree of voluntary participation in quality circles is positively related to following quality circle guidelines and that following such guidelines is positively related to economic gain. Implications of voluntary and nonvoluntary participation on cost-benefit outcomes is discussed.

**Tang Thomas Li-Ping (1988)**<sup>2</sup> stated that Quality circle (QC) is a group of workers from the same work area who voluntarily meet on a regular basis to identify, analyze, and solve various work-related problems. While management support has been a variable frequently cited as critical to the success of QCs in organizations, very little research has empirically documented the relationship between management support and QC effectiveness. This study was conducted to examine the relationship between top-, middle-, and lower-management attendance and the effectiveness of QCs. The effectiveness of 47 QCs over a 3-year period was examined as a function of management attendance using the archival data of a QC program. The results showed that QCs with a high level of upper-management attendance had a higher attendance rate at QC meetings and had more QC members than had QCs with a low level of management attendance. QCs with a high level of middle-management attendance had attempted more QC projects and had a higher amount of cost savings than had QCs with a low level of management attendance. The effect of lower-management attendance on QC effectiveness was not significant.

**Ferrari S (1986)**<sup>3</sup> examined the organization of quality circles in Italy, the training aspect of these quality circles, and advantages and limitations of quality circles. For successful circles, the author recommended a feasibility study by qualified consultants, an experimental pilot project confined to certain parts of the company, and a fully informed management.

**Greenbawm, Howard H (1987)** <sup>4</sup> had made a study on Quality Circles. In order to evaluate the effectiveness of problem-solving groups, a study developed a model of group problem-solving behavior, and applied the resulting conceptual framework to 16 actual evaluations of quality circle programs (defined as a group of 3-15 persons from the same work area who meet for problem-solving). The model divides each of the successive stages of a systems model--input, process, output and feedback--into four levels or subsystems: task, individual, group, and organization, and thus defines a matrix of 16 cells into which the variables measured in evaluations of quality circle programs can be placed. Results revealed that none of the 16 published evaluations considered all four major categories of variables (the stages mentioned above), most often omitting the feedback stage. Findings suggest that: (1) problem-solving groups should be evaluated regularly to improve their effectiveness; (2) evaluations should be comprehensive, paying more attention to mechanisms that provide group members with feedback as well as to the more commonly measured input, process, and output variables; and (3) self-report data-collection procedures should be supplemented by more objective measures.

**Ladwig, Dennis J (1985)** <sup>5</sup> conducted a research on "Quality/Performance Circles Three Years after Implementation". An overview is provided of the development of quality/performance circles at Lakeshore Technical Institute (LTI), Wisconsin, and of the projects undertaken through the quality/performance circle program during its 3-year history. First, background information is provided on the use of quality circles in Japan and the United States, including information on required elements for successful quality circles, the benefits that may be accrued through such efforts, and the characteristics of LTI. After highlighting the reasons for initiating the quality circle program at LTI, the paper outlines the procedures used to implement the program: (1) board approval; (2) collegewide invitation to participate in an orientation to the quality/performance circle system; (3) literature review; (4) surveys regarding decision-making and problem-solving processes at LTI conducted before and after the implementation of the quality/performance circle program; (5) assessment of the management style of LTI personnel; (6) survey regarding the impact of the quality/performance circle program; and (7) personnel selection according to work classification. Major conclusions regarding

the program after its first year of implementation are presented, followed by a listing of the 16 goals and projects addressed by the program (e.g., the development of an idea/suggestion memo system, a recognition and retirement program, and a wellness program for staff members). Finally, conclusions stressing the positive results of the quality/performance circle program at LTI are presented.

**Holcomb, Lynn; Berger, Leonard (1986)** <sup>6</sup> made a research on "Perceptual differences in Attitudes on Quality Circle". A study was conducted to determine any perceptual differences toward quality circles in a chemical plant. It also tried to determine if any perceptual differences that might be found could be related to attitudes toward the circles themselves or the attitudes toward circle members. Length of service was also a factor.

**Barrick, Murray R.; Alexander, Ralph A. (1987)** <sup>7</sup> presented a paper on A Review of Quality Circle Efficacy and the Existence of Positive-Findings Bias. Reviewed literature on impact of the quality circle process upon both individual and organizational outcomes. Demonstrated quality circle's effectiveness, reporting two moderating factors' influence. Found no significant positive-findings bias, suggesting bias may be an artifact resulting from the inclusion of "popular-press" articles with research-oriented studies.

**Tang Thomas Li Ping (1986)** <sup>8</sup> made a research about the quality circles in Japan. Japanese management practices have attracted much interest in the United States. The use of quality circles (QCs) common in Japan, has been considered a promising approach to improving American workers' productivity. A quality circle is made up of workers from the same group who meet to discuss quality problems, recommend solutions, and implement improvements. In-process goals of QCs include immediate feedback, improvements, and modifications of policies; end-product goals deal with cost-savings, improved quality, and higher productivity. This study examined the in-process goals of 47 quality circles over a 3-year period in a quasi-experimental field study in a Tennessee fabrication and assembly plant. The dependent variables were the quantity of QC presentations and the speed of problem-solving. These two dependent variables were examined as a function of upper-management support (high versus low), QC initiation



(management-initiated versus self-initiated), and collar color (white versus blue) in a 2 x 2 x 2 multiple analysis of variance. The results showed that QCs with a high level of upper-management support solved their problems significantly faster than did those QCs with a low level of support. Management-initiated QCs solved their problems significantly faster and solved more problems than did self-initiated QCs. Self-initiated QCs with a low level of upper-management support had a slower speed of problem-solving. Further, self-initiated QCs with white collar workers also had a slower speed of problem-solving. A six-page reference list and three data tables conclude the document.

**White, Donald D.; Bednar, David A. (1985)** <sup>9</sup> discusses on Locating Problems with Quality Circle. Five categories of common quality circles problems are identified to help firms anticipate difficulties and avert circle failures. These categories include encountered internal problems, encountered external problems, created internal problems, created external problems, and interface problems. Solutions are suggested.

**M.K.Agarwal (1984)** <sup>10</sup> conducted a study on “Quality Circle in service sector. According to his study.” one must keep in mind that Quality Circle activities are merely a part of an overall quality control programs and can not have separated existence from it. That event if one start with Quality Circle, if there is no prospect of combining them with total quality control, they can not last. Even if they do for a brief time show success, it can not be true success.”

## **2.2. RESEARCH GAP**

A number of studies and research has been conducted regarding the functions of quality circle and its awareness. Also a number of studies have been made relating to the troubles faced by the Management and employees. Different studies have concentrated and analyzed on various problems like determining the acceptance level of the employees.

Such studies and researches imply that the management should seek for the higher employee satisfaction level.

So far, the research has suggested that the management should consider the employee satisfaction and also make them knowing their importance in the organization. The researcher observed that the studies intending to find out the awareness and assertiveness of quality circle members in their circle functioning is limited to a few. Here, this is identified as a research gap, which the researcher would like to bridge upon.

## **CHAPTER 3 - METHODOLOGY**

### **3.1 TYPE OF PROJECT**

The study has been conducted in the form of survey, so that the inputs can be received from the respondents, This study identifies the major factors for knowledge sharing and attempts to capture the areas of improvement if any so as to increase and fine tune the benefits of implementing new ideas at right time.

### **3.2 TARGET RESPONDENTS**

The target respondents are the Low Level employees of the organization.

