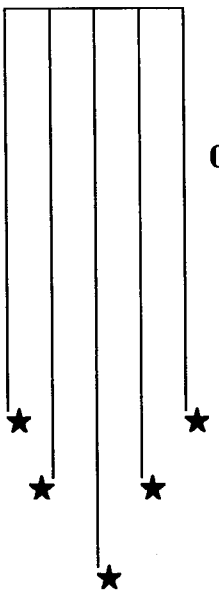
# PRODUCTION MONITORING SYSTEM

Estd-1984

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PROJECT REPORT

Submitted by


**VIDYA LAKSHMI J .**


P 1054

Under the guidance of


**Mrs. S.VIVEKANANTHI MSc.**
Lecturer,
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**In partial fulfillment of the requirements for the award of degree of**
**Bachelor of Science Applied Science**
**Computer Technology**
**of Bharathiar University, Coimbatore:641 046 .**


**DEPARTMENT OF COMPUTER TECHNOLOGY**

**KUMARAGURU COLLEGE OF TECHNOLOGY**

**COIMBATORE: 641 006.**

# KUMARAGURU COLLEGE OF TECHNOLOGY

Estd-1984

## COIMBATORE: 641 006

## Department of Computer Technology

## Certificate

This is to certify that this project entitled

***PRODUCTION MONITORING SYSTEM***

has been submitted by

**Ms. VIDYA LAKSHMI J.**

In partial fulfillment of the requirements for the award of degree of

**Bachelor of Science Applied Science Computer Technology**

of Bharathiar University, Coimbatore:641 046

during the academic year 2002-2003.

J. Vidya Lakshmi 21/3/03

**(Guide )**

**(Head of the Department)**

Certified that the Candidate was Examined by us in the Project Work Viva-Voce Examination held on 25/03/2003

University Register Number 0028Q0167

**(Internal Examiner)**

**(External Examiner)**

*CERTIFICATE*

SRI MADHURAMBIKAI SPINNING MILL Pvt. Ltd
SEMANDAMPALAYAM P.O.
VELLAKOVIL-638 111
Ph : 260216, 261616

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Miss Vidya Lakshmi J., student of III-BSc AS – CT (2002-2003), of Kumaraguru College Of Technology has undergone a project work entitled Production Monitoring System from 1/11/2002 to 1/03/2003 in our concern. The project has been successfully completed and implemented.

Yours faithfully,
For Sri Madhurambikai Spinning mill

Chairman

MADHURAMBIKAI SPINNING MILLS (P) Ltd
S.F. No. 477/2 Semmandampalayam
VELLAKOVIL - 638 111
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Course co-ordinator

21/3

Mrs. V. Geetha M.C.A.

# *ACKNOWLEDGEMENT*

# ACKNOWLEDGEMENT

With all humility and submissiveness I surrender myself at the 'Divine Feet' of God and submit my foremost gratitude for having gracefully blessed me with knowledge, skill and enthusiasm.

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This is an important moment to remember all my teachers at the college who have helped for the past three years and in future to, in lighting my future through their caring words.

# *SYNOPSIS*

# SYNOPSIS

"**Production Monitoring System**"deals with the computerization of the day to day activities of the organization. The system takes into account purchase order management and production management.

This project is developed using Visual Basic as the front end and Oracle as the back end. The advantages of Visual Basic are that it is user friendly and provides better security as it uses most of the features of the Object Oriented programming. The backend Oracle provides better security facilities compared to other database management systems.

The proposed system is to be developed as an alternative to the existing system. The initial system study reverts to the bottlenecks of the existing system such as tedious manual work, which is more time consuming, records being maintained on paper which occupy more space and data maintenance. This project is aimed to overcome these disadvantages as well as to integrate the major activities of the organization.

# CONTENTS

# *INTRODUCTION*

# 1. INTRODUCTION

## 1.2. ORGANISATION PROFILE

Sri Madhurambikai Spinning Mill Pvt Limited was started in the year 1996 in order to satisfy the increasing demands for yarn by the garment manufacturers in the close by towns like Tirupur, Palladam, etc.

Sri Madhurambikai Spinning Mill Pvt Limited is commited to constant pursuit excellence, by creating an environment of perpetual improvement for the ultimate goal-satisfying the needs of their customers.

The production department in the company involves the following departments:

- Mixing
- Blowroom
- Carding
- Drawing
- Spinning

The company works three shifts a day with a total number of 200 employees. Each shift is eight hours long. The product from this company is carded yarn. Carded yarn is of different types. It is differentiated by its thickness. Based on the thickness of the yarn it is categorized into various Counts. The company mainly produces carded yarn of the following Counts

- 20's Count (Low Quality)
- 40's Count
- 60's Count (High Quality)

Of these the yarn of 20's count is the thickest and that of 60's count is the thinnest. The yarn count increases as its thickness decreases.

## 1.2. PROJECT OVERVIEW

The project entitled "PRODUCTION MONITORING SYSTEM" deals with the daily production activities of "SRI MADHURAMBIKAI SPINNING MILL". The capacity of the company is 1640 (open end) spindles.

### 1.2.1. SCOPE:

The developed system is used to manage the entire production workflow and raw material management of the company where much manual work is not needed. Due to the computerization process, the user can work more efficiently. The various reports required during the production and raw material purchase can be easily generated as a hardcopy.

### 1.2.2. OVERVIEW:

The system deals with production monitoring and raw material purchase. It keeps track of the input to the production department, the input from one stage of production to the other stage, the waste generated by each process and the final product, the yarn of various counts, which is the output of the production department. And the enquries, quotations, orders, order confirmations, deliveries, payments and purchase returns of the cotton purchase department.

The system also displays the components under each process. Updates on the database will also be carried out simultaneously when the component moves from one process to another.

Thus the system is designed to satisfy the needs of the production department and the raw material purchase department.

### 1.2.3. OBJECTIVES:

The project is designed mainly to achieve the following goals precisely:

- making the job user friendly
- more accuracy
- making all data readily available
- portability
- reducing manual work
- less time consuming
- production in each department can be found
- labor efficiency can be found

# *SYSTEM STUDY AND ANALYSIS*

# 2. SYSTEM STUDY AND ANALYSIS

A complete understanding of the software requirements is essential to the success of a software development effort. No matter how well designed or well coded, a poorly analyzed and specified program will disappoint the user and bring grief to the developer.

The requirement analysis task is a process of discovery, refinement, modeling and specification. The software scope, initially established by the system engineer is refined in detail. Models of the required data, information and control flow and operation behavior are created. Alternative solutions are analyzed and allocated to various elements. The information gathered after being analyzed, are processed and presented to the user.

## 2.1. EXISTING SYSTEM

All the modules are being maintained manually. Production and raw material purchase details are recorded manually, which is time consuming and hard process. The machine and labor efficiency are not evaluated. Therefore the production percentage cannot be improved.

Production maintenance is stored in a single file, which contains all the production details. Retrieval of required data at any point of time will be a time consuming process. Raw material maintenance is also done manually. These are the disadvantages of the existing system. The cost of record keeping is comparatively large. Hence a better method that eradicates the bottlenecks of the existing system has to be proposed.

Some of the other drawbacks of the existing system include:

- the material waste by the employees cannot be identified quickly.
- the machine efficiency (production) and the labor efficiency cannot be calculated accurately.
- reports cannot be generated in the required form.

## 2.2. PROPOSED SYSTEM

A better solution for the problems in existing system is the computerization of the modules, which reduces the number of copies and saves time. Maintaining records through computerization is a better approach. Existing system maintains only one register for all the details of a particular department. In the proposed system, different databases are available for separate maintenance of each process. So it is very clear and easy to work. The details available are accurate which is a great advantage for the company.

So the proposed system will be a better solution for the existing system.

## 2.3. REQUIREMENTS ON THE NEW SYSTEM

The main aim of running a textile mill is to increase the production. Since the volume of information available is growing day by day, maintaining the details in manual ledgers and accessing information from them makes the job more complex.

The following are the reasons why the system needed to be computerized:

- Inaccuracy in maintaining the data.
- More time consuming
- Need for more number of employees.
- Problems in storing bulk information on ledgers and note books.
- Security and reliability of the data stored and information retrieved.
- Sharing of information by more than one person without duplication.

To achieve better accuracy, to get the reports faster and in order to cope with the latest technology, the proposed system would be of great use. Computerized system gives relief from monotonous clerical job and gives the company time to concentrate on creative efforts to produce better results.

# *PROGRAMMING ENVIRONMENT*

# 3. PROGRAMMING ENVIRONMENT

## 3.1. HARDWARE CONFIGURATION

| | |
|---|---|
| MACHINE | :IBM COMPATIBLE |
| PROCESSOR | :PENTIUM III |
| PRIMARY MEMORY | :128 MB |
| SECONDARY MEMORY | :40 GB |
| FLOPPY DISK DRIVE | :1.44 MB |
| MONITOR | :14 " COLOUR |
| KEYBOARD | : ANY STANDARD KEYBOARD |
| MOUSE | : SCROLL |

## 3.2. SOFTWARE CONFIGURATION

| | |
|---|---|
| OPERATING SYSTEM | : WINDOWS '98 |
| FRONT-END | : VISUAL BASIC6.0 |
| BACK END | :ORACLE 8.0 |

## 3.3. DESCRIPTION OF SOFTWARE AND TOOLS USED

### 3.3.1. Visual Basic 6.0

**Package Features:**

**Visual Basic –A brief description:**

Visual basic is:

- A Front End Tool
- A Graphical User Interface (GUI)
- A 4GL ($4^{th}$ generation language)
- An Event Driven language
- A User Friendly oriented package, which allows even a novice to develop an application more quickly and easily.

**Exploring Visual Basic**:

The "Visual" part refers to the method used to create the graphical user interface rather than writing numerous lines of code to describe the appearance and the location of interface elements. Instead we simply add pre build objects in the screen.

The "Basic" part refers to the basic language where basic means beginners all purpose symbolic instruction code. It is the only language which is used by the programmers. Visual Basic is evolved from the original basic language and now it contains several hundred statement functions and keywords, many of which are directly related to the GUI.

**APPLICATION DEVELOPMENT:**

Using Visual Basic 6.0, we can create event driven application. In a Visual Basic application, code is executed in response to events. Another application is procedural in which code is executed according to a path defined by the logic of application.

More about Visual Basic:

1. Integrated Development Environment:

Visual Basic is developed in the Integrated Development Environment.

2. Event:

An action initiated by the user, the operating system or the program itself. Example of event is keystroke, a mouse click, the receipt of the data from a report.

3. Method:

Predefined actions that can be transformed by an object. E.g. a form has a hide method that makes it invisible to the user.

4. Controls:

Reusable objects that provide a piece of visual interface of a program. E.g. textbox, label.

### 3.3.2. Oracle 8

**Elements of Oracle8 SQL**

Literals

Text

Integer

Number

Data types

Nulls

Pseudo columns

Comments

Database Objects

Schema Object Names and Qualifiers

Referring to Schema Objects and Parts

Structured Query Language (SQL), is the set of commands that all programs and users must use to access data in an Oracle database. Application programs and Oracle tools often allow users access to the database without using SQL directly, but these applications in turn must use SQL when executing the user's request. This chapter provides background information on SQL as used by most relational database systems. Topics include:

## SQL Standards

Oracle SQL complies with industry-accepted standards. Oracle Corporation ensures future compliance with evolving SQL standards by actively involving key personnel in SQL standards committees. Industry-accepted committees are the American National Standards Institute (ANSI) and the International Standards Organization (ISO), which is affiliated with the International Electro technical Commission (IEC). Both ANSI and the ISO/IEC have accepted SQL as the standard language for relational databases. When a new SQL standard is simultaneously published by these organizations, the names of the standards conform to conventions used by the organization, but the standards are technically identical.

The latest SQL standard published by ANSI and ISO is often called SQL92 (and sometimes SQL2). The formal names of the new standard are:

ANSI X3.135-1992, "Database Language SQL"
ISO/IEC 9075:1992, "Database Language SQL"

SQL92 defines four levels of compliance: Entry, Transitional, Intermediate, and Full. A conforming SQL implementation must support at least Entry SQL. Oracle8, Release 8.0, fully supports Entry SQL and has many features that conform to Transitional, Intermediate, or Full SQL.

Oracle8 conformance to Entry-level SQL92 was tested by the National Institute for Standards and Technology (NIST) using the Federal Information Processing Standard (FIPS), FIPS PUB 127-2.

## Tools Support

Most (but not all) Oracle tools support all features of Oracle's SQL. This reference describes the complete functionality of SQL. If the Oracle tool that you are using does not support this complete functionality, you can find a discussion of the restrictions in the manual describing the tool, such as PL/SQL User's Guide and Reference.

# *SYSTEM DESIGN AND DEVELOPMENT*

# 4. SYSTEM DESIGN AND DEVELOPMENT

## 4.1. SCREEN DESIGN

### 4.1.1 Input Design

The input design is the link that ties information system into the world of its users. Input design consists of developing specifications and procedures for data preparation, steps necessary to fit transaction data into a form that is usable for computer processing.

The input design pertaining to this system is formulated to serve the objectives such as effectiveness, accuracy, simplicity and attractiveness.

The input screens are designed using visual basic forms and additional controls are added in order to enhance its attractiveness.

The forms were designed individually for each master file and transaction involved in the raw material purchase and production departments. The master forms include the variety master form, supplier master form, machine master form, employee master form and the department-designation master from.

