

# ***INVENTORY CONTROL SYSTEM***

## **SPINDLES AND RINGS UNIT, LAKSHMI MACHINE WORKS, COIMBATORE**

Submitted in partial fulfilment of the requirements for the award of the degree of

**B.Sc Applied Sciences - Computer Technology**

of **Bharathiar University, Coimbatore.**

*A-462*

Submitted by

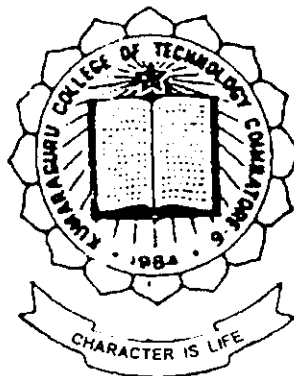
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**Department of Computer Science & Engineering**

**Kumaraguru College of Technology**

**PROJECT REPORT**

**1999 - 2000**

# CERTIFICATE

This is to certify that the project entitled "INVENTORY CONTROL SYSTEM"

Done At

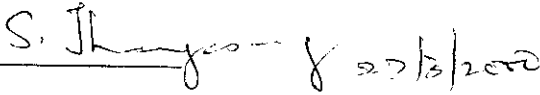
**SPINDLES AND RING UNIT,  
LAKSHMI MACHINE WORKS, COIMBATORE**

submitted to **Kumaraguru College of Technology** (Affiliated to Bharathiar University,  
Coimbatore.) in partial fulfillment of the requirements for the award of the  
**B.Sc. Applied Sciences - Computer Technology** is record of original work done by:

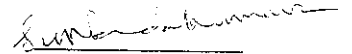
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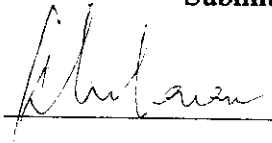
 S. Jeyaraj - 8 27/3/2000

Professor and Head

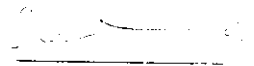


Staff in-charge

Submitted for University Examination held on 28.03.2000



Internal Examiner



External Examiner

# DECLARATION

We hereby declare that the project work entitled

**"INVENTORY CONTROL SYSTEM"**

done at

**LAKSHMI MACHINE WORKS**

**SPINDLES AND RINGS UNIT**

**COIMBATORE**

and submitted to

**KUMARAGURU COLLEGE OF TECHNOLOGY**

(Affiliated to Bharathiar University, Coimbatore.)

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

**B.Sc. Applied Sciences - Computer Technology**

is a report of work done by us during the period of study in Kumaraguru College of  
Technology, Coimbatore - 641006.

Under the supervision of

**Mr. Su.Nandakumarr B.E.**

Name of the candidate

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9727600014

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Date: 28.03.2000

Place: COIMBATORE



**LMW**

**LAKSHMI MACHINE WORKS LIMITED**

**HRD/2000  
23.03.2000**

**CERTIFICATE**

This is to certify that Ms.R.Aarti and Ms.A.Geetha, III year B.Sc. Computer Technology students of Kumaraguru College of Technology Chinnavedampatti, Coimbatore 641 006 had done their project titled "INVENTROY CONTROL SYSTEM" in our Company from November 1999 to March 2000.

For LAKSHMI MACHINE WORKS LIMITED.

  
DEPUTY GENERAL MANAGER - HRD



*dedicated to*

*our beloved parents  
and  
friends*

## **ACKNOWLEDGEMENT**

We take this opportunity to express our deep sense of gratitude to **Dr.K.K.Padmanaban B.Sc.(Engg), M.Tech., Ph.D., Principal, KUMARAGURU COLLEGE OF TECHNOLOGY,COIMBATORE.** for his support in the successful completion of this project.

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We extend our heartfelt thanks to **Mr. Raja Rathinam B.Sc., Spindles and Rings Unit, LAKSHMI MACHINE WORKS, COIMBATORE.** for his graceful support and esteemed co-operation for the fulfillment of the project.

Last but not the least we express our sincere thanks to our parents and friends who were always there whenever the need arouse.