### **3.3 ASSUMPTIONS, CONSTRAINTS AND LIMITATIONS**

- The area of study is limited to PC Asafoetida Company, Madurai.
- The company was not able to divulge certain confidential information's like the exact figures of the costs involved in any project of each business unit.
- It cannot be generalized to the entire organization.

### **3.4 RESEARCH APPROACH**

Research is common parlance refers to a search for knowledge. The goals of research may be discovering new facts, establishment of new relationship, creation of new concepts, verification of existing concepts, finding solution to a problem or satisfying ones desire to know.

## **METHODOLOGY**

It is a way to solve the research problem systematically.

### **RESEARCH METHODOLOGY**

Research methodology speaks about why a research problem has been defined, in what way, what data have been collected and what particular method has been adopted why particular technique of analyzing data has been used and host of similar other questions are usually answered.

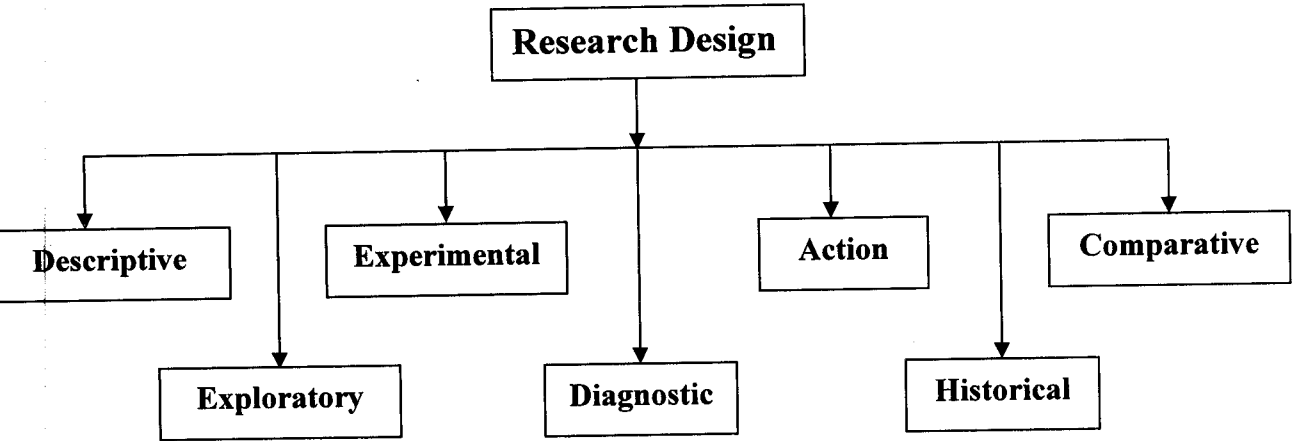


# Objectives

1. To study the involvement of employees in the Quality Circle.
2. To find out the attitude of the members towards Quality Circle activities.
3. To assess the work performance of the employees who have been involved in Quality Circle activities.
4. To find out the problem solving ability of Quality Circle members.
5. To study the mode of developing skills to involve in Quality circle activities.

# Research Design

A research design means a plan of action to be carried out in connection with the research. It is like a blue print based on which research is undertaken on a selected topic.



## Descriptive

The aim of descriptive studies is to describe accurately the characteristics of a particular individual or group or a situation. In a descriptive study it is important first of all to describe the problem or events accurately. Secondly it is important to see that the facts and findings are reliable, authentic and verifiable.

## Exploratory

The major emphasis in these studies is to discover of new insights or ideas. The reason for aiming at new insights or ideas is to formulate a more precise problem or to develop hypotheses for further definite research.

## Experimental

The objective of experimental study is to test a hypothesis of casual relationship between variables

### **Diagnostic**

The diagnostic study is geared to the solution of a specific problem by discovery of the relevant variables that are associated with it in varying degrees.

### **Action**

The process by which practitioners attempt to study their problems scientifically in order to guide, correct and evaluation their decisions and actions is called action research.

### **Historical**

Historical research is nothing but objective location, evaluation and synthesis of evidence on order to establish facts and draw conclusions concerning the past.

### **Comparative**

The research aims at comparing institutions, practices, concepts, trends in economics of different countries and like over a period of time. The research has adopted descriptive research design.

The research design adopted is here *descriptive*. Descriptive research includes surveys and fact – finding enquires of different kinds. The major purpose of descriptive research is description of the state of affairs, as it exists at present. The main characteristics of this method are that the research has no control over the variable. He can only report what has happened or what is happening.

### **Sampling**

A sample is composed some fraction are part of the total number of elements or units in a defined population. Sampling therefore is a method of selecting some fraction of a population.

### **Sample design**

Sample design for this study through universe is selected. All the Quality Circle members of PC Asafoetida were taken up for the study. The numbers of respondents are 50.

### **Sampling size**

This refers to the number of items to be selected from the universe to constitute a sample. Since this is a population study, all the 50 respondents are included for this study.

### **Data used for analysis**

The data used for analysis in the study has been collected in two forms namely primary and secondary data.

#### **Primary data**

The primary is the data collected a fresh by the researcher. The primary data instrument for collection was structured questionnaire. Personal observation and instructed interview were also used in appropriate places. The questionnaire consists of 40 items like Employees personal details, the employee involvement in the Quality Circle, Benefits of the Quality Circle, Employees performance in the Quality Circle, attitude of the members involved in Quality Circle.

#### **Secondary data**

Secondary data on the other hand are those which have already been collected by someone else and which have already been passed through the statistical process. The secondary data are collected from published sources of information like websites, journals and books.

### 3.5 DATA PROCESSING:

- **Percentage Analysis:**

This method helps in reducing number to a common base, which in turn helps in comparisons. The following formula is used to analyze the data.

$$\frac{\text{No. of Responses}}{\text{Total No. of Respondents}} \times 100$$

- **Weighed Mean score analysis**

- **Representation of Data**

- **Bar charts:**

It is a Clustered column with 3 – D visual effect the bars are of same width and only the length varies.

- **Pie - chart graphs:**

Division of the whole or parts of the whole. It can lay out large portion first clockwise position. It is easy to group.

## CHAPTER 4 - DATA ANALYSIS AND INTERPRETATION

### 4.1. Analysis and Interpretation

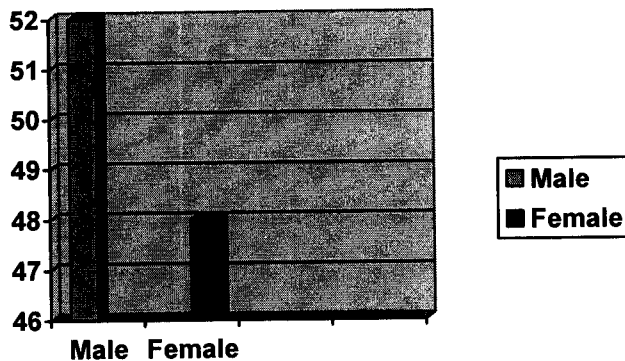
Table showing the Gender of respondents

Table 1

S.No	Sex	No. of Respondents	Percentage
1	Male	26	52
2	Female	24	48
Total		50	100

Figure showing the Gender of respondents

Figure 1



#### INFERENCE:

This table shows that 52% of the respondents were Male and 48% of the respondents were Female. Therefore, majority i.e., 52% of the members are Male members in the quality circle.