**Master forms:**

The variety master form is used to input the various varieties of cotton, which the company deals with. It uses a code for each variety as the primary key. The supplier master form gets the supplier details as input. These are the suppliers who supply cotton to the company. This form also gets the varieties of cotton the supplier supplies to the company. The next is the machine master form, which is used to get the details of each machine in the company such as machine number, department, standard production and standard waste. The employee master form gets the necessary details of the employees.

**Production forms:**

The production department involves the following process

- Mixing
- Blowroom

- Carding
- Drawing
- Spinning

The mixing department mixes two varieties of cotton in the required proportion. This form get the two variety names, the ratios in which the are mixed, shift name and date as input.

The blowroom form gets the shift wise input form the user. The input includes the machine number, tenter name, supervisor name, date, shift name, time of the shift, opening laps, number of laps produced, standard production, standard waste and the different kind of wastes in kgs. The waste percentage, total production, number of hours the tenter was idle are calculated. The carding, drawing, spinning forms get similar details as input and the calculations are performed.

The purchase department involves the following forms

- Cotton Enquiry
- Quotation
- Purchase Order
- Order Confirmation
- Delivery of goods
- Verification of goods (Bales Entry)
- Purchase Return
- Payment

The enquiry form is used to generate a cotton enquiry, which is sent to all the suppliers supplying that variety of cotton or a particular supplier. The quotation form is used to enter the price quoted by the supplier for the enquiry sent. This is done with reference to the enquiry number, which is the primary key of the enquiry table.

The order form helps generate an order with reference to the quotation number, which is the primary key of the quotation table. This specifies the variety of cotton, supplier name, supplier type, number of bales ordered, date of order and the amount quoted. The order confirmation form contains similar details as the order form with addition to when the goods will arrive in the company.

The delivery of goods is entered using the delivery form. The verification of goods is done in the bales entry form. Here the date of arrival of the goods, the supplier name, variety name, number of lotts, number of bales per lott, the bale number, bale weight, tare weight and net weight are input.

The purchase return form deals with the goods that are not satisfactory and therefore have to be returned to the supplier. This form also requires the reason why the goods are being returned. The payment for the goods can be made in installments. Cash or DD or cheque can make the payment. The payment form deals with these details.

### 4.1.2. OUTPUT DESIGN

The development of software depends on the design of its output, which is the main requirement of the user. So designing the desired output is an important factor, which determines the worthiness of the software. Special attention should be given so that the output designed contains only the relevant information.

The output design that is the report design is a cross between the design of forms and the screens. Reports are normally printed on paper but they also be shown on the screens or stored files to be used by other application programs, if the need arises.

Printed reports are used when an output are needed for other organizations, is too voluminous to be browsed on-line or is needed for control or audit purposes. Screen reports are needed for single database occurrence enquiries, low volume outputs or small interactive processes.

Many of the elements of a report correspond to elements on the forms and screen. Each has titles, headings and fields. However, reports are used frequently to summarize data or identify subsets for further examination.

The reports are generated for all the master and transaction forms. The reports for the master forms contain the data stored in the corresponding database. The forms that deal with the production each has a shift wise report, which gives the production

details of that particular shift, a daily report the gives the production details for that day, a monthly report that gives the production details for that month and an annual report that gives the annual production details. These reports also display the machine efficiency for that period.

The employee efficiency can be got for various time intervals (like shift wise, daily, monthly and annual) using the reports generated for the purpose.

Reports for the forms dealing with the purchase of raw material have also been generated.

## 4.2. DATABASE DESIGN

**Introduction**

Data are raw facts that we use to represent information. Process data is information. Data must be manipulated (organized, formatted, summarized, etc) before it can be used as information.

Database Management System (DBMS) serve to manipulate and maintain database. When industry's need for information was small, database tended to be simple and informal. But as the need for up-to-date information increased, automated DBMS where developed based in groups formalized data modeling rules called Data Models.

**Relational Data Model**:

In the relational data model, entity types are referred to as relations. The relational model was an attempt to simplify database structure. It represents all the data in the database as simple raw column tables of data values and where all database operations work on these tables.

**Normalization:**

Normalization is a step process for designing relations and relationships. Normalization reduces redundancy using the principle of non-loss decomposition. Non-loss decomposition is the reduction of table to the smaller tables without any loss of information. This enables the manipulation of the database in a powerful way, minimizes the data anomalies and inconsistencies, improves data independence and helps create flexible designs.

**Table Designs:**

Each table has a primary key, which is used to reference the data in that row. The primary of one table is used as the foreign in other tables. For example the variety code is the primary key of the variety master table. This primary key is used as the foreign key in the mixing table.

**Variety Master table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | varcode | Number | 8 | Variety code |
| 2 | varname | Varchar | 20 | Variety name |

**Supplier Master Table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | supcode | Number | 8 | Code for the supplier |
| 2 | supname | Number | 20 | Supplier name |
| 3 | street | Varchar | 30 | Supplier's street name |
| 4 | city | Varchar | 20 | Supplier's city name |
| 5 | pincode | Number | 6 | Supplier's pin code |
| 6 | phone1 | Number | 10 | Supplier's phone number |
| 7 | phone2 | Number | 10 | Supplier's phone number |
| 8 | e_mail | Varchar | 30 | Supplier's E-mail ID |
| 9 | website | Varchar | 20 | Supplier's website |
| 10 | fax | Number | 10 | Supplier's fax number |
| 11 | type | Varchar | 20 | Supplier type |

**Machine Master Table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | code | Number | 8 | Code for the machine |
| 2 | type | Varchar | 10 | Type of machine i.e., which department the machine belongs to |
| 3 | mno | Number | 10 | Number for the Machine |
| 4 | stdp | Number | 10 | Standard production of the machine |
| 5 | stdwas | Number | 10 | Standard waste given by the machine |

**Employee Master Table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | empno | Number | 8 | Employee Number |
| 2 | ename | Varchar | 20 | Employee name |
| 3 | department | Varchar | 20 | Department to which the employee belongs |
| 4 | desig | Varchar | 20 | Employee's designation |
| 5 | street | Varchar | 20 | Employee's street name |
| 6 | street2 | Varchar | 20 | Address for communication |
| 7 | city | Varchar | 20 | Employee's city name |
| 8 | city2 | Varchar | 20 | Address for communication |
| 9 | state | Varchar | 20 | State to which the employee belongs |
| 10 | state2 | Varchar | 20 | Address for communication |
| 11 | country | Varchar | 20 | Country to which the employee belongs |
| 12 | country2 | Varchar | 20 | Address for communication |
| 13 | pincode | Number | 6 | Employee's pin code |
| 14 | pincode2 | Number | 6 | Address for communication |
| 15 | phone | Number | 10 | Number for contact |
| 16 | phone2 | Number | 10 | Number for contact |
| 17 | qualification | Varchar | 20 | Employee's qualification |
| 18 | fathersname | Varchar | 20 | Employee's father's name |
| 19 | dateofjoin | Date | 8 | Date in which the employee joined the company |
| 20 | dateofbirth | Date | 8 | Employee's date of birth |
| 21 | information | Varchar | 40 | Other information about the employee |

**Mixing table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | mixcode | Number | 8 | Mixing code |
| 2 | var1 | Number | 8 | Variety code |
| 3 | ratio1 | Number | 8 | Ratio in which the variety is being mixed |
| 4 | var2 | Number | 8 | Variety code |
| 5 | ratio2 | Number | 8 | Ratio in which the variety is being mixed |
| 6 | shift | Varchar | 20 | Shift name |
| 7 | mdate | Date | 8 | Date of mixing |

**Blowroom table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | sno | Number | 8 | Serial Number |
| 2 | mcno | Number | 8 | Machine Number |
| 3 | tenter | Number | 8 | Tenter number |
| 4 | opstock | Number | 10 | Opening Stock in laps |
| 5 | lapsprod | Number | 10 | Laps produced in the shift |
| 6 | clstock | Number | 10 | Closing stock in laps |
| 7 | std | Number | 10 | Standard production |
| 8 | diff | Number | 10 | Difference between the standard production and laps produced |
| 9 | idlehrs | Number | 10 | Number of hours the employee was idle |
| 10 | wastekgs | Number | 10 | Waste produced in kgs |
| 11 | wasteper | Number | 10 | Waste produced in percentage |
| 12 | stdw | Number | 10 | Standard waste produced |
| 13 | diffw | Number | 10 | Difference in waste produced |
| 14 | totkgs | Number | 10 | Total kgs produced during the shift |
| 15 | shift | Varchar | 10 | Shift name |
| 16 | supervisor | Varchar | 10 | Supervisor name |

| | | | | |
|---|---|---|---|---|
| 17 | Date1 | Date | 8 | Shift date |
| 18 | time | Varchar | 10 | Time of the shift |
| 19 | droppings | Number | 10 | Waste |
| 20 | gutterwaste | Number | 10 | Waste |

**Carding table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | sno | Number | 8 | Serial Number |
| 2 | mcno | Number | 8 | Machine Number |
| 3 | tenter | Number | 8 | Tenter number |
| 4 | opsli | Number | 10 | Opening Stock in slivers |
| 5 | sliprod | Number | 10 | Slivers produced in the shift |
| 6 | clsli | Number | 10 | Closing stock in slivers |
| 7 | std | Number | 10 | Standard production |
| 8 | diff | Number | 10 | Difference between the standard production and slivers produced |
| 9 | idlehrs | Number | 10 | Number of hours the employee was idle |
| 10 | wastekgs | Number | 10 | Waste produced in kgs |
| 11 | wasteper | Number | 10 | Waste produced in percentage |
| 12 | stdw | Number | 10 | Standard waste produced |
| 13 | diffw | Number | 10 | Difference in waste produced |
| 14 | totkgs | Number | 10 | Total kgs produced during the shift |
| 15 | supervisor | Varchar | 10 | Supervisor name |
| 16 | shift | Varchar | 10 | Shift name |
| 17 | Date1 | Date | 8 | Shift date |
| 18 | time | Varchar | 10 | Time of the shift |
| 19 | fs | Number | 10 | Waste |
| 20 | lf | Number | 10 | Waste |
| 21 | cf | Number | 10 | Waste |
| 22 | nimo | Number | 10 | Waste |

**Drawing table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | sno | Number | 8 | Serial Number |
| 2 | mcno | Number | 8 | Machine Number |
| 3 | tenter | Number | 8 | Tenter number |
| 4 | opsli | Number | 10 | Opening Stock in slivers |
| 5 | sliprod | Number | 10 | Slivers produced in the shift |
| 6 | clsli | Number | 10 | Closing stock in slivers |
| 7 | std | Number | 10 | Standard production |
| 8 | diff | Number | 10 | Difference between the standard production and slivers produced |
| 9 | idlehrs | Number | 10 | Number of hours the employee was idle |
| 10 | nimo | Number | 10 | Waste produced in kgs |
| 11 | wasteper | Number | 10 | Waste produced in percentage |
| 12 | stdw | Number | 10 | Standard waste produced |
| 13 | diffw | Number | 10 | Difference in waste produced |
| 14 | totkgs | Number | 10 | Total kgs produced during the shift |
| 15 | supervisor | Varchar | 10 | Supervisor name |
| 16 | shift | Varchar | 10 | Shift name |
| 17 | Date1 | Date | 8 | Shift date |
| 18 | time | Varchar | 10 | Time of the shift |

**Spinning table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | sno | Number | 8 | Serial Number |
| 2 | mcno | Number | 8 | Machine Number |
| 3 | tenter | Number | 8 | Tenter number |
| 4 | opkgs | Number | 10 | Opening Stock in slivers |
| 5 | kgsd | Number | 10 | Slivers produced in the shift |
| 6 | clskgs | Number | 10 | Closing stock in slivers |
| 7 | std | Number | 10 | Standard production |
| 8 | diff | Number | 10 | Difference between the standard production and slivers produced |
| 9 | idlehrs | Number | 10 | Number of hours the |

| | | | | |
|---|---|---|---|---|
| | | | | employee was idle |
| 10 | nimo | Number | 10 | Waste produced in kgs |
| 11 | wasteper | Number | 10 | Waste produced in percentage |
| 12 | stdw | Number | 10 | Standard waste produced |
| 13 | diffw | Number | 10 | Difference in waste produced |
| 14 | totkgs | Number | 10 | Total kgs produced during the shift |
| 15 | supervisor | Varchar | 10 | Supervisor name |
| 16 | shift | Varchar | 10 | Shift name |
| 17 | Date1 | Date | 8 | Shift date |
| 18 | time | Varchar | 10 | Time of the shift |

**Enquiry table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | eno | Number | 8 | Enquiry number |
| 2 | sname | Number | 8 | Supplier number |
| 3 | type | Varchar | 10 | Supplier type |
| 4 | date | Date | 8 | Enquiry date |
| 5 | variety | Number | 8 | Variety code |
| 6 | nobales | Number | 10 | Number of bales |
| 7 | kgs | Number | 10 | Number of kilograms |

**Quotation table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | qno | Number | 8 | Quotation number |
| 2 | date | Date | 8 | Quotation date |
| 3 | eno | Number | 8 | Enquiry number |
| 4 | amount | Number | 10 | Total Amount |
| 5 | ratepkg | Number | 10 | Rate per kilogram |

**Purchase order table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | orderno | Number | 8 | Order number |
| 2 | supno | Number | 8 | Supplier code |
| 3 | varno | Number | 8 | Variety number |

| | | | | |
|---|---|---|---|---|
| 4 | ordate | Date | 8 | Order date |
| 5 | nobales | Number | 10 | Number of bales |
| 6 | crate | Number | 10 | Candy rate |
| 7 | amount | Number | 10 | Amount |
| 8 | wtpbale | Number | 10 | Weight per bale |