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# **1. INTRODUCTION**

## **1.1. Organisation Profile**

Lakshmi Machine Works, Coimbatore, manufactures all types of spinning machinery from blow room lines upto Ring Spinning frames.

LMW's Spindles and Rings Unit is an ancillary unit, manufacturing spindles, spinning rings and toprollers for ring ring frame. It also manufactures all types of gears for all frames. Apart from manufacturing and supplying to LMW main unit, Spindles and Ring Unit manufactures rings and spindles against customer's specific orders.

Inventory system has been developed to control all the raw materials required to manufacture the above components at Spindles and Ring Unit.

## **1.2. Overview of Project**

The system mainly deals with the control of items stock in the store. It keeps track of the existing items. On line information about the item stock.

Receiving goods are done based on the minimum level and recorder level. This helps to maintain the quality of goods.

Issuing of goods is done based on the requirement for developing the product.

Thus the system is designed to satisfy the above needs, using VisualBasic 6.0 as Front Eend and Oracle 8.0 as Back End. No data source name is required, only drivers are required for the project.

## **1.3. Objective of the project**

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

- Robustness
- Portability
- Making users job friendly
- Providing on line information
- More accuracy.

---

*system analysis*

## **2. SYSTEM ANALYSIS**

### **2.1. Need for Computerisation**

When inventory was done manually, all the entries, transaction, reports were to be prepared by the manual effort. This resulted in many drawbacks.

They were mainly disadvantageous because:

Largely time consuming, difficult to preserve old records, no proper efficiency. As the demands are growing larger and larger, manual power increases and hence they find hard to keep track of the information and datas. Hence the operations are computerised.

When computerised, the above constraints are broken.

### **2.2. Proposed System**

The system is designed by making a detailed study of the previous system. It was thoroughly analysed and the new system is developed.

The new system comprises of five modules, each having its own sub-modules.

- Maintenance
- Transaction
- Query
- Reports
- House keeping

The maintenance module keeps track of the item details. It helps in maintaining the updated information about the current items. To help this module, three sub-modules namely Addition, Deletion and modification of items are given

Any new item can be added. Modification can be made on any fields except Opening balance and drawing number. Deletion is active, only when a particular items opening balance is null.

The transaction deals with all the dealings of the organisation. Items are stocked in and issued out, with this module. An items is stocked in when its current stock falls below minimum (or) recorder level. Issues are done based on manufacturing.

The Query helps to view the item status. The item status below minimum level, recorder level can be viewed. Apart from this, the item status of the current month can be known.

The Reports are developed based on the users requirement. There are 3 reports, which can be viewed whenever required. The reports are namely Priced Store ledger, Weekly balance report, monthly consumption report.

The housekeeping module helps to maintain the ledgers of the previous month. For every month opening balance of month is updated. When month is april, opening balance of year is updated.

**Salient Features:**

- Multiuser
- High security
- User friendly
- Reports are more clear

### **2.3. Hardware Specification**

#### **Server :**

Pentium II 400 MHz Server Wipro Acer

256 MB RAM / 4.3 GB + 4.3 GB Hard disk drive

1.44 MB Floppy Disk Drive

CD ROM Drive

32-bit Ethernetnet Card

HP -DDS -2 Tape Backup.

SVGA Color Monitor

104 keys keyboard.

#### **Client :**

Pentium 166 MHZ

32 MB RAM / 1.2 GB Hard disk drive

1.44 MB Floppy disk drive

SVGA Color Monitor

104 keys keyboard.

## 2.4. Software Specification

### **Platform**

Server : Windows NT 4.0

Client : Windows 95/98/NT(Work Station)Version

**Front End** : Visual Basic 6.0

**Back End** : Oracle 8.0



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*system design*

### 3. SYSTEM DESIGN



The more creative & challenging phase of the system life cycle is System Design. The design focuses on the detailed implementation of the system. The design phase is a transition from a user - oriented document to a document oriented to the programmers. System design goes through two phases of development and they are logical and physical level of detail that virtually determines information flow into and out of the system and the required data sources.

First step in design phase is to determine how the output is to be produced and in what format. Secondly, input data and the tables have to be designed to meet the requirement of the proposed output.