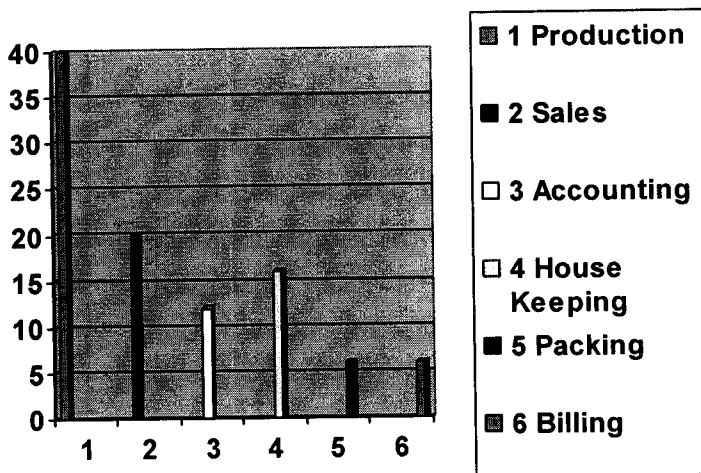
## Table showing the respondents of the Department

**Table 2**

S.No	Department	No. of Respondents	Percentage
1	Production	20	40
2	Sales	10	20
3	Accounting	6	12
4	House keeping	8	16
5	Packing	3	6
6	Billing	3	6
<b>Total</b>		<b>50</b>	<b>100</b>

## Figure showing the respondents of the Department

**Figure 2**



**INFERENCE:**

40% of the respondents are from the production department.

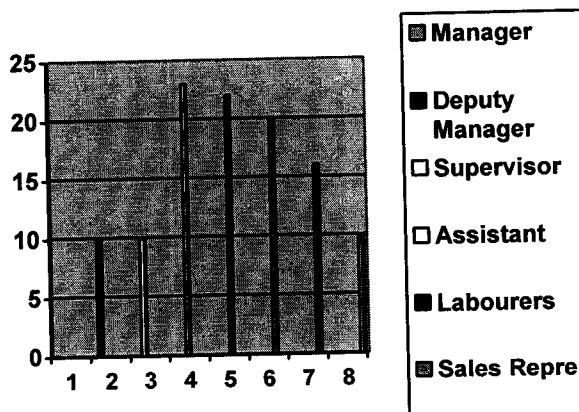
**Table showing the Designation of the respondents**

**Table 3**

S.No	Designation	No. of Respondents	Percentage
1	Manager	-	-
2	Deputy Manager	5	10
3	Supervisor	5	10
4	Assistant	6	12
5	Laborers	11	22
6	Sales Representative	10	20
7	House keeping	8	16
8	Executives	5	10
<b>Total</b>		<b>50</b>	<b>100</b>

**Figure showing the Designation of the respondents**

**Figure 3**



**INFERENCE:**

22% of the respondents are laborers by designation and as equal member are sales representatives.

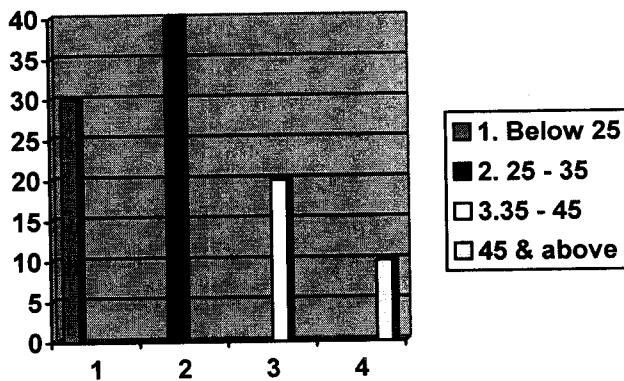
## Table showing the classification of respondents by Age

Table 4

S.No	Age Group (in years)	No. of Respondents	Percentage
1	Below 25	15	30
2	25 – 35	20	40
3	35 – 45	10	20
4	45 & above	5	10
<b>Total</b>		<b>50</b>	<b>100</b>

## Figure showing the classification of respondents by Age

Figure 4



### INFERENCE:

The majority of the respondents that is 40% are from the young age group of 25-35 years.



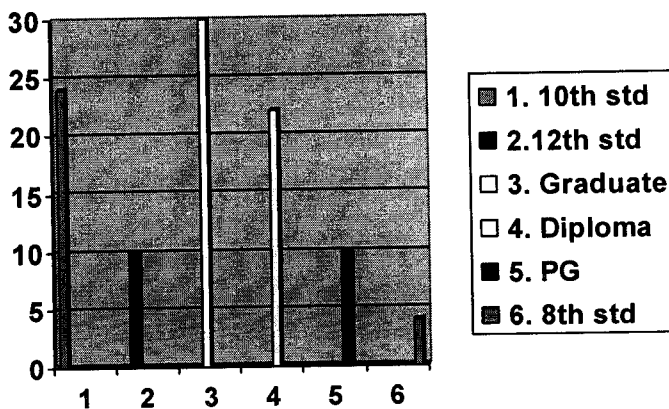
**Table showing the classification of respondents by their Educational Qualification**

**Table 5**

S.No	Qualification	No. of Respondents	Percentage
1	10 <sup>th</sup> Standard	12	24
2	12 <sup>th</sup> Standard	5	10
3	Graduate	15	30
4	Diploma	11	22
5	PG	5	10
6	8 <sup>th</sup> Standard	2	4
<b>Total</b>		<b>50</b>	<b>100</b>

**Figure showing the classification of respondents by their Educational Qualification**

**Figure 5**



**INFERENCE:**

One-third of the respondents i.e., 30% are graduates.

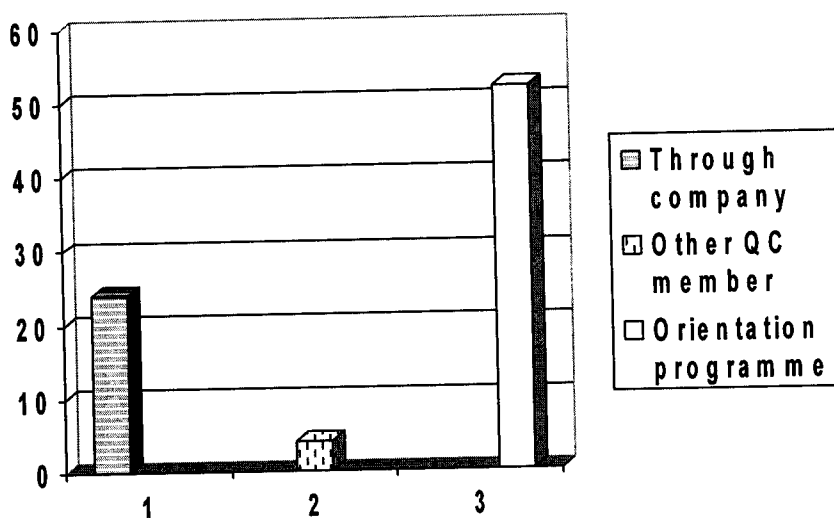
## Table showing awareness about Quality Circle

Table 6

S.No	Know about QC	No. of Respondents	Percentage
1.	Through company	12	24
2.	Other QC member	2	4
3.	Orientation programme	26	52
<b>Total</b>		<b>50</b>	<b>100</b>

## Figure showing awareness about Quality Circle

Figure 6



### INFERENCE:

This table shows that 24% of the respondents know about the purpose, functioning and benefits of Quality Circle Through the Company, 4% of the respondents know about with Other Quality Circle members. 52% of the respondents know about through the Orientation programme. Most of the respondents know about Quality Circle through inspiration of management Orientation programme.