**Order confirmation table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | code1 | Number | 8 | Confirmation code |
| 2 | ordernu | Number | 8 | Order Number |
| 3 | duedate | Date | 8 | Due date |
| 4 | nopay | Number | 10 | Number of payments |

**Delivery table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | code | Number | 8 | Invoice number |
| 2 | orno | Number | 8 | Order number |
| 3 | date1 | Date | 8 | Delivery date |
| 4 | vno | Varchar | 20 | Vehicle number |
| 5 | vtype | Varchar | 20 | Vehicle type |
| 6 | tcharge | Number | 10 | Transport charge |
| 7 | totamt | Number | 10 | Total amount |
| 8 | totkgs | Number | 10 | Total number of kilograms |

**Payment table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | Code | Number | 8 | Payment code |
| 2 | Payno | Number | 8 | Payment number |
| 3 | paydate | Date | 8 | Payment date |
| 4 | amount | Number | 10 | Amount paid |
| 5 | type | Varchar | 10 | Cash/DD/Cheque |
| 6 | insno | Number | 10 | Installment number |
| 7 | ddchno | Varchar | 10 | DD/Cheque number |

| | | | | |
|---|---|---|---|---|
| 8 | bkname | Varchar | 30 | Bank name |
| 9 | nopay | Number | 10 | Number of payments |

**Purchase Return table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | delcode | Number | 8 | Invoice number |
| 2 | retkgs | Number | 10 | Number of kilograms returned |
| 3 | retdt | Date | 8 | Return date |
| 4 | recamt | Number | 10 | Amount received |
| 5 | duedate | Date | 8 | Due date |
| 6 | rem | Varchar | 40 | Remarks |

**Bales Entry table:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | code | Number | 8 | Entry code |
| 2 | supcode | Number | 8 | Supplier code |
| 3 | varcode | Number | 8 | Variety code |
| 4 | lottno | Number | 8 | Lott number |
| 5 | totlotts | Number | 8 | Total number of lotts |
| 6 | totkgs | Number | 8 | Total weight in kilograms |
| 7 | deldate | Date | 8 | Delivery date |
| 8 | tarewt | Number | 8 | Tare weight |
| 9 | netwt | Number | 8 | Net weight |

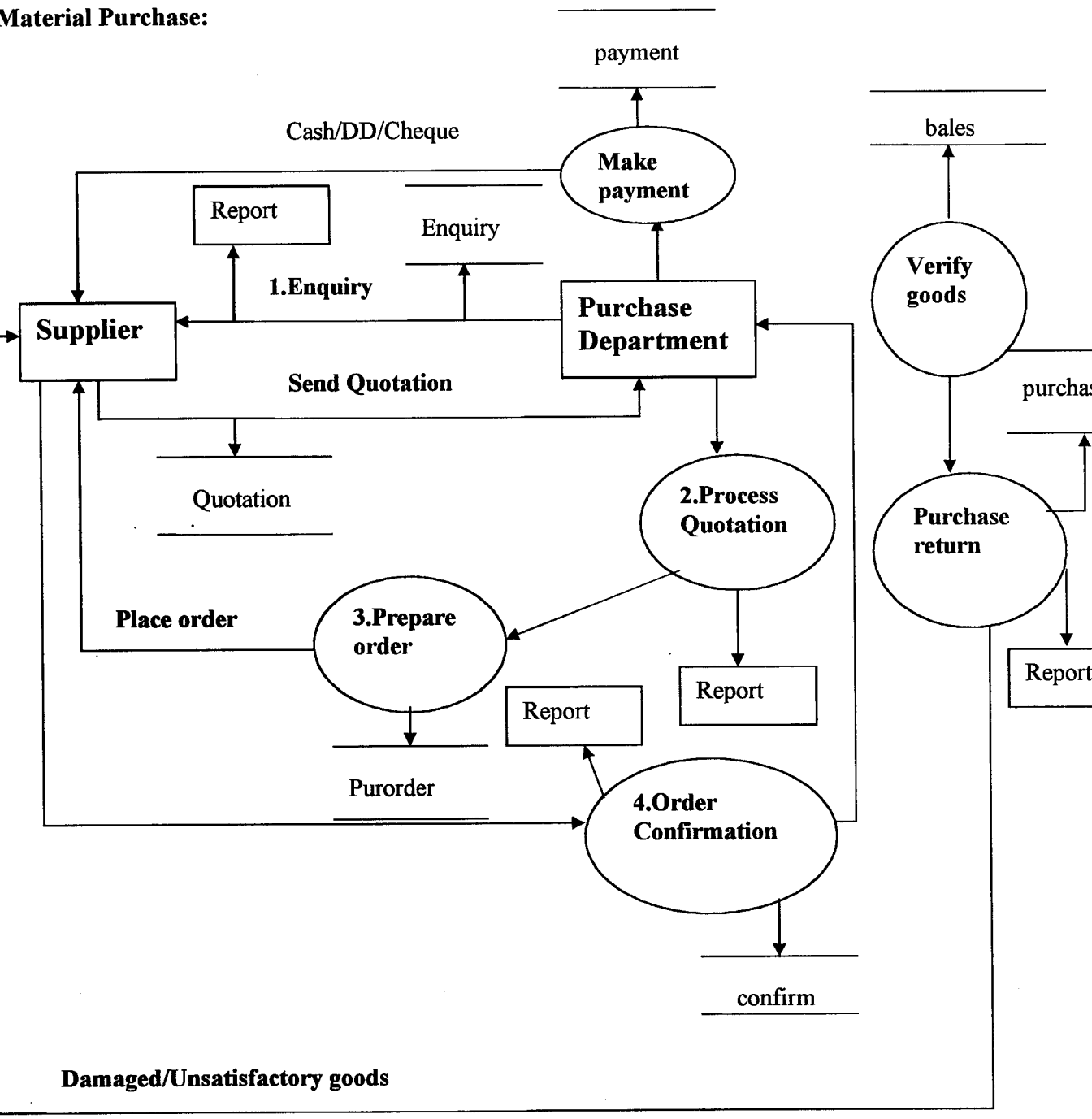
**Bales details:**

| Sno | Field name | Data type | Width | Description |
|---|---|---|---|---|
| 1 | code | Number | 8 | Bale code |
| 2 | balno | Number | 8 | Bale number |
| 3 | balwt | Number | 8 | Bale weight |

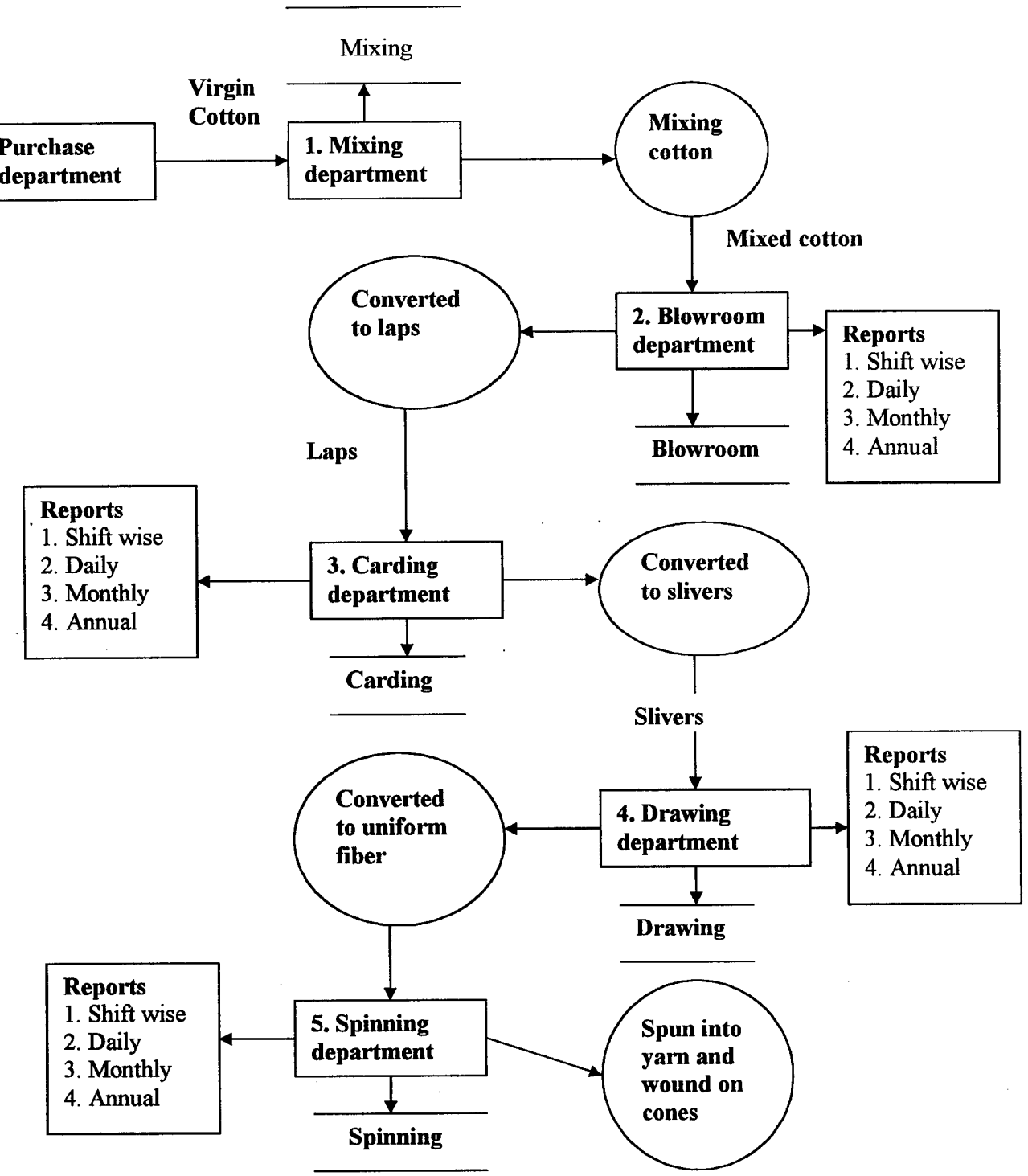
# PROCESS DESIGN

## DATA FLOW DIAGRAM

**Material Purchase:**



**uction process**:



## 4.3.2. Menu Structure

- Masters
- Production
- Purchase
- Reports

**Main Menu Expansion:**

- Masters
  - Variety
  - Supplier
  - Machine
  - Employee
  - Department And Designation
- Production
  - Mixing
  - Blowroom
  - Carding
  - Drawing
  - Spinning

## Purchase

- Enquiry
- Quotation
- Purchase Order
- Order Confirmation
- Delivery
- Payment
- Purchase Return
- Bales Entry

## Reports

- Master Reports
  - ✓ Variety Report
  - ✓ Supplier Report
  - ✓ Machine Report
  - ✓ Employee Report
- Purchase Reports
  - ✓ Enquiry
  - ✓ Quotation
  - ✓ Confirmation
  - ✓ Delivery
  - ✓ Payment
- Blowroom

- Carding
- Drawing
- Spinning
- Employee
  - ✓ Shift wise
  - ✓ Daily
  - ✓ Monthly
  - ✓ Annual

## 4.4. Module Design

### 4.4.1. Raw Material Purchase:

The raw material purchase starts with the company sending an enquiry to the supplier. The supplier then sends a quotation to the company. If the quotation is satisfactory the company places an order to the supplier. The goods are the sent to the company and the company then verifies the goods. They are first checked in lotts, each lott has a certain number of bales. The lott number, bale number and bale weight are checked individually for each bale. The cotton sent by the supplier may not always be of the quality the company ordered. In that case they are considered not satisfactory and the company returns them to the supplier. The supplier is not always paid the whole amount in one installment. The company is given a certain period of time to make the payment. Payment to the supplier is made either by cash/DD/cheque.

### 4.4.2 Production:

The production process starts with the mixing of virgin cotton in the mixing department. The different varieties of cotton are mixed based on the quality and count of the yarn to be produced. If the yarn to be produced is of high counts then only

good quality of pure cotton is mixed. If the company is producing yarn of low counts the waste cotton that is purchased from larger units is used. In this stage the other waste such as cotton seeds, dust, etc are removed from the cotton.

The mixed cotton is then sent to the blowroom department where it is converted into lap form. The blowroom department produces wastes like droppings (DS) and gutter waste. The laps are then sent to the carding department where it is converted to slivers. The carding department produces wastes like fan waste (FS), lickerin flag (LS), nimofill commonly known as blower waste. Slivers are further passed on to the drawing department where the fiber is made uniform. The drawing department produces only blower waste. The uniform fiber (slivers) then moves on to the spinning department where it is spun into yarn and wound on cones. The spinning department also produces only blower waste.

# *SYSTEM TESTING AND IMPLEMENTATION*

# 5. SYSTEM TESTING AND IMPLEMENTATION

## SYSTEM TESTING

The system on the whole was tested for the following:

- Validation of inputs
- Referential integrity test
- Sequential tests
- Consistency of the application

Testing is a vital part of the system, which leads to the success of the system. m testing makes a logical assumption that if all the parts of the system are correct, then the n will be successfully achieved.

The objective of testing is to discover errors. Inorder to fulfill these objectives a of tests were planned and executed. The approach is to test each entity with successfully ones, upto the system level.