#### 3.1. Input Design

Input to a system can be defined as the information that is to be provided to the system that is used for further processing by the systems to obtain meaningful information which helps in decision making.

Input design consists of developing specifications and procedures necessary for processing the data entered.

```

Private Sub mnuViewToolbar_Click()
    mnuViewToolbar.Checked = Not mnuViewToolbar.Checked
    tbToolBar.Visible = mnuViewToolbar.Checked
End Sub

```

```

Private Sub SubQuery_Click(Index As Integer)
    On Error Resume Next
    Cn.Execute "create table qrytmp (DRG_NO VARCHAR2(9),
        DESCRIPTION VARCHAR2(35),
        lev number(9,2),
        Unit varchar2(2),
        lev1 number(9,2))"

    Select Case Index
        Case 1
            Rec1.Open "select drg_no, description, unit, mini_level from maint " _
                "order by drg_no", Cn
        Case 0
            Rec1.Open "select drg_no, description, unit, reorder_level from maint " _
                "order by drg_no", Cn
    End Select

    Do While Not Rec1.EOF
        Call ChkRec(Rec1(0), Format(Date, "mmm"))
        If SumP < Rec1(3) Then
            Cn.Execute "insert into qrytmp values (" _
                & Rec1(0) & ", " & Rec1(1) & ", " _
                & SumP & ", " & UtAry(Rec1(2) - 1) & ", " _
                & Rec1(3) & ")"
        End If
        Rec.Close
        Rec1.MoveNext
    Loop
    IND = Index
    Rec1.Close
    Rec1.Open "select * from qrytmp", Cn
    If Rec1.EOF Then
        Cn.Execute "drop table qrytmp"
        MsgBox "No Data found"
        Exit Sub
    End If
    Rec1.Close
    Load frmQry1
    frmQry1.Show
End Sub

```

*P. 1452*



```
Private Sub Query2_Click()  
    Load frmQry  
    frmQry.Show  
End Sub
```

```
Private Sub Report_Click(Index As Integer)  
    IND = Index + 1  
    Select Case Index  
        Case 0  
            frmHouse.Caption = " Priced Store Ledger"  
        Case 1  
            frmHouse.Caption = " Monthly Stock Balance Value"  
        Case 3  
            frmHouse.Caption = " Consumption State"  
    End Select  
    Load frmHouse  
    frmHouse.Show  
End Sub
```

```
Private Sub tbToolBar_ButtonClick(ByVal Button As MSComCtlLib.Button)  
    On Error Resume Next  
    Select Case UCase(Button.Key)  
        Case "ITEM"  
            main_Click (0)  
        Case "ISSUE"  
            issue_Click  
        Case "USER"  
            main_Click (2)  
    End Select  
End Sub
```

```
Private Sub mnuHelpAbout_Click()  
    frmAbout.Show vbModal, Me  
End Sub
```

```
Private Sub mnuViewStatusBar_Click()  
    mnuViewStatusBar.Checked = Not mnuViewStatusBar.Checked  
    sbStatusBar.Visible = mnuViewStatusBar.Checked  
End Sub
```

## MDI Form (frmMain)

Option Explicit

Dim Rec1 As ADODB.Recordset

Private Sub ho\_Click()

IND = 0

Load frmHouse

frmHouse.Caption = " HouseKeeping"

frmHouse.Show

End Sub

Private Sub issue\_Click()

Load frmIssueRec

frmIssueRec.Show

End Sub

Private Sub main\_Click(Index As Integer)

Select Case Index

Case 0 'Item

Load frmMaint

frmMaint.Show

Case 2 'User

Load frmUser

frmUser.Show

Case 4

Cn.Close

End

End Select

End Sub

Private Sub MDIForm\_Load()

Set Rec1 = New ADODB.Recordset

End Sub

Private Sub MDIForm\_Unload(Cancel As Integer)