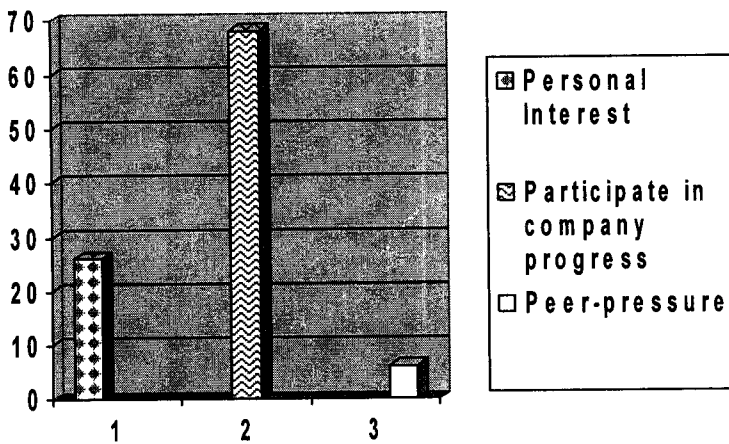
## Table showing the reason for joining as members in the Quality Circle

**Table 7**

S.No	Reason	No. of Respondents	Percentage
1.	Personal Interest	13	26
2.	Participate in company progress	34	68
3	Peer-pressure	3	6
<b>Total</b>		<b>50</b>	<b>100</b>

## Figure showing the reason for joining as members in the Quality Circle

**Figure 7**



### **INFERENCE:**

This table shows that 26% of the respondents have joined through their own Personal Interest, 68% of the respondents are Participate for the company progress. 6% of the respondents joined because of Peer-pressure. About two-third i.e., (68%) of the respondents have joined the QC in order to participate in company progress.

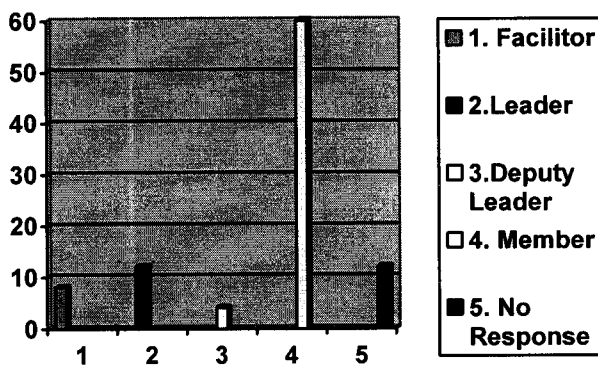
**Table showing the classification of respondents by their title in Quality Circle**

**Table 8**

S.No	Title	No. of Respondents	Percentage
1	Facilitator	4	8
2	Leader	6	12
3	Deputy Leader	4	8
4	Member	30	60
5	No response	6	12
<b>Total</b>		<b>50</b>	<b>100</b>

**Figure showing the classification of respondents by their Title in Quality Circle**

**Figure 8**



**INFERENCE:**

60% of the respondents are members of the quality circle, while 12% are leaders and 8% are deputy leaders and facilitators. An interesting point to note is that 12% of the respondents are not aware of their position in QC.

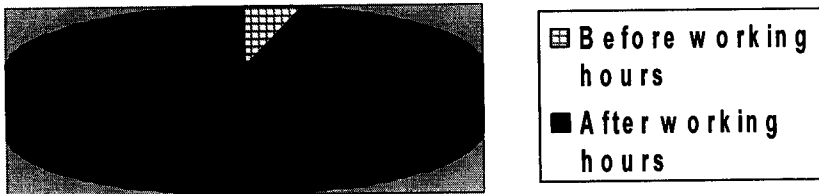
## Table showing when the Quality Circle Meetings are conducted

Table 9

S.No	Schedule of meeting	No. of Respondents	Percentage
1	Before working hours	2	4
2	After working hours	48	96
<b>Total</b>		<b>50</b>	<b>100</b>

## Figure showing when the Quality Circle Meetings are conducted

Figure 9



### INFERENCE:

This table shows that 4% of the respondents stated that the Quality Circles meet before working hours, 96% of the respondents stated that the Quality Circles meet after working hours. Most (96%) of the respondents stated that the Quality Circles meet after working hours.

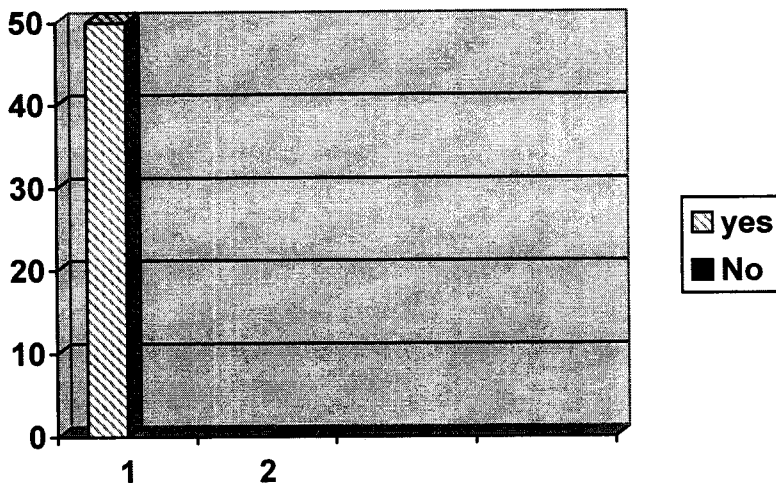
## Table showing the conducts of Quality Circle meeting

Table 10

S.No	Conducts of Quality Circle meeting	No. of Respondents	Percentage
1	Regularly	50	100
2	Irregularly	0	0
<b>Total</b>		<b>50</b>	<b>100</b>

## Figure showing the conducts of Quality Circle meeting

Figure 10



### INFERENCE:

This table shows that 100% of the respondents show that all the Quality Circle meets regularly.

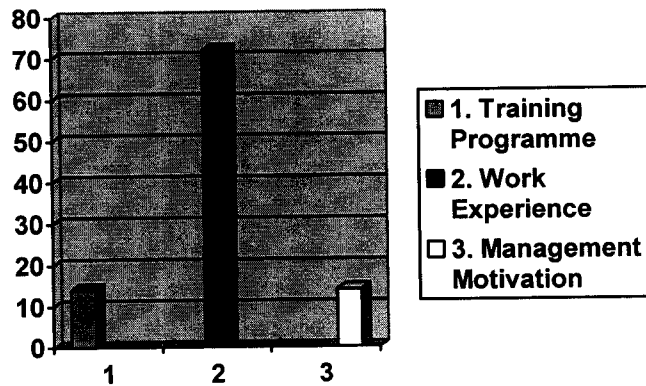
**Table showing the Identification of problem through Quality Circle meeting**

**Table 11**

S.NO	Particulars	No. of Respondents	Percentage
1	Training programme	7	14
2	Work experience	36	72
3	Management motivation	7	14
<b>Total</b>		<b>50</b>	<b>100</b>

**Figure showing the identification of problem through Quality Circle meeting**

**Figure 11**



**INFERENCE:**

72% of the respondents identifies their problem through work experience because they face more problem in day to day work.