In the case of **PRODUCTION MONITORING SYSTEM** two types of tests were ucted namely

- Unit testing
- Integrated testing

Unit testing is where the individual programs were tested using the test data. The t as per the requirements was found satisfactory. Thus it was possible to conclude that every am in the software is functionally correct.

rity testing is where the individual programs are combined into modules and tested. Integrity were performed on each module and the validity was checked. After which all the modules brought together under a single module and the integrity test was performed again. The result e test was found to be successful.

system was validated in such a way that even the slightest deviation in the input data will e an error message and provide the necessary guidelines regarding the input.

# SYSTEM IMPLEMENTATION

A crucial phase in the system development is the successful implementation of the ystem. Implementation is the process of converting a new system design into an operational This involves creating computer compatible files to store data, converting the data flow ms into coding and documentation.

**PRODUCTION MONITORING SYSTEM** has undergone the formal process of mentation in the same manner, as every other system would undergo.

rocedural aspects, which were followed, are

- Testing
- Documentation

**ng:**

Testing is a vital process to the success of the system. Inadequate testing or non- g may lead to errors that may not appear until months later. Hence the aim of testing is to de bug free software and a secure system.

**mentation:**

After testing is completed, the whole system must be documented and presented in dable form. This is to ensure that if any corrections, updating or manipulations are to be rmed in the future, the users will find no problem in performing those changes. A mentation of the source code, report generation programs, tables that were used to construct atabases, forms used for the screen formats and of course the software was handed over to (company).

# *CONCLUSION*

# 6. CONCLUSIONS

With the exposure of the technical knowledge of computers and its ages, whatever I gained is fully applied in the design an implementation of the **)UCTION MONITORING SYSTEM**.

The **PRODUCTION MONITORING SYSTEM** has been done to reduce orkload of the staff of the organization. This system has an added advantage of reliability and acy.

All the suggestions forwarded in the software proposal have been ssfully completed and the final thresholds of the applications have been crossed.

During the design phase of the **PRODUCTION MONITORING TEM** many difficulties were encountered. All these difficulties were analyzed deeply and efforts were taken to bring out an accurate and credible software package.

This user-friendly software has overcome strict and severe validation checks rmed using the test data. A great effort was made to attain maximum perfection in menting the software in a simple, precise and self-explanatory manner.

# *FUTURE ENHANCEMENTS*

# 7. FUTURE ENHANCEMENTS

The project entitled "Production Monitoring System" deals with only the ction and raw material management of the company. This can further be extended to uterize the other modules in the company. The other modules such as stores management, nts, sales, etc. can be computerized.

The data from this system can be used effectively in extending this system. Stock gement can also be done using the data from the raw material purchase tables.

The hard copy of the data stored can be got in the form of reports. The number of ts can be increased in future according to the user's requirements. The reports enable the user nsport data easily therefore they should be in the required format. Reports to generate an for multiple items can be added in addition to the existing report.

The forms can be further modified according to the user's convenience. The user find a few forms confusing or tedious and hence alter them.

# *BIBLIOGRAPHY*

## 8. BIBLIOGRAPHY

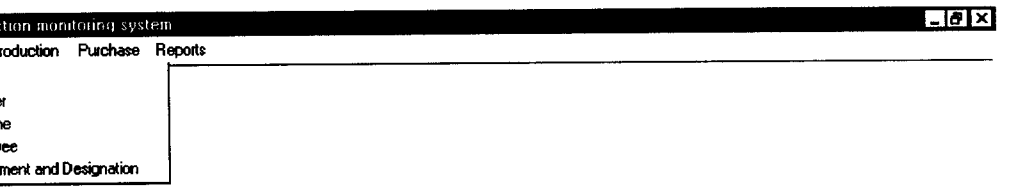

- Visual Basic 6 by Gray Cornel.
- Programmers Reference Visual Basic 6 -2nd Edition by Dan Rahmel.
- Visual Basic 6 by Greg Perry with Sujaya Hettihawa.
- Oracle 8i DBO – Lance Mortenson

# *APPENDIX*

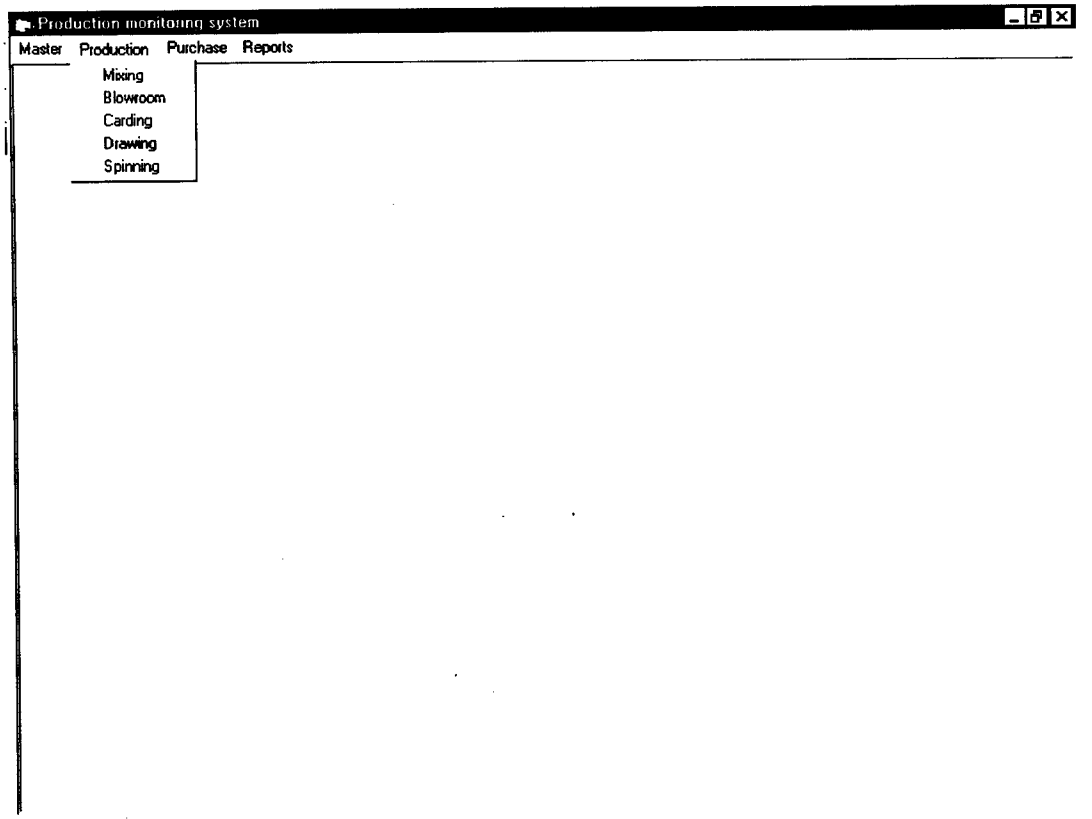
# 9. APPENDIX

## CREEN DESIGNS

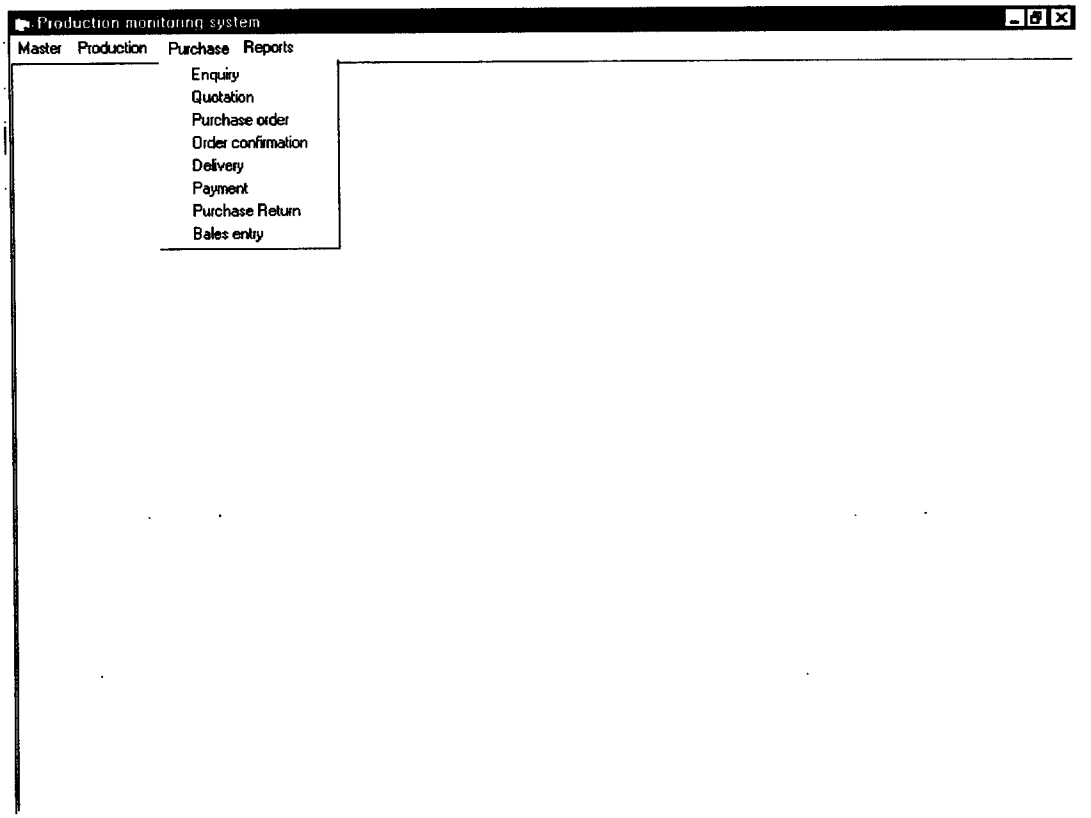
### From Showing The Master Menu:



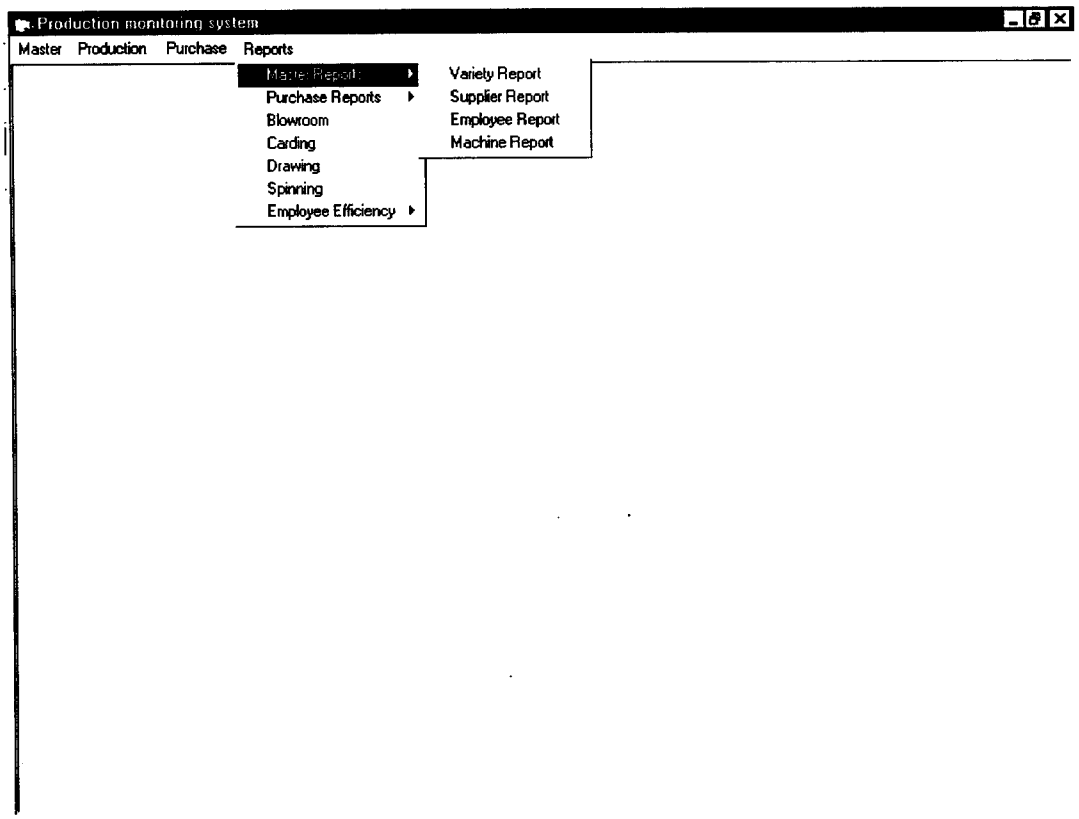
## Form Showing the Production Menu:



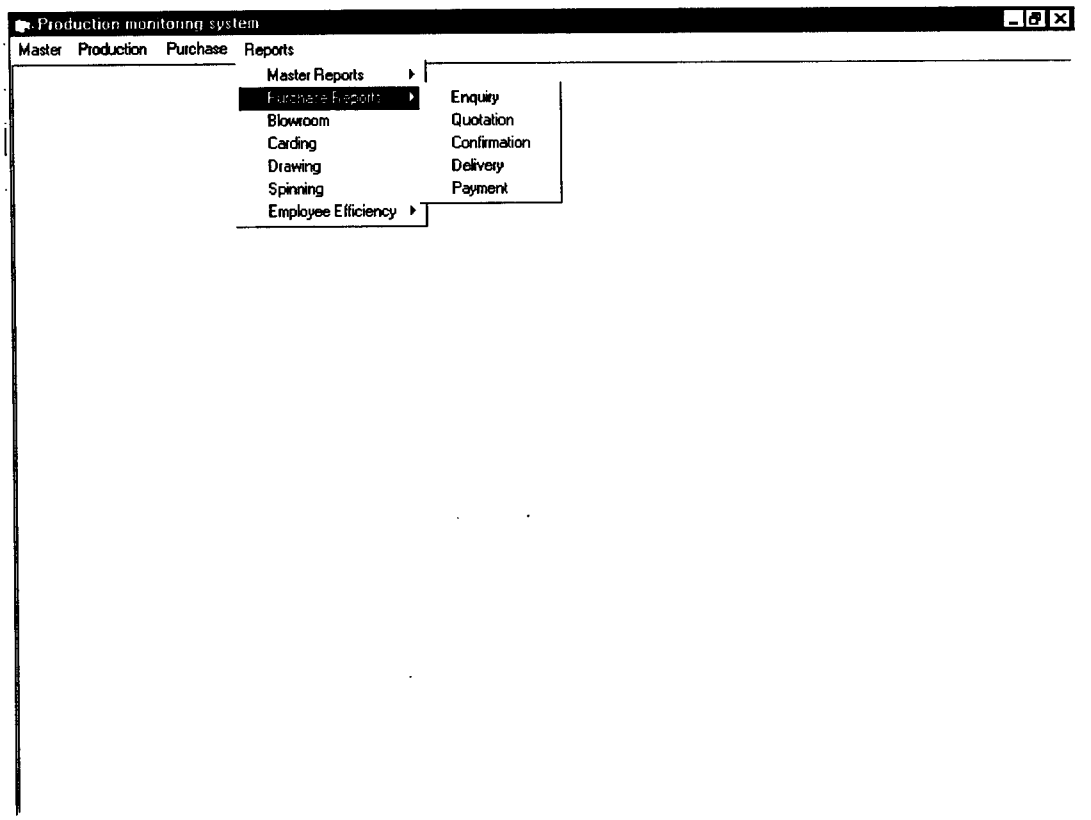
## Main Form Showing The Production Menu:



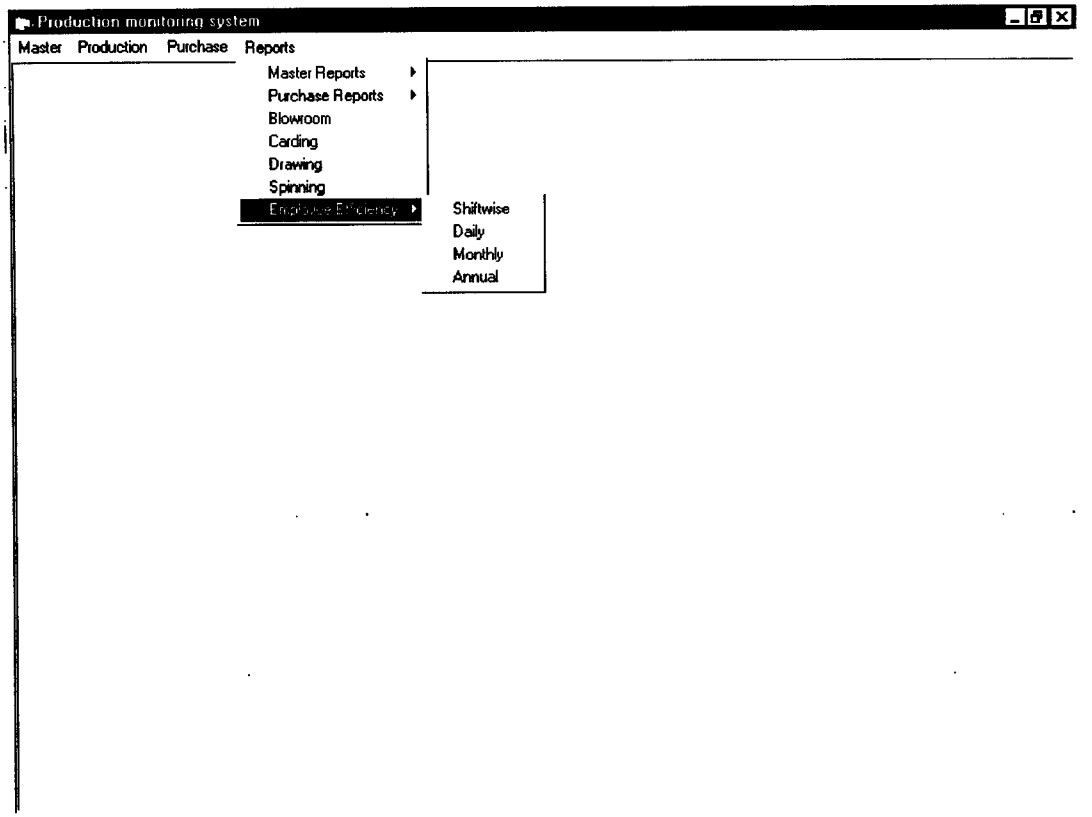
## Main Form Showing The Master Report Menu:



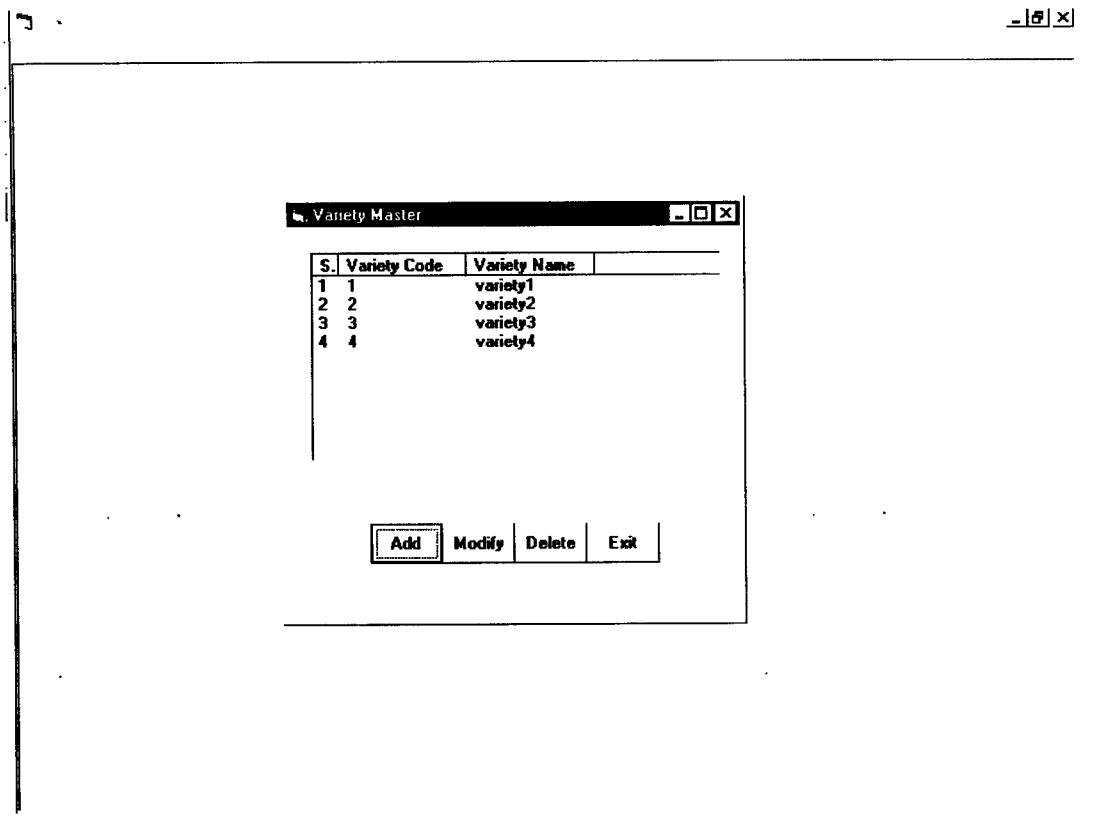
## Main Form Showing The Purchase Reports Menu:



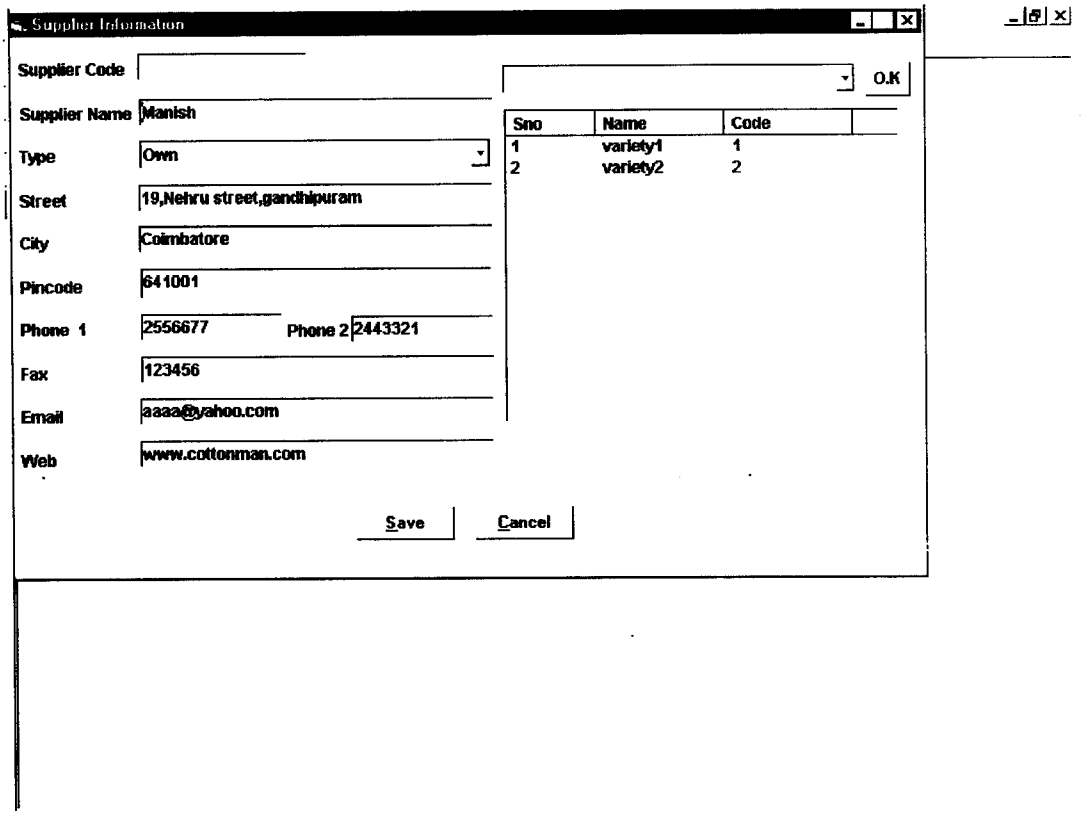
## Main Form Showing The Employee Efficiency Report Menu:



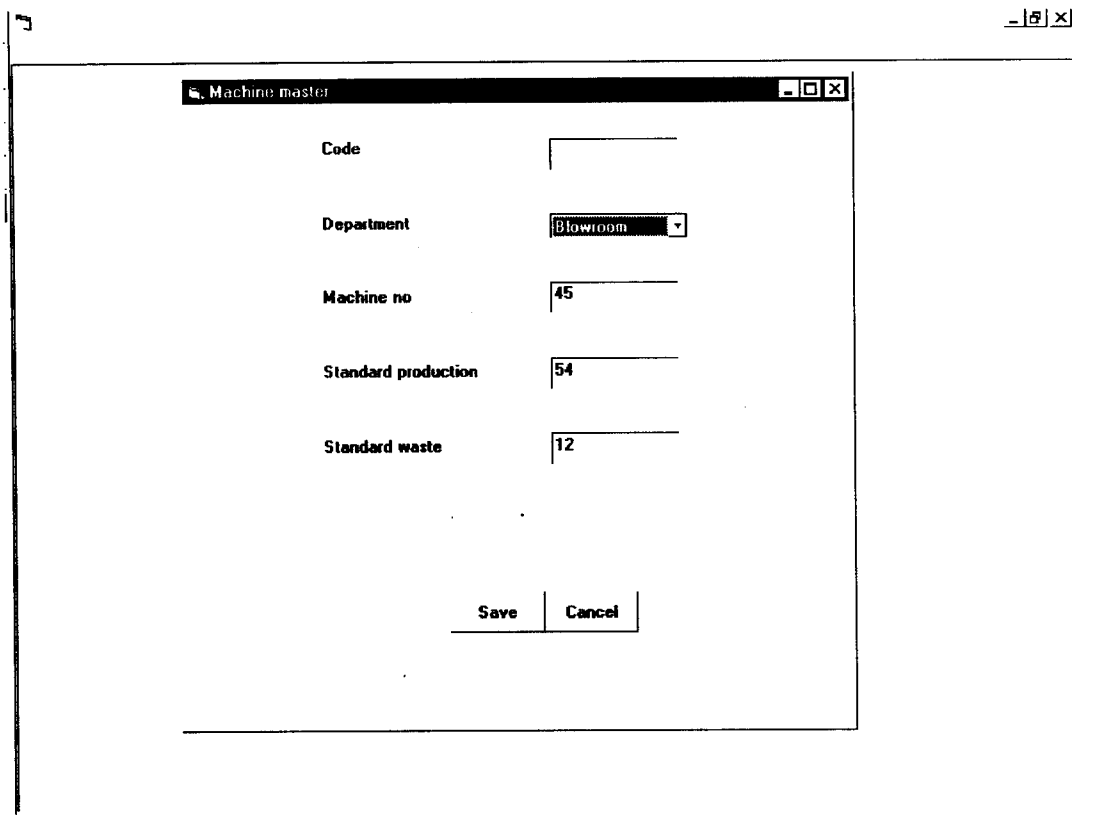
## Variety Master Form:



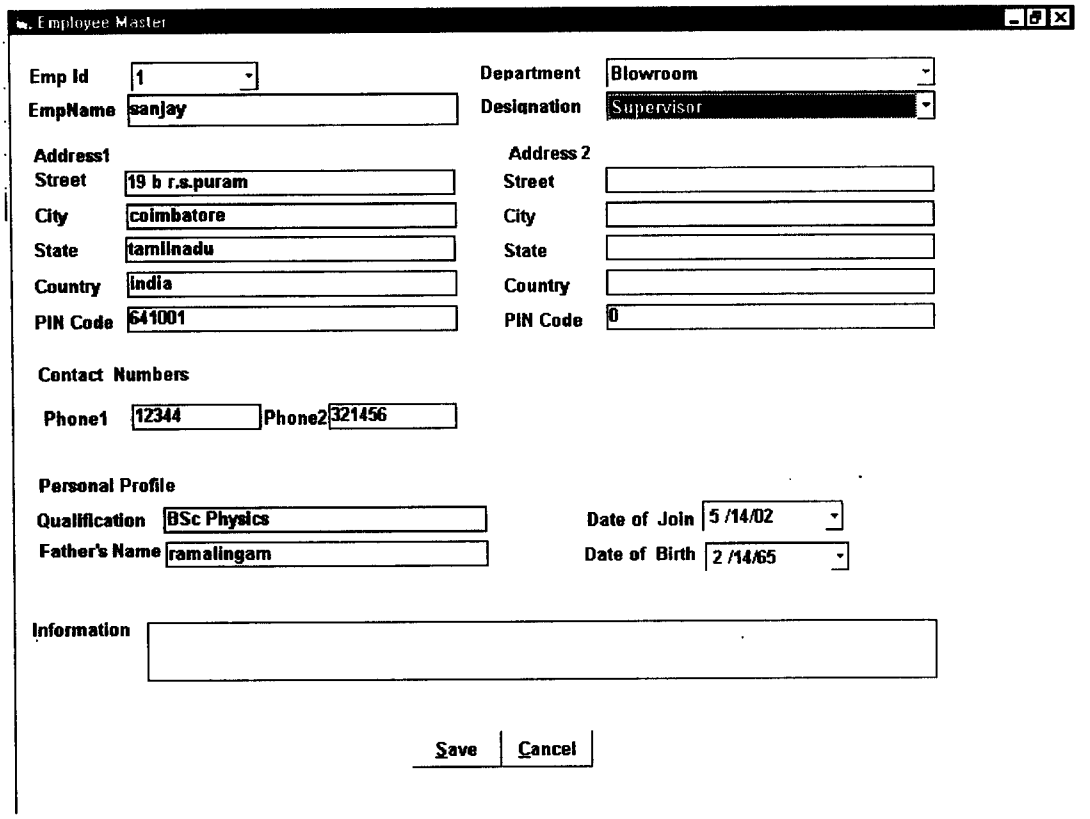
## Supplier Master Form:



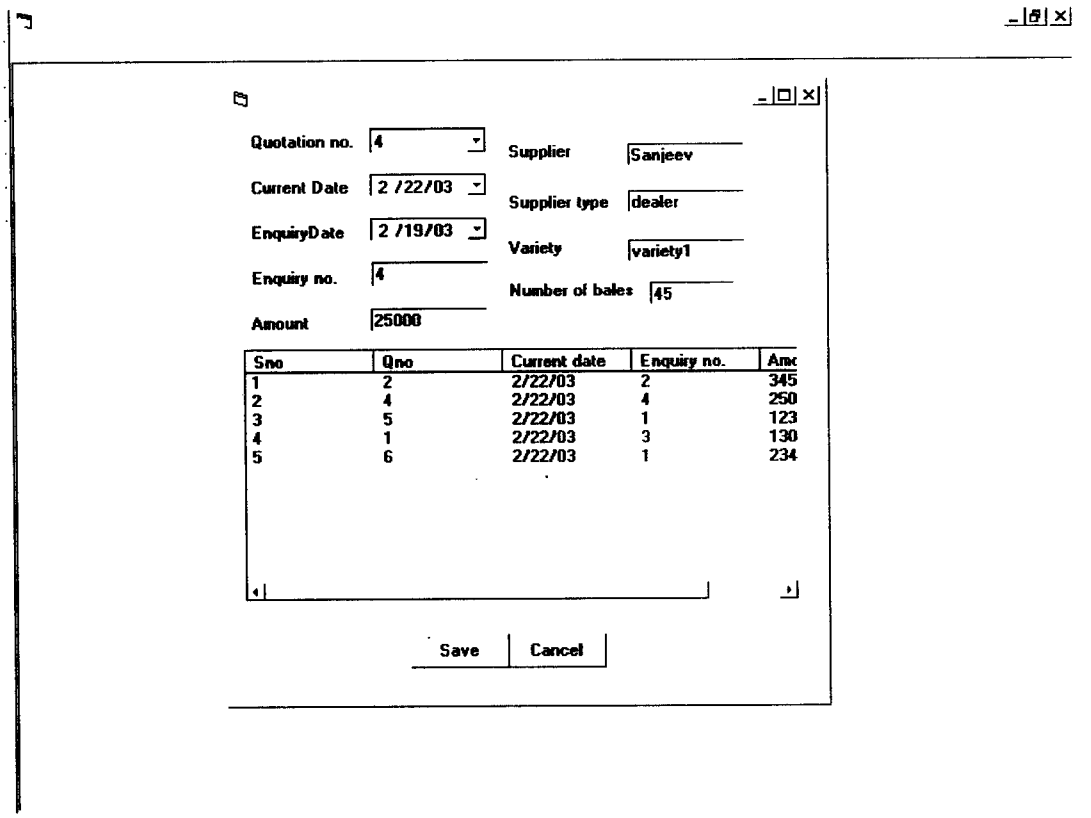
## Machine Master Form:



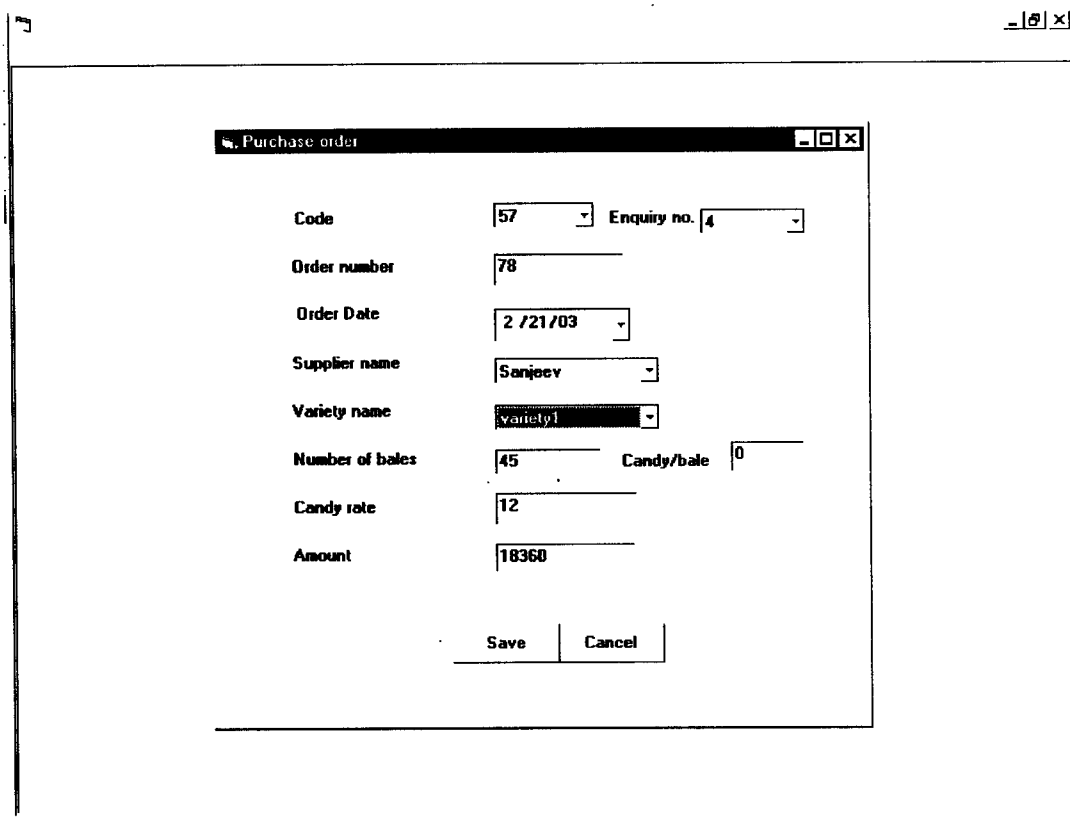
# Employee Master Form:



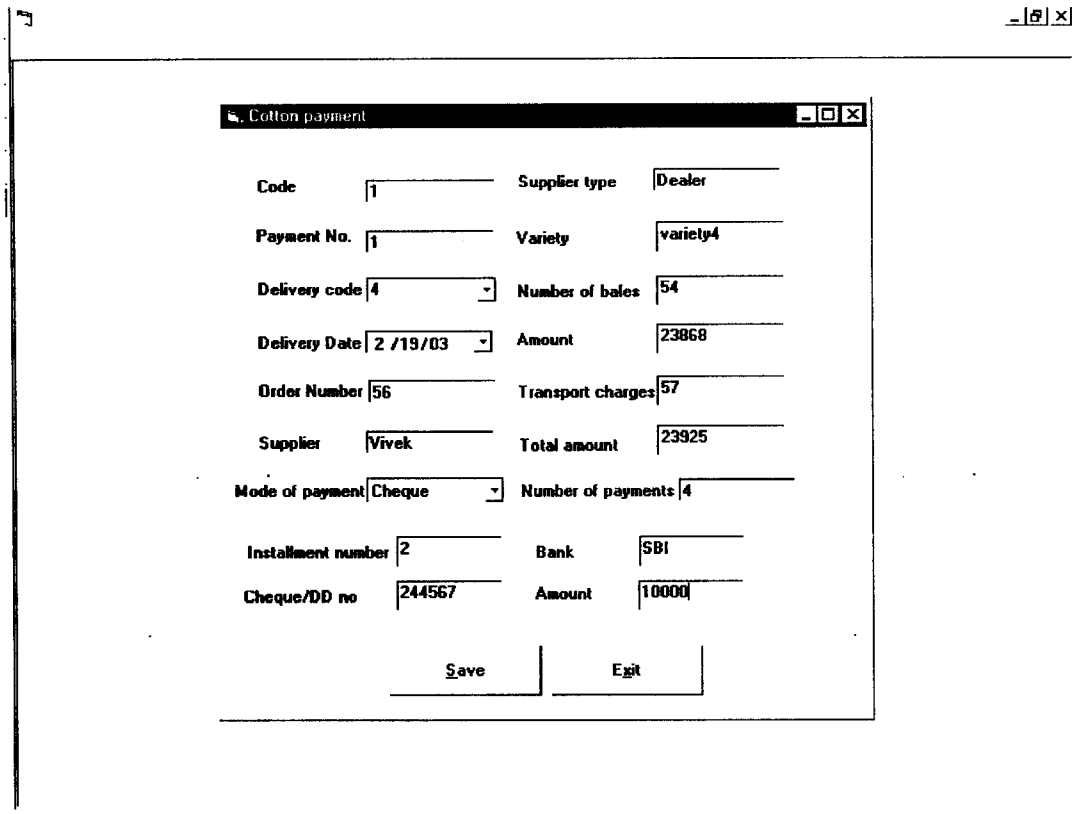
# Quotation Form:



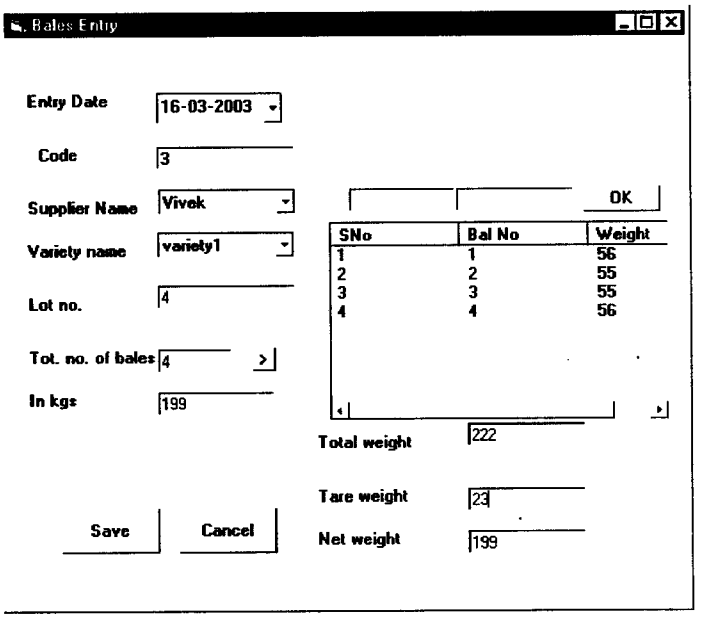
## Purchase Order Form:



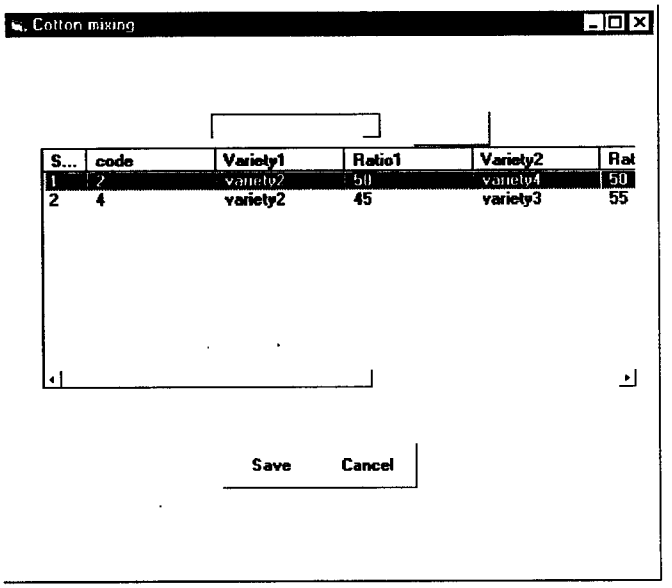
## Payment To Supplier Form:



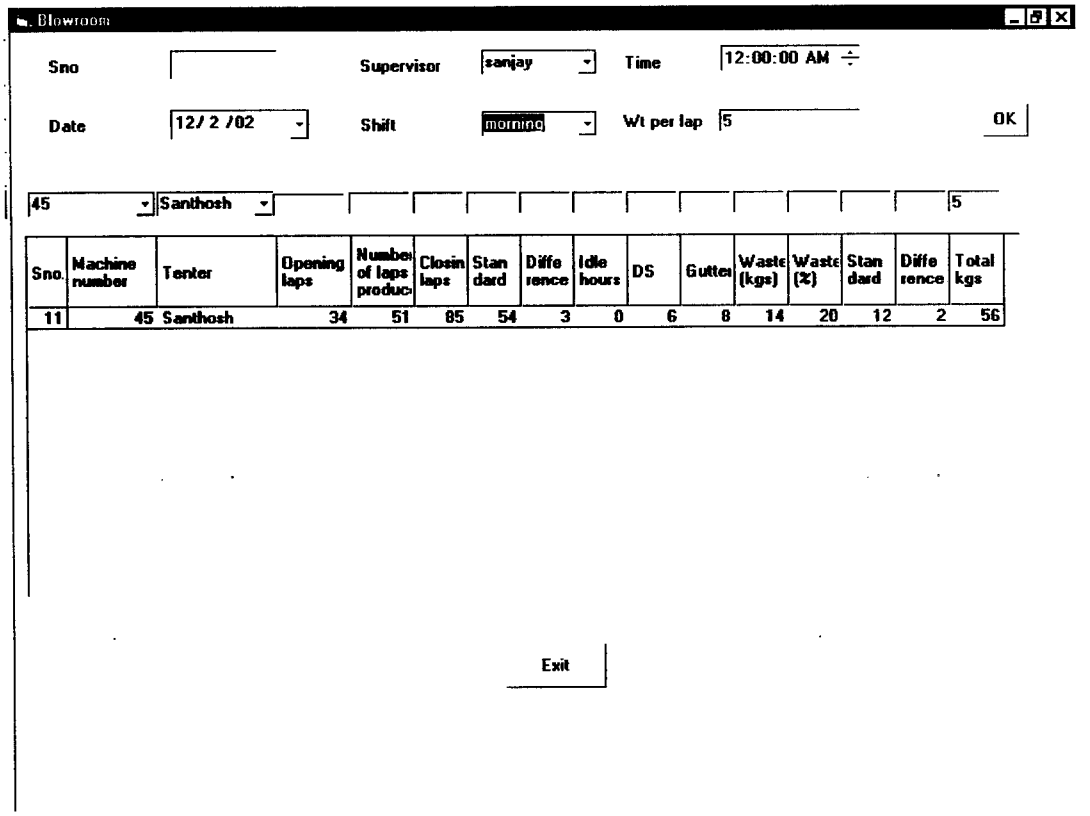
# Bales Entry Form:



## Mixing Form:


Cotton mixing
S...
code
Variety1
Ratio1
Variety2
Rat
1
2
variety2
50
variety4
50
2
4
variety2
45
variety3
55
Save
Cancel

## Blowroom Form:



## 9.2. SAMPLE CODING

### Supplier Details form Coding

```
Dim ls As ListItem
Dim tag1 As Integer
Dim rs As New ADODB.Recordset

Private Sub Cbosname_Click()
LvwVar.ListItems.clear
If rs.State = adStateOpen Then rs.Close
rs.Open " select * from sup_mast where supname='" & Cbosname & "'", cn, 3,1
TxtSCode.Enabled = True
TxtSCode = rs!SUPCODE
TxtStreet = rs!street
TxtCity = rs!city
Txtpin = rs!pincode
TxtSName.Visible = True
TxtSName = rs!supname
Cbosname.Visible = False
If Not IsNull(rs!phone1) Then TxtPhone1 = rs!phone1
If Not IsNull(rs!phone2) Then TxtPhone2 = rs!phone2
If Not IsNull(rs!e_mail) Then TxtEmail = rs!e_mail
If Not IsNull(rs!website) Then TxtWeb = rs!website
If Not IsNull(rs!fax) Then TxtFax = rs!fax
If tag1 = 2 Or tag2 = 3 Then
   cbotype = rs!Type
End If
Call addcbovar
If rs.State = adStateOpen Then rs.Close
rs.Open "select a.* from var_mast a,sup_var b where a.varcode=b.varcode and b.supcode=
" & Val(TxtSCode) & "", cn, 3, 1
```

```
While rs.EOF = False
Set ls = LvwVar.ListItems.Add(, , LvwVar.ListItems.Count + 1)
   ls.SubItems(1) = rs!varname
   ls.SubItems(2) = rs!varcode
   rs.MoveNext
Wend
TxtSCode.Enabled = False
End Sub

Private Sub cmdadd_Click()
Dim n As Integer
tag1 = 1
Frame1.Enabled = True
Frame3.Visible = True
Frame2.Visible = False
TxtSName.Visible = True
Cbosname.Visible = False
If rs.State = adStateOpen Then rs.Close
rs.Open "select max(supcode) from sup_mast", cn, 3, 1
If Not IsNull(rs(0)) Then
   n = rs(0) + 1
  Else
   n = 1
End If
TxtSCode = n
TxtSName.SetFocus
Call addcbovar
End Sub

Private Sub cmdcan_Click()
Frame2.Visible = True
Frame3.Visible = False
Frame1.Enabled = False
```

```
Cbosname.Visible = False
TxtSName.Visible = True
LvwVar.ListItems.clear
Call clear
End Sub

Private Sub cmddel_Click()
Frame1.Enabled = True
cmdokk.Visible = True
Frame3.Visible = True
Frame2.Visible = False
TxtSName.Visible = False
Cbosname.Visible = True
Cbosname.clear
If rs.State = adStateOpen Then rs.Close
rs.Open "select supname from sup_mast", cn, 3, 1
While Not rs.EOF
   Cbosname.AddItem rs!supname
   rs.MoveNext
Wend
Cbosname.SetFocus
TxtSName = Cbosname
End Sub

Private Sub cmdedit_Click()
tag1 = 2
Frame1.Enabled = True
Frame3.Visible = True
Frame2.Visible = False
Cbosname.Visible = True
TxtSName.Visible = False
Cbosname.clear
If rs.State = adStateOpen Then rs.Close
```

```
rs.Open "select supname from sup_mast", cn, 3, 1
While Not rs.EOF
   Cbosname.AddItem rs!supname
   rs.MoveNext
Wend
Cbosname.SetFocus
End Sub
Private Sub cmdexit_Click()
Unload Me
End Sub

Private Sub cmdok_Click()
If rs.State = adStateOpen Then rs.Close
rs.Open "select * from var_mast where varname='" & Trim(CboVar) & "'", cn, 3,1
While rs.EOF = False
   Set ls = LvwVar.ListItems.Add(, , LvwVar.ListItems.Count + 1)
   ls.SubItems(1) = rs!varname
   ls.SubItems(2) = rs!varcode
   rs.MoveNext
Wend
End Sub

Private Sub cmdokk_Click()
Frame2.Visible = True
Frame3.Visible = False
Frame1.Enabled = False
TxtSName.Visible = True
TxtSName = Cbosname
cn.Execute "delete from sup_mast where supname='" & TxtSName & "'"
TxtSName.Visible = False
MsgBox "Record deleted"
Cbosname.clear
Call clear
```

```
End Sub
Private Sub cmdsave_Click()
Frame2.Visible = True
Frame3.Visible = False
Frame1.Enabled = False
TxtSName.Visible = True
Cbosname.Visible = False
If tag1 = 2 Then
cn.Execute "delete from sup_mast where supcode=" & Val(TxtSCode) & ""
cn.Execute "delete from sup_var where supcode=" & Val(TxtSCode) & ""
TxtSName = Cbosname
End If
If TxtSName = " " Then
   MsgBox "Supplier name cannot be NULL"
   TxtSName.SetFocus
   Exit Sub
End If
If TxtStreet = " " Then
   MsgBox "Street cannot be NULL"
   TxtStreet.SetFocus
   Exit Sub
End If
If TxtCity = " " Then
   MsgBox "City cannot be NULL"
   TxtCity.SetFocus
   Exit Sub
End If
If Val(txtpin) = 0 Then
   MsgBox "Pincode cannot be NULL"
   txtpin.SetFocus
   Exit Sub
End If
```

```
cn.Execute "insert into sup_mast values(" & Val(TxtSCode) & ",'" & TxtSName & "','" &
TxtStreet & "','" & TxtCity & "'," & Val(txtpin) & "," & Val(TxtPhone1) & "," &
Val(TxtPhone2) & ",'" & TxtEmail & "','" & TxtWeb & "','" & TxtFax & "','" & cbotype &
"')"
For I = 1 To LvwVar.ListItems.Count
   cn.Execute "insert into sup_var values(" & Val(LvwVar.ListItems(I).SubItems(2)) & ","
& Val(TxtSCode) & ")"
Next I
Call clear
End Sub
Private Sub Form_Load()
If rs.State = adStateOpen Then rs.Close
rs.Open "select * from sup_mast", cn, 3, 1
cmdokk.Visible = False
End Sub

Private Sub clear()
TxtSCode = ""
TxtSName = ""
TxtStreet = ""
TxtCity = ""
txtpin = ""
TxtPhone1 = ""
TxtPhone2 = ""
TxtFax = ""
TxtEmail = ""
TxtWeb = ""
LvwVar.ListItems.clear
End Sub
Private Sub LvwVar_DblClick()
LvwVar.ListItems.Remove (LvwVar.SelectedItem.Index)
For I = 1 To LvwVar.ListItems.Count
LvwVar.ListItems(I).Text = I
```

```
Next I
End Sub

Private Sub TxtPhone1_KeyPress(KeyAscii As Integer)
If KeyAscii > 47 And KeyAscii < 58 Or KeyAscii = 8 Then
Else
KeyAscii = 0
End If
End Sub
Private Sub TxtPhone2_KeyPress(KeyAscii As Integer)
If KeyAscii > 47 And KeyAscii < 58 Or KeyAscii = 8 Then
Else
KeyAscii = 0
End If
End Sub

Private Sub txtpin_KeyPress(KeyAscii As Integer)
If KeyAscii > 47 And KeyAscii < 58 Or KeyAscii = 8 Then
Else
KeyAscii = 0
End If
End Sub

Public Sub addcbovar()
CboVar.clear
If rs.State = adStateOpen Then rs.Close
rs.Open "select varname from var_mast", cn, 3, 1
While Not rs.EOF
   CboVar.AddItem rs!varname
   rs.MoveNext
Wend
If rs.EOF = True Then
rs.MoveFirst
```

```
End If
End Sub
```

## Blowroom Details Form Coding

```
Dim rs As New ADODB.Recordset
Dim n As Integer

Private Sub cbomc_Click()
If rs.State = adStateOpen Then rs.Close
rs.Open "select * from mach_mast where type='Blowroom' and mno=" & Val(cbomc) &
"", cn, 3, 1
txtstd = rs!stdp
txtwstd = rs!stdwas
End Sub

Private Sub CboShift_change()
Call fillgrid
End Sub

Private Sub CboSup_Change()
Call fillgrid
End Sub

Private Sub CboSup_Click()
Call fillgrid
End Sub

Private Sub cmdexit_Click()
Unload Me
End Sub

Private Sub cmdok_Click()
Call addsno
```

```
cn.Execute "insert into Blowroom values(" & Val(txtsno) & "," & Val(cbomc) & "," &
Val(cbotent.ItemData(cbotent.ListIndex)) & "," & Val(Txtopst) & "," & Val(Txtnlap) & ","
& Val(Txtclst) & "," & Val(txtstd) & "," & Val(txtdiff) & "," & Val(txtidle) & "," &
Val(txtwask) & "," & Val(txtwper) & "," & Val(txtwstd) & "," & Val(txtwdiff) & "," &
Val(txttot) & ",'" & cboshift & "'," & Val(cbosup.ItemData(cbosup.ListIndex)) & ",'" &
DTP & "','" & Format(DTPtime, "hh:mm") & "'," & Val(txtdrop) & "," & Val(txtgut) & ")"
Call fillgrid
MsgBox "Record added"
Call clear
End Sub

Private Sub Dtp_Change()
Call fillgrid
End Sub

Private Sub Dtp_Click()
Call fillgrid
End Sub

Private Sub Form_Load()
MSF.RowHeight(0) = 800
MSF.ColWidth(0) = 455
MSF.ColWidth(1) = 1000
MSF.ColWidth(2) = 1335
MSF.ColWidth(3) = 840
MSF.ColWidth(4) = 700
MSF.ColWidth(5) = 600
MSF.ColWidth(6) = 600
MSF.ColWidth(7) = 600
MSF.ColWidth(8) = 600
MSF.ColWidth(9) = 600
MSF.ColWidth(10) = 600
MSF.ColWidth(11) = 600
```

```
MSF.ColWidth(12) = 600
MSF.ColWidth(13) = 600
MSF.ColWidth(14) = 600
MSF.ColWidth(15) = 600
MSF.TextMatrix(0, 0) = "Sno."
MSF.TextMatrix(0, 1) = "Machine number"
MSF.TextMatrix(0, 2) = "Tenter"
MSF.TextMatrix(0, 3) = "Opening laps"
MSF.TextMatrix(0, 4) = "Number of laps produced"
MSF.TextMatrix(0, 5) = "Closing laps"
MSF.TextMatrix(0, 6) = "Stan dard"
MSF.TextMatrix(0, 7) = "Diffe rence"
MSF.TextMatrix(0, 8) = "Idle hours"
MSF.TextMatrix(0, 9) = "DS"
MSF.TextMatrix(0, 10) = "Gutter"
MSF.TextMatrix(0, 11) = "Waste (kgs)"
MSF.TextMatrix(0, 12) = "Waste (%)"
MSF.TextMatrix(0, 13) = "Stan dard"
MSF.TextMatrix(0, 14) = "Diffe rence"
MSF.TextMatrix(0, 15) = "Total kgs"
If rs.State = adStateOpen Then rs.Close
rs.Open "select * from emp_mast where department= 'Blowroom'", cn, 3, 1
cbotent.clear
cbosup.clear
While rs.EOF = False
   If rs("desig") = "Tenter" Then
      cbotent.AddItem rs!ename
      cbotent.ItemData(cbotent.NewIndex) = rs!empno
   End If
   If rs("desig") = "Supervisor" Then
      cbosup.AddItem rs!ename
      cbosup.ItemData(cbosup.NewIndex) = rs!empno
   End If
```

```
  rs.MoveNext
Wend
If rs.State = adStateOpen Then rs.Close
rs.Open "select * from mach_mast", cn, 3, 1
cbomc.clear
While rs.EOF = False
  If rs("type") = "Blowroom" Then
    cbomc.AddItem rs!mno
  End If
  rs.MoveNext
Wend
Call addsno
End Sub

Private Sub MSF_KeyDown(KeyCode As Integer, Shift As Integer)
If KeyCode = 46 Then
  If MsgBox("Are You Sure To Delete the Blowroom Entry", vbYesNo + vbQuestion) =
vbYes Then
    r = MSF.RowSel
    cn.Execute "delete from Blowroom where sno = " & Val(MSF.TextMatrix(r, 0)) & " "
    If MSF.Rows = 2 Then MSF.FixedRows = 0
    MSF.RemoveItem (r)
  End If
End If
End Sub

Private Sub txtgut_Change()
txtwask = Val(txtdrop) + Val(txtgut)
txtwper = Round(Val(txtwask) / 100, 2)
txtwdiff = Val(txtwask) - Val(txtwstd)
txttot = Val(txtwt) + Val(Txtnlap)
End Sub
```

```
Private Sub Txtnlap_Change()
Txtclst = Val(Txtopst) + Val(Txtnlap)
txtdiff = Val(txtstd) - Val(Txtnlap)
Dim h As Double
Dim min As Double
Dim n As Double
m = Val(Txtnlap) * (480 / Val(txtstd))
If (480 - m) > 60 Then
   h = (480 - m) / 60
   min = (480 - m) Mod 60
Else
   h = 0
   min = 480 - m
End If
txtidle = h & ":" & min
If Val(txtwt) = 0 Then
   MsgBox "Enter the weight per lap"
   txtwt.SetFocus
   Exit Sub
End If
txttot = Val(Txtnlap) * Val(txtwt)
End Sub

Private Sub txttot_Change()
Call txtwask_Change
End Sub

Private Sub txtwask_Change()
If Val(txtwask) <> 0 And Val(txttot) <> 0 Then
txtwper = Round((Val(txtwask) / (Val(txtwask) + Val(txttot))) * 100, 2)
End If
End Sub
```

```
Public Sub fillgrid()
Dim r As Integer
MSF.Rows = 1
If cboshift = "" Then Exit Sub
If cbosup = "" Then Exit Sub
r = 1
If rs.State = adStateOpen Then rs.Close
rs.Open "select a.*,b.ename from Blowroom a,emp_mast b where a.shift = '" & cboshift &
"' and a.date1 = #" & DTP & "# and b.empno = a.tenter", cn,3,1
If rs.EOF = False Then
While rs.EOF = False
MSF.Rows = MSF.Rows + 1
MSF.TextMatrix(r, 0) = rs!sno
MSF.TextMatrix(r, 1) = rs!mcno
MSF.TextMatrix(r, 2) = rs!ename
MSF.TextMatrix(r, 3) = rs!opstock
MSF.TextMatrix(r, 4) = rs!lapsprod
MSF.TextMatrix(r, 5) = rs!clstock
MSF.TextMatrix(r, 6) = rs!std
MSF.TextMatrix(r, 7) = rs!diff
MSF.TextMatrix(r, 8) = rs!idlehrs
MSF.TextMatrix(r, 9) = rs!droppings
MSF.TextMatrix(r, 10) = rs!gutter
MSF.TextMatrix(r, 11) = rs!wastekgs
MSF.TextMatrix(r, 12) = rs!wasteper
MSF.TextMatrix(r, 13) = rs!stdw
MSF.TextMatrix(r, 14) = rs!diffw
MSF.TextMatrix(r, 15) = rs!totkgs
r = r + 1
rs.MoveNext
Wend
End If
End Sub
```

```
Public Sub clear()
Txtopst = ""
Txtnlap = ""
Txtclst = ""
txtstd = ""
txtdiff = ""
txtidle = ""
txtwask = ""
txtwper = ""
txtwstd = ""
txtwdiff = ""
txttot = ""
txtdrop = ""
txtgut = ""
End Sub

Private Sub txtwt_Change()
If Val(Txtnlap) <> 0 Then
   Txtnlap.SetFocus
Else
   cbomc.SetFocus
End If
End Sub

Public Sub addsno()
If rs.State = adStateOpen Then rs.Close
rs.Open "select max(sno) from Blowroom", cn, adOpenKeyset, adLockOptimistic
If Not IsNull(rs(0)) Then
   n = rs(0) + 1
  Else
   n = 1
End If
```

```
txtsno = n
End Sub
```

# COTTON ENQUIRY REPORT

## *SRI MADHURAMBIKAI SPINNING MILL Pvt. Ltd.*

## *VELLAKOVIL-638111*

### Cotton Enquiry from 2/19/03 To 3/12/0

| Enquiry Number | Date | Supplier | Type | Variety | Number of bales |
|---|---|---|---|---|---|
| 2 | 21/Feb/03 | rygth | own | variety2 | 45 |
| 1 | 19/Feb/03 | frht | own | variety4 | 45 |
| 4 | 21/Feb/03 | tryht | dealer | variety1 | 45 |

# COTTON ORDER REPORT

## *SRI MADHURAMBIKAI SPINNING MILL Pvt. Ltd.*

## *VELLAKOVIL-638111*

### Cotton Order From 2/19/03 3/1Label1

| Order Number | Supplier Name | Variety Name | Order Date | No. of Bales | Candy Rate | Total Amount |
|---|---|---|---|---|---|---|
| 78 | Sanjeev | variety1 | 2/21/03 | 45 | 12 | 18360 |
| 35 | Manish | variety4 | 2/19/03 | 454 | 23 | 365470 |
| 356 | Manish | variety4 | 2/19/03 | 45 | 12 | 66420 |

# COTTON DELIVERY REPORT

## *SRI MADHURAMBIKAI SPINNING MILL Pvt. Ltd.*

## *VELLAKOVIL-638111*

### Invoice Report From 2/19/03 To 3/12/0

| Invoice Number | Delivery Date | Total Kgs | Vehicle Number | Vehicle Type | Transport Charge | Total Amount |
|---|---|---|---|---|---|---|
| 4 | 19/Feb/03 | 45 | fdy78698 | Rent | 57 | 8457 |
| 5 | 19/Feb/03 | 45 | jgh879080 | Own | 0 | 18360 |
| 2 | 19/Feb/03 | 45 | aaabbb89k | Rent | 456 | 8856 |

# VARIETY DETAILS REPORT

***SRI MADHURAMBIKAI SPINNING MILL Pvt. Ltd.***

***VELLAKOVIL-638111***

## Cotton Variety Details As On 3/19/03

| Variety code | Variety Name | Stock in Kgs |
|---|---|---|
| 1 | variety1 | 456 |
| 4 | variety4 | 445 |
| 3 | variety3 | 711 |
| 2 | variety2 | 545 |

**Total Stock In Kgs: 2157**

# EMPLOYEE DETAILS REPORT

***SRI MADHURAMBIKAI SPINNING MILL Pvt. Ltd.***

***VELLAKOVIL-638111***

## Employee details as on 3/19/03

| Employee Number | Name | Phone1 | Qualifictation | Designation | Department |
|---|---|---|---|---|---|
| 1 | sanjay | 12344 | BSc Physics | Supervisor | Blowroom |
| 2 | ram | 2334455 | BSc chemistry | Supervisor | Carding |
| 3 | Ajay | 2345678 | B.A. III | Supervisor | Drawing |
| 4 | Manoj | 2675432 | B.A eco | Supervisor | Spinning |
| 5 | Santhosh | 2134567 | nill | Tenter | Blowroom |

# MACHINE REPORT

***SRI MADHURAMBIKAI SPINNING MILL Pvt. Ltd.***

***VELLAKOVIL-638111***

## Machine Details As On 3/19/03

| Machine Code | Department | Machine Number | Standard Production in kgs | Standard Waste in kgs |
|---|---|---|---|---|
| 7 | Carding | 15 | 43 | 11 |
| 8 | Drawing | 21 | 47 | 11 |
| 9 | Spinning | 13 | 45 | 5 |
| 10 | Blowroom | 11 | 50 | 10 |

**Total Number OF Machines: 4**

# BLOWROOM SHIFT WISE REPORT

## *SRI MADHURAMBIKAI SPINNING MILL Pvt. Ltd.*

## *VELLAKOVIL-638111*

### Shiftwise Production Details Of The Blowroom

**Shift: Morning** **Date: 2/19/03**

| Machine Number | Standard Production | Production | Standard Waste | Waste | Machine Efficiency |
|---|---|---|---|---|---|
| 45 | 50 | 54 | 10 | 12 | 106.00% |
| 11 | 50 | 50 | 10 | 10 | 94.00% |

# CARDING DAILY REPORT

## *SRI MADHURAMBIKAI SPINNING MILL Pvt. Ltd.*

## *VELLAKOVIL-638111*

### Daily Report Of Carding Section

### Date: 2/19/03

| Shift | Machine Number | Standard Production | Production | Standard Waste | Waste | Machine Efficiency |
|---|---|---|---|---|---|---|
| Morning | 2 | 43 | 55 | 11 | 11 | 106.98% |
| Morning | 7 | 43 | 43 | 11 | 11 | 90.70% |
| Evening | 2 | 43 | 55 | 11 | 11 | 109.30% |
| Evening | 7 | 43 | 43 | 11 | 11 | 93.02% |

# MONTHLY REPORT OF DRAWING

## *SRI MADHURAMBIKAI SPINNING MILL Pvt. Ltd.*

## *VELLAKOVIL-638111*

### Monthly Report Of Drawing Section

| Date | Shift | Machine Number | Standard Production | Production | Standard Waste | Waste | Machine Efficiency |
|---|---|---|---|---|---|---|---|
| 19/Feb/03 | morning | 3 | 47 | 45 | 11 | 9 | 95.74% |
| 19/Feb/03 | morning | 8 | 47 | 47 | 11 | 11 | 87.23% |
| 19/Feb/03 | evening | 8 | 47 | 47 | 11 | 11 | 93.62% |
| 19/Feb/03 | evening | 3 | 47 | 45 | 11 | 9 | 87.23% |

# ANNUAL REPORT OF SPINNING

## *SRI MADHURAMBIKAI SPINNING MILL Pvt. Ltd.*

## *VELLAKOVIL-638111*

### Annual Report Of SPINNING Section

| Date | Shift | Machine Number | Standard Production | Production | Standard Waste | Waste | Machine Efficiency |
|---|---|---|---|---|---|---|---|
| 19/Feb/03 | morning | 3 | 47 | 47 | 11 | 9 | 95.74% |
| 19/Feb/03 | morning | 8 | 47 | 47 | 11 | 11 | 87.23% |
| 19/Feb/03 | evening | 8 | 47 | 47 | 11 | 11 | 93.62% |
| 19/Feb/03 | evening | 3 | 47 | 47 | 11 | 9 | 87.23% |