Cn.Close

End

End Sub

```
Private Sub ChkE(Txt As TextBox, Msg As String)
    MsgBox Msg
    Txt.SetFocus
    Txt.SelStart = 0
    Txt.SelLength = Len(Txt.Text)
End Sub
```

```
Public Sub ChkRec(ChkDrgNo As String, cMonth As String)
    SumP = 0
    Rec.Open "select sum(ob_month) from maint " _
        & "where maint.drg_no = " & ChkDrgNo & """, Cn
    SumP = IIf(IsNull(Rec(0)), 0, Rec(0))
    Rec.Close
    Rec.Open "select sum(qty_rece), sum(qty_issu) from trans " _
        & "where trans.drg_no = " & ChkDrgNo _
        & "" and to_char(trans.ref_dt,'Mon') = " & cMonth & """, Cn
    SumP = SumP + IIf(IsNull(Rec(0)), 0, Rec(0))
    SumP = SumP - IIf(IsNull(Rec(1)), 0, Rec(1))
End Sub
```

‘Checking Errors before insert into Oracle

Public Function ChkVal(Txt As TextBox, DType As Byte, Msg As String) As Boolean

ChkVal = True

Select Case DType

Case 0 ‘String

If Len(Trim(Txt.Text)) < 1 Then

Call ChkE(Txt, Msg)

ChkVal = False

End If

Case 1 ‘Numeric

If Not IsNumeric(Txt.Text) Then

Call ChkE(Txt, Msg)

ChkVal = False

End If

Case 2 ‘Date

If Not IsDate(Txt.Text) Then

Call ChkE(Txt, Msg)

ChkVal = False

End If

End Select

End Function

Sub UserChk()

RecLogin.Open "select count(\*) from infn", Cn

Unload frmSplash

fMainForm.Show

If RecLogin(0) > 0 Then

If Len(LoginName) = 0 Then

Load frmLogin

frmLogin.Show 1

End If

Else

FoundUser = True

fMainForm.tbToolBar.Enabled = False

fMainForm.maint.Enabled = False

fMainForm.tr.Enabled = False

fMainForm.q.Enabled = False

fMainForm.R.Enabled = False

fMainForm.ho.Enabled = False

Load frmUser

frmUser.Show

End If

End Sub

## Module

Option Explicit

```
Public fMainForm As frmMain
Public Cn As ADODB.Connection
Public Rec As ADODB.Recordset
Public RecLogin As ADODB.Recordset
Public LoginName As String
Public FoundUser As Boolean
Public SumP As Currency
Public IND As Byte
Public UtAry(4) As String
```

'When start the program This Module is Executed First

```
Sub main()
    frmSplash.Show           'Copy Right and Version Information
    frmSplash.Refresh
    Set fMainForm = New frmMain
    Load fMainForm          'Loading the MDI Form
    SqlConnection            'Connect to Oracle
    UserChk                  'Checking for Users
    UtAry(0) = "No"
    UtAry(1) = "Mt"
    UtAry(2) = "Kg"
    UtAry(3) = "Lt"
End Sub
```

```
Public Sub SqlConnection()
    Set Cn = New ADODB.Connection
    Cn.Open "driver={microsoft ODBC for Oracle};uid=System;pwd=manager;Server="
    Set Rec = New ADODB.Recordset
    Set RecLogin = New ADODB.Recordset
End Sub
```

'Checking the Minimum Value of any numeric variable

```
Public Function ValueChk(Txt As TextBox, MinVal As Currency, Msg As String)
    As Boolean

    ValueChk = True
    If Txt.Text < MinVal Then
        Call ChkE(Txt, Msg)
        ValueChk = False
    End If
End Function
```



---

*Appendix – C: source code*



Zoom 100%

### Stock Validation of 1999 - 2000

Sl.No.	Drawing No.	Description	STOCK			Unit
			Opening	Issued	Received	
1	1000000001	xxxxxxxxxxxxxxxxxxxx	5	0	20	25 Kg
2	2000000001	wwwwwwwwwwwwww	100	79	0	21 Lt
3	3000000001	rrrrrrrrrrrrrr	50	0	45	95 No
4	4000000001	TTTTTTTTTTTT	12	12	0	0 Mt