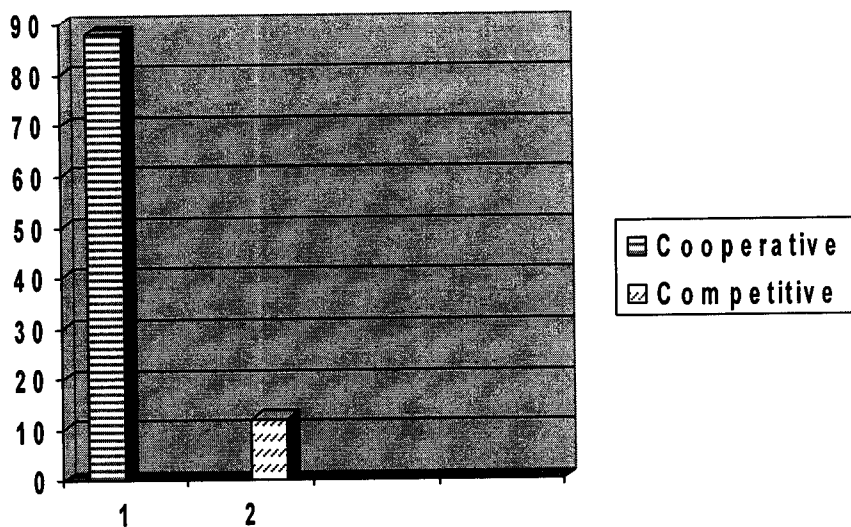
## Table showing the Relationship with other Quality Circle members

Table 12

S.No	Relationship with other QC	No. of Respondents	Percentage
1	Cooperative	44	88
2	Competitive	6	12
<b>Total</b>		<b>50</b>	<b>100</b>

## Figure showing the Relationship with other Quality Circle members

Figure 12



### INFERENCE:

This table shows that 88% of the respondents were Cooperative, 12% of the respondents were Competitive. Most of the respondents are stated that, the members are more Cooperative with other Quality Circle members.



**Table showing the self development through Quality Circle meets**

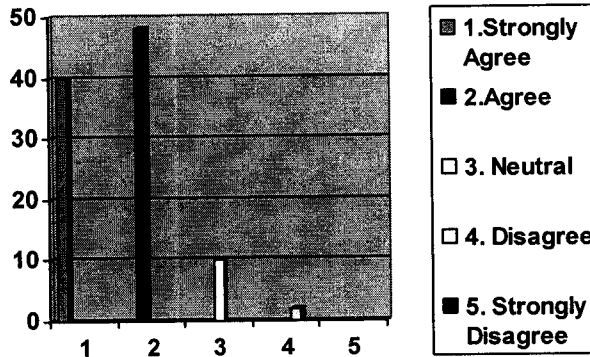
**Table 13**

S.No	Scale	No. of Respondents	Percentage
1	Strongly Agree	20	40
2	Agree	24	48
3	Neutral	5	10
4	Disagree	1	2
5	Strongly Disagree	-	-
<b>Total</b>		<b>50</b>	<b>100</b>

<b>Weighted Average Method</b>	<b>20.04</b>
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**Figure showing the self development through Quality Circle meets**

**Figure 13**



**INFERENCE:**

48% of the respondents have agreed and 40% have strongly agreed that quality circle have helped the members for their self development. It helped them in communication, leadership quality, decision making etc.,

## Table showing the efforts of Quality Circle in cost reduction

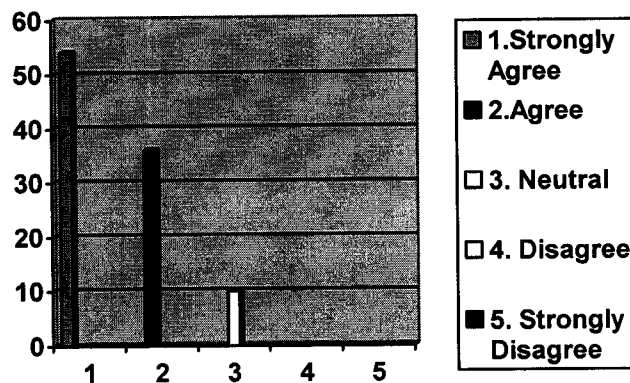
Table 14

S.No	Scale	No. of Respondents	Percentage
1	Strongly Agree	27	54
2	Agree	18	36
3	Neutral	5	10
4	Disagree	-	-
5	Strongly Disagree	-	-
<b>Total</b>		<b>50</b>	<b>100</b>

<b>Weighted Average Method</b>	<b>21.56</b>
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## Figure showing the efforts of Quality Circle in cost reduction

Figure 14



### INFERENCE:

54% of the respondents have strongly agreed that quality circle have helped the company to reduce cost by finding various means to reduce cost like saving electricity and water.

## Table showing the efforts of Quality Circle in waste reduction

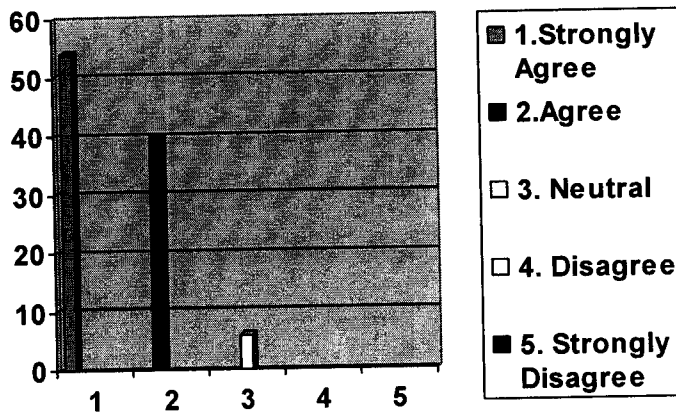
Table 15

S.No	Scale	No. of Respondents	Percentage
1	Strongly Agree	27	54
2	Agree	20	40
3	Neutral	3	6
4	Disagree	-	-
5	Strongly Disagree	-	-
<b>Total</b>		<b>50</b>	<b>100</b>

<b>Weighted Average Method</b>	<b>22.76</b>
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## Figure showing the efforts of Quality Circle in waste reduction

Figure 15



### INFERENCE:

54% of the respondents have strongly agreed that quality circle have helped the company in reducing the waste as quality circles had undertaken project on waste like plastic bottles, polyethylene covers and suggestion were presented to management

**Table showing the efforts of Quality Circle in the improvement of quality**

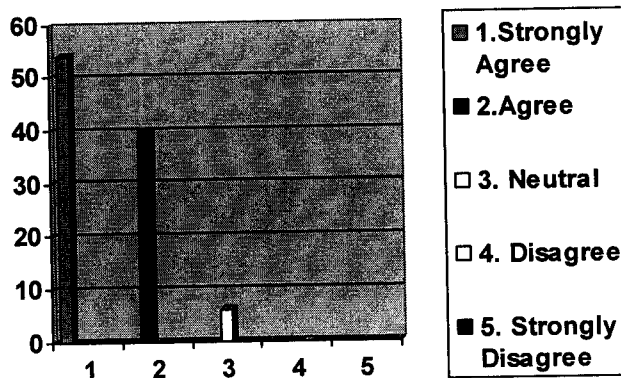
**Table 16**

S.No	Scale	No. of Respondents	Percentage
1	Strongly Agree	27	54
2	Agree	20	40
3	Neutral	3	6
4	Disagree	-	-
5	Strongly Disagree	-	-
<b>Total</b>		<b>50</b>	<b>100</b>

<b>Weighted Average Method</b>	<b>22.76</b>
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**Figure showing the efforts of Quality Circle in the improvement of quality**

**Figure 16**



**INFERENCE:**

54% of the respondents have strongly agreed that quality circle have helped the company to achieve work without errors and enhance the quality work.