Zoom 100%

### Consumption Value Statement from 01-Mar-2000 To 31-Mar-2000

Sl.No.	Drawing No.	Description	Opening Value	Receipt Value	Issue Value	Closing Value
1	100000001	XXXXXXXXXXXXXXXXXXXX	1,000.00	0.00	0.00	1,000.00
2	200000001	XXXXXXXXXXXXXXXXXXXX	300,000.00	0.00	0.00	300,000.00
3	300000001	XXXXXXXXXXXXXXXXXXXX	22,800.00	0.00	0.00	22,800.00
4	400000001	XXXXXXXXXXXXXXXXXXXX	3,600.00	0.00	0.00	3,600.00



Zoom 100%

### Stock Value of 1999 - 2000

Sl.No.	Drawing No.	Description	S T O C K			Unit	Rate	Amount
			Opening	Issues	Receipts			
1	100000001	xxxxxxxxxxxxxxxxxxxxx	5	40	40	5 Kg	200.00	1,000.00
2	200000001	VVVVVVVVVVVVV	100	79	0	21 Lt	3,000.00	63,000.00
3	300000001	RRRRRRRRR	50	0	45	95 No	456.00	43,320.00
4	400000001	TTTTTTTTTTT	12	12	0	0 Mt	300.00	0.00

Zoom 100%

### Priced Stores Ledger of 1999 - 2000

Store No.	Drawing No.	Description	Doc.No.	Date	S T O C K		Rate	Work Order
					Opening	Received		
1	100000001	XXXXXXXXXXXXXXXXXXXXX			5		200.00	
			000001 1	23-Mar-2000		20	0	
			000003 1	23-Mar-2000		20	0	
			000003 2	23-Mar-2000		0	40	2
2	200000001	XXXXXXXXXXXXXXXXXXXXX			100		3,000.00	
			000001 2	23-Mar-2000		0	79	2
3	300000001	RRRRRRRRRR			50		456.00	
			000002 1	23-Mar-2000		45	0	1
4	400000001	TTTTTTTTTTTT			12		300.00	
			000002 2	23-Mar-2000		0	12	



Year:  Month:

Process


Back

---

*Appendix – B: sample reports*



**About the Program**

 **Lakshmi Machine Works Ltd. Coimbatore**

Version 1.0.0

Store Management of Lakshmi machine Works Ltd.  
Coimbatore

This computer program is protected by copyright law and international treaties. Reproduction or distribution of this program can be done only with the prior permission of the author.





S.No.	Drawing No.	Description	Opening	Issues	Receipts	Unit
1	200000003	YYYYYYYYYYYYYYYYYYYY	20	0	0	No
2	100000002	YYYYYYYYYYYYYYYYYYYY XXXXXXXXXXXXX	12	12	0	No
3	300000001	WWWWWWWWWWWWWWWW	12	0	20	Kg
4	150000001	TTTTTTTTTTTTTTTTTTTT	20	0	0	Lt

OK

S.No.	Drawing No.	Description	Stock	Re-Order	Unit
1	100000002	XXXXXXXXXXXXXXXXXXXX	0	24	No
2	150000001	TTTTTTTTTTTTTTTTTTTT	20	40	Lt
3	200000003	YYYYYYYYYYYYYYYYYYYY	20	21	No
4	300000001	WWWWWWWWWWWWWWWW	32	100	Kg

OK



S.No	Drawing No.	Description	Stock	Minimum	Unit
1	100000002	XXXXXXXXXXXXXXXXXXXX	0	10	No
2	150000001	XXXXXXXXXXXXXXXXXXXX	20	30	Lt

OK



<input type="checkbox"/> Issue	Date: 22-Mar-2000	Document No.: 11
Reference No.:	Drawing No.:	Work Order No.:
Quantity:	Entry By:	Department:
<input type="button" value="Save"/>	<input type="button" value="Delete"/>	<input type="button" value="Cancel"/>
		<input type="button" value="Back"/>

Ordering No. [ ] Date: 22-Mar-2000

Description: [ ]

Minimum Level: [ ] Maximum Level: [ ] Re-Order Level: [ ]