**Table showing the efforts of Quality Circle in improving personal skills**

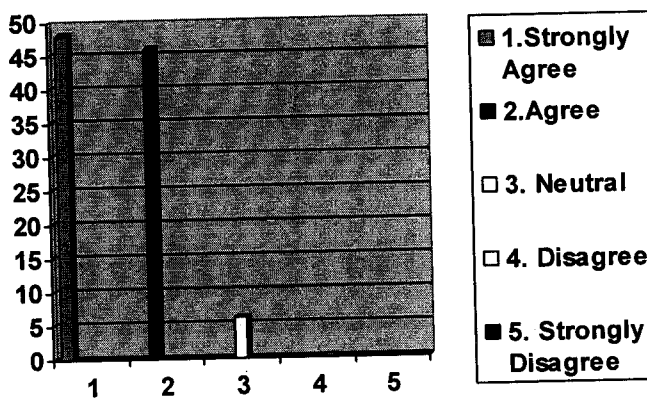
**Table 17**

S.No	Scale	No. of Respondents	Percentage
1	Strongly Agree	24	48
2	Agree	23	46
3	Neutral	3	6
4	Disagree	-	-
5	Strongly Disagree	-	-
<b>Total</b>		<b>50</b>	<b>100</b>

<b>Weighted Average Method</b>	<b>22.28</b>
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**Figure showing the efforts of Quality Circle in improving personal skills**

**Figure 17**



**INTERPRETATION:**

48% of the respondents have strongly agreed and 46% have agreed that quality circle have helped the member in improving personal skills.

**Table showing the efforts of Quality Circle in improving interpersonal relations**

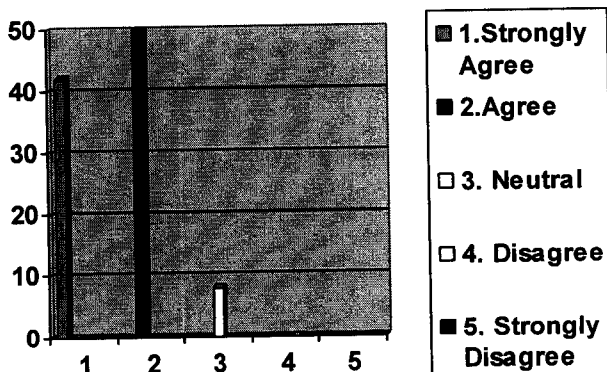
**Table 18**

S.No	Scale	No. of Respondents	Percentage
1	Strongly Agree	21	42
2	Agree	25	50
3	Neutral	4	8
4	Disagree	-	-
5	Strongly Disagree	-	-
<b>Total</b>		<b>50</b>	<b>100</b>

<b>Weighted Average Method</b>	<b>21.64</b>
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**Figure showing the efforts of Quality Circle in improving interpersonal relations**

**Figure 18**



**INFERENCE:**

50% of the respondents agreed that quality circle have helped them in improving interpersonal relations as they have good relations with other quality circle members.

**Table showing the efforts of Quality Circle in problem solving**

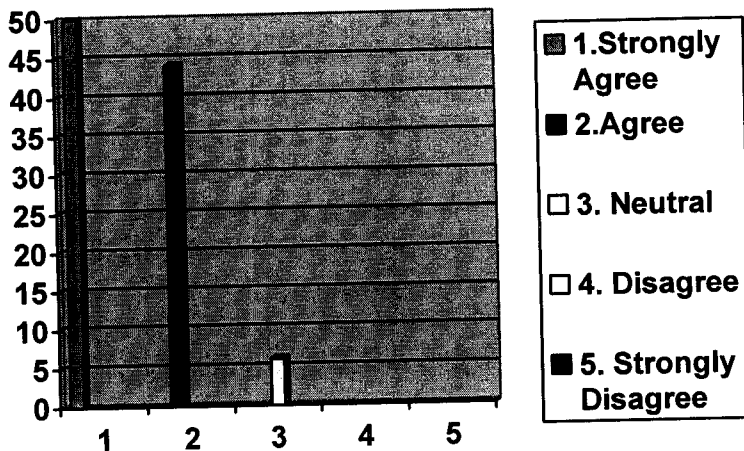
**Table 19**

S.No	Scale	No. of Respondents	Percentage
1	Strongly Agree	25	50
2	Agree	22	44
3	Neutral	3	6
4	Disagree	-	-
5	Strongly Disagree	-	-
<b>Total</b>		<b>50</b>	<b>100</b>

<b>Weighted Average Method</b>	<b>22.36</b>
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**Figure showing the efforts of Quality Circle in problem solving**

**Figure 19**



**INFERENCE:**

54% of the respondents have strongly agreed that quality circle have helped the company in solving problems that exist.

**Table showing the efforts of Quality Circle in better working environment**

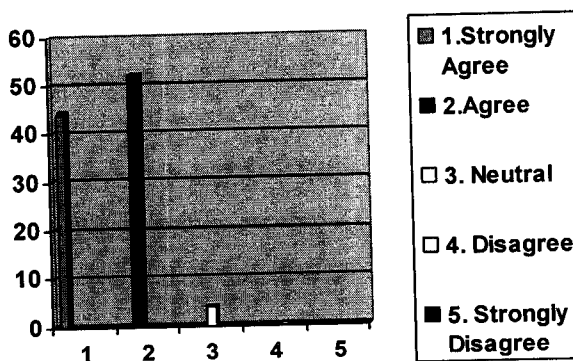
**Table 20**

S.No	Scale	No. of Respondents	Percentage
1	Strongly Agree	22	44
2	Agree	26	52
3	Neutral	2	4
4	Disagree	-	-
5	Strongly Disagree	-	-
<b>Total</b>		<b>50</b>	<b>100</b>

<b>Weighted Average Method</b>	<b>23.28</b>
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**Figure showing the efforts of Quality Circle in better working environment**

**Figure 20**



**INFERENCE:**

52% of the respondents agree that quality circle have helped the employees of the company in providing better working environment through providing clean toilet and good ventilation.



**Table showing the usefulness by being the member of Quality Circle**

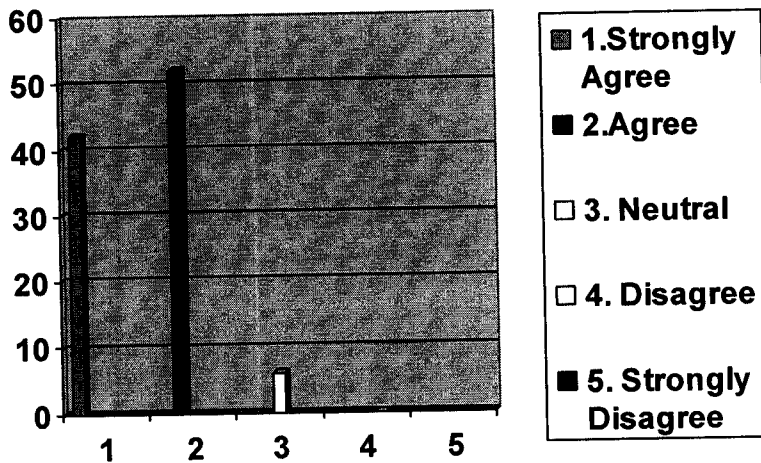
**Table 21**

S.No	Scale	No. of Respondents	Percentage
1	Strongly Agree	21	42
2	Agree	26	52
3	Neutral	3	6
4	Disagree	-	-
5	Strongly Disagree	-	-
<b>Total</b>		<b>50</b>	<b>100</b>

<b>Weighted Average Method</b>	<b>22.52</b>
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**Figure showing the usefulness by being the member of Quality Circle**

**Figure 21**



**INFERENCE:**

52% of the respondents agree that they feel useful by being a member of quality circle because it helps in the improvement of personal skills, problem solving ability.

## Table showing the opinion for the effectiveness of Quality Circle

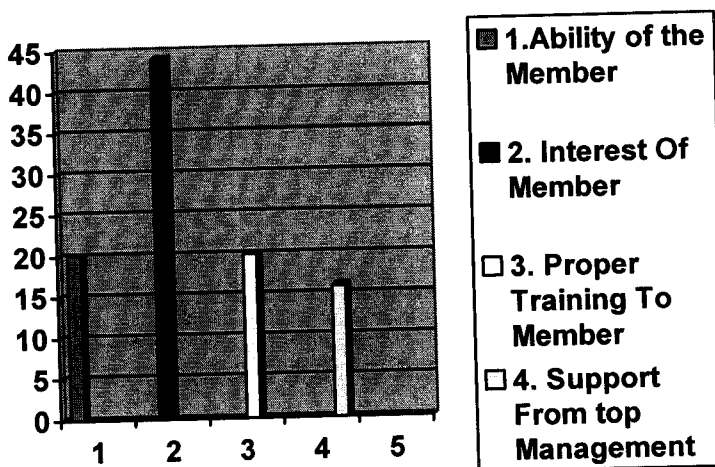
Table 22

S.No	Particular	No. of Respondents	Percentage
1	Ability of the member	10	20
2	Interest of member	22	44
3	Proper training to member	10	20
4	Support from top management	8	16
<b>Total</b>		<b>50</b>	<b>100</b>

<b>Weighted Average Method</b>	<b>14.96</b>
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## Figure showing the opinion for the effectiveness of Quality Circle

Figure 22



### INFERENCE:

44% of the respondents have responded that effectiveness of quality circle is due to the interest of members. And the interest is due to the management motivation.

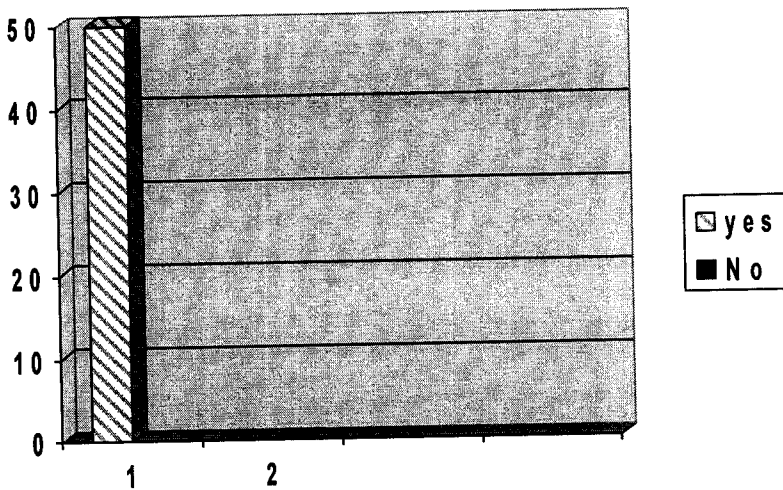
## Table showing the contribution of Quality Circle to the organisation

Table 23

S.No	Particulars	No. of Respondents	Percentage
1	Yes	50	100
2	No	0	0
Total		50	100

## Figure showing the contribution of Quality Circle to the organisation

Figure 23



### INFERENCE:

100% of the respondents feel that quality circle have contributed well for the organization in solving various work related problems.

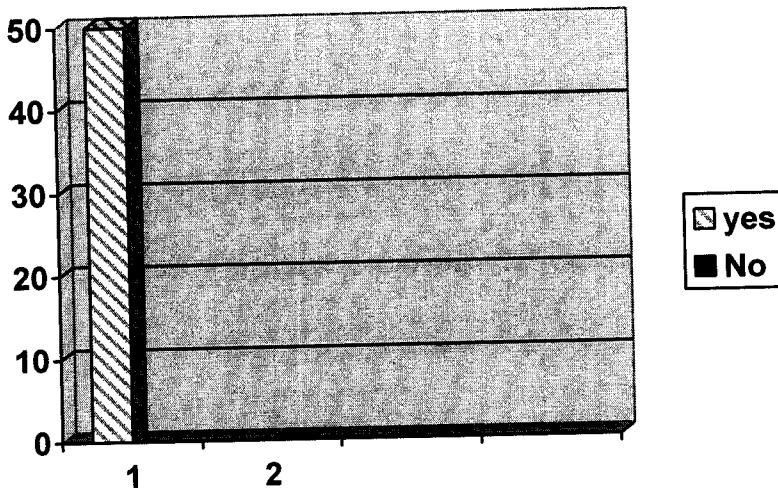
**Table showing the members pride by being the member of Quality Circle**

**Table 24**

S.NO	Particulars	No. of Respondents	Percentage
1	Yes	50	100
2	No	0	0
	<b>Total</b>	<b>50</b>	<b>100</b>

**Figure showing the members pride by being the member of Quality Circle**

**Figure 24**



**INFERENCE:**

100% of the respondents feel proud to be a member of their quality circle as they were able to contribute for the betterment of the organization and also able to develop their personal skills. .

## **CHAPTER 5 - CONCLUSION**

### **5.1 SUMMARY OF FINDINGS**

- The study shows that the majority of the respondents i.e., 52% of them are male.
- The study shows that 40% of the respondents are from production department.
- The study shows that 22% of respondents belong to production laborers and 20% of them belong to sales department.
- It is evident from the study that 40% of respondents are in the age group of 25-35 years and 30% of them are below 25 years of age.
- It is clear from the study that 30% of respondents are Graduates and 24% of them are with qualification of 10<sup>th</sup> standard.
- The study reveals that 52% of respondents are aware of quality circle only through inspiration of management orientation programs.
- It is found that 68% of respondents have expressed that they joined in quality circle of their personal interest.
- It is evident from the study that 60% of respondents are the members of quality circle and 12% of them are leader of quality circle.
- This study reveals that 4%of respondents attend meeting after working hours and 96% of respondents attends during working hours.
- It is observed that 94% respondents regularly attend the meeting of their quality circle.
- It is found that 72% of respondents identify the problem through work experience and 14% of them identify the problem in training program and management motivation.
- About 88% of respondents are co-operative with other quality circle members.
- This study reveals that 48% of the respondents agree that the quality circle helped the members for self-development and 2% of respondents disagree with this fact.
- It has been found out that 54% respondents strongly agree that quality circle helps in cost reduction.
- It is clear from the study that 54% of respondents strongly agree that quality circle helps in improvement in quality.