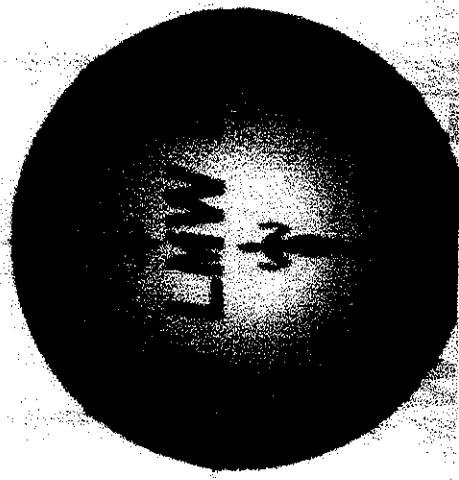
Rate: [ ] Opening Balance: [ ] Unit Detail: No [ ]

Location: [ ] Store No. [ ]

Save      Delete      Cancel      Back



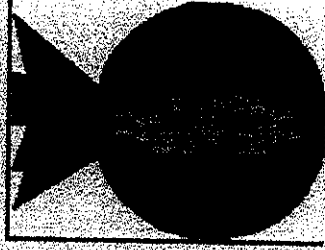
User Name	<input type="text"/>	New Password	<input type="text"/>
		Confirm Password	<input type="text"/>
<b>Personal Details</b>			
First Name	<input type="text"/>	Address	<input type="text"/>
Last Name	<input type="text"/>		
Employee	<input type="text" value="1011111111"/>	Department	<input type="text" value="Sales"/>
		Level	<input type="text" value="User"/>
<input type="button" value="Save"/>	<input type="button" value="Delete"/>	<input type="button" value="Cancel"/>	<input type="button" value="Back"/>



Login

User Name:

Password:



License To  
Product

Platform Windows 95/98/NT/2000

Version

Copyright (C)  
Company

Warning



---

*Appendix – A: sample screens*

---

*appendixes*

## 7. BIBLIGOGRAPHY

<b>TITLE</b>	<b>AUTHOR</b>	<b>PUBLICATION</b>	<b>YEAR</b>
Mastering Visual Basic 6.0	Arman Danesh	BPB	1999
Visual Basic 6.0 (Unleashed)	Rob Thayer	Techmedia	1999
Oracle Programming with Visual Basic	Stephen Walther	BPB	1999
Visual Basic 6.0 Manual		Microsoft Press	1999
Visual Basic for Applications 5.0	Paul Sanna	Prentice-Hall India Pvt. Ltd.	1998
Oracle. A Beginner's Guide	Michael Abbey	Oracle Press	1998
PL/SQL Programming	Michael Abbey	Oracle Press	1998
SQL & Relational Data Bases	Soren Vang	Galgota Publications	1992
Server Concept Manual		Oracle Press	1997
Application Developer's Guide		Oracle Press	1997
SSI Study material		SSI Press	1999

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*bibliography*

## 6. CONCLUSION

The "**Inventory Control System**" has met its objective. This can be sensed by seeing that all the problems in the manual system has been eradicated.

The system has been thoroughly tested with varied test data and was found to be fit. The system reliability is high and enough securities have been provided.

The system is quite useful for new entrants to computers and also experienced users. The system is made user friendly and menu driven. It eases the user with less typing of commands and the user can select everything by simply selecting the options available under menu or by shortcut keys.

### **Scope for future enhancement:**

This system can be developed further, for the complete control of stock with various departments, when the unit is extended with more production of components.

---

*conclusion*

## **SYSTEM TESTING:**

In System Testing, the whole system is tested for the interfaces between the modules and program units are tested and recorded. This testing is done with sample data and live data. The security, communication between the interfaces are tested.

## **ACCEPTANCE TESTING:**

The Acceptance testing is the final stage of testing phase. This is done by the user. The system is given to user and they will test the system with live data. The various possibilities of the data are entered and response from the system is tested. Once this testing is signed-off by the client, then we can successfully implement the system.

## **IMPLEMENTATION:-**

As far as this project is concerned, it is developed using client's hardware and software at the client's site. Hence there is no phase called implementation. The data structure are also available on the system and hence the client can directly use the system.

## **5. SYSTEM TESTING AND IMPLEMENTATION**

System testing is a style of implementation, which is aimed at ensuring that the system works correctly at various levels.

The 'Inventory Control System' has been tested under various conditions with different kinds of data.

The system is tested in three phases:

- Unit testing
- System testing
- Acceptance testing

### **UNIT TESTING:**