- This study reveals that 48% of respondents strongly agree that quality circle helps in developing personal skills of the members and 46% of the respondents agreed to this fact.
- It is observed that 50% of respondents strongly agree that quality circle improves problem solving ability and 44% of them agree with the same.
- This study shows that 52% of the respondents agree that quality circle creates better working environment and 44% of them strongly agree to this fact.
- This study reveals that 52% of respondents agree that is useful being a member of quality circle and 43% of them strongly agree to the fact.
- It is evident that 44% of the respondents have expressed that effectiveness of quality circle depends on interest of members and 20% of respondents expressed that effectiveness of quality circle depends on proper training to members.
- It is clear from the study that 100% of respondents express that quality circle contributed well for the organization.
- It is observed that 100% of respondents are proud to be a member of quality circle.

From the overall findings it can be concluded that the employee involvement in quality circle in PC Asafoetida Company, by following a systematic approach in the well planned manner and they give the positive direction for their future to solve the problems and also it helps to take good decision. The management has developed the participative culture as a way of life in this organization.

## 5.2 SUGGESTIONS AND RECOMMENDATIONS

In making the quality circle program a success in Indian perspective we are facing certain constraints. To overcome them the following suggestions may be taken into consideration, so that quality circles in any organization may also make significant contribution and that organization can get excellence in any field of work.

- ✓ The top management of any organization should promote participative culture so that such atmosphere can provide for the success of quality circle.
- ✓ It is quite necessary to educate the workers regarding the justification of quality circles within organization, so that; they may be induced to join in it. Addition to such offers, adequate training, and orientation program for new members and refresher courses for the existing ones can be organized quite often.
- ✓ The management should admit as well as practice the fact that initiative to establish and join quality circle should be the prerogative to the workers themselves.
- ✓ For every meaningful activity inspiration or encouragement is necessary. Likewise in quality circle also good suggestion and presentation should be recognized and rewarded. It would not only provide satisfaction to the members but also boost their morale. However incentive should be given merely for attending the quality circle meetings.
- ✓ It is also necessary to create an atmosphere in the organization may be increased. Some plans should be formulated by them, spirit of dedication and loyalty may be inculcated.

### **5.3 CONCLUSION**

For effective quality circle program participative culture is required in any organization. From centuries past, we Indians have been following this approach in our day-to-day life. The “Panchayat Raj” system is an excellent example of this, in which rural people solve their problems by sitting together and through sharing their views. They not only find solutions of their problems but implement them as well. Therefore it seems that we have bright future for quality circle in our country.

Therefore, the study of information collected from the quality circle members in PC Asafoetida Company, Madurai, clearly defines the employee’s awareness and involvement towards quality circle is good. The attitude of the members in a quality circle is very good in nature and their potential is high. By being the quality circle member, they develop their work performance and their personal skills like problem solving, decision making, communication, morale, team work, and unity. The management has developed the participative culture as a way of life in this organization.



## **5.4 SCOPE FOR FUTURE STUDY**

- A study on employee involvement in quality circle.
- Effectiveness of quality circle.
- Quality circle in service sector.

# A STUDY ON AWARENESS OF QUALITY CIRCLE FOR THE MEMBERS OF QUALITY CIRCLE IN PC ASAFOETIDA COMPANY, MADURAI QUESTIONNAIRE

Name : \_\_\_\_\_

Sex : Male / Female

Department : a) Production                      b) Sales  
                    c) Accounting                      d) Housekeeping  
                    e) Packing                              f) Billing

Designation : a) Manager      b) Deputy Manager      c) Supervisor  
                    d) Assistant      e) Executive                      f) Laborer  
                    g) Housekeeping      h) Sales representative

Age : ( ) Below 25 years      ( ) 25 – 30 years  
                    ( ) 35 – 45 years      ( ) 45 & above

Educational

Qualification : a) 10<sup>th</sup> Std      b) 12<sup>th</sup> Std      c) Diploma  
                    d) Graduate      e) PG  
                    f) \_\_\_\_\_

2. Name of the quality circle? \_\_\_\_\_

3. Commencement date of quality circle \_\_\_\_\_

4. How many members are there in quality circle \_\_\_\_\_

5. How long you are in quality circle? \_\_\_\_\_

6. How do you know about quality circle?

- a) Through company                      b) through other quality circle member  
c) Through inspiration of management orientation program  
d) Other sources \_\_\_\_\_

7. The reason to join quality circle

- a) Personal Interest                      b) To participate in company progress  
c) Because of peer pressure      d) Others \_\_\_\_\_

8. How many quality circle are there in your company? \_\_\_\_\_

*Your title in the quality circle?*

- a) Facilitator                      b) Leader  
c) Deputy Leader                  d) Member

0. *When do you conduct your meeting?*

- a) Before working hours          b) After working hours  
c) During working hours

1. *Do you feel that the timing of the quality circle meeting is comfortable?*

- a) Yes                                  b) No

if "No" Please specify the reason \_\_\_\_\_

2. *How often does quality circle meet?*

- a) Daily                                b) Once in a week  
c) Once in two week                d) Once in month

3. *Whether quality circle members meeting are conducted regularly?*

- a) Yes                                  b) No

4. *Do you regularly attend quality circle meeting?*

- a) Yes                                  b) No

5. *How many projects that your quality circle has undertaken?* \_\_\_\_\_

6. *Basis for identification of problem*

- a) Training program                b) Through work experience  
c) Management motivation        d) Others \_\_\_\_\_

7. *Relationship with quality circle*

- a) Co-operative                      b) Competitive

8. *Have you personally developed yourself due to quality circle?*

- a) Yes                                  b) No

If "Yes" any three suits you

- 1) Decision Making
- 2) Communication
- 3) Initiative
- 4) Creativity
- 5) Problem solving ability
- 6) Leadership quality

- 7) Morale
- 8) Standard of living
- 9) Team work
- 10) Co-operation
- 11) Others \_\_\_\_\_

10. *Attitude towards quality circle*

[ SA – Strongly Agree, A – Agree, N – Neutral, DA – DisAgree, SDA – Strongly DisAgree ]

	SA	A	N	DA	SDA
a) I joined QC for self development	( )	( )	( )	( )	( )
b) QC promotes cost reduction	( )	( )	( )	( )	( )
c) It helps in waste reduction	( )	( )	( )	( )	( )
d) It reduces errors & enhance quality	( )	( )	( )	( )	( )
e) It improves personal skills	( )	( )	( )	( )	( )
f) Helps in developing inter personal skills	( )	( )	( )	( )	( )
g) It improves problem solving ability	( )	( )	( )	( )	( )
h) It creates better working environment	( )	( )	( )	( )	( )
i) It is useful being a member of QC	( )	( )	( )	( )	( )

11. *In your opinion what do you think leads to effectiveness of quality circle?*

- a) Ability of member
- b) Interest of members
- c) Proper training to members
- d) Support from top management

12. *Are you proud to be a member of quality circle?*

- a) Yes
- b) No

13. *Do you feel that your quality circle contribute well to the organization?*

- a) Yes
- b) No

14. *Any suggestions to improve your quality circle?*

THANK YOU

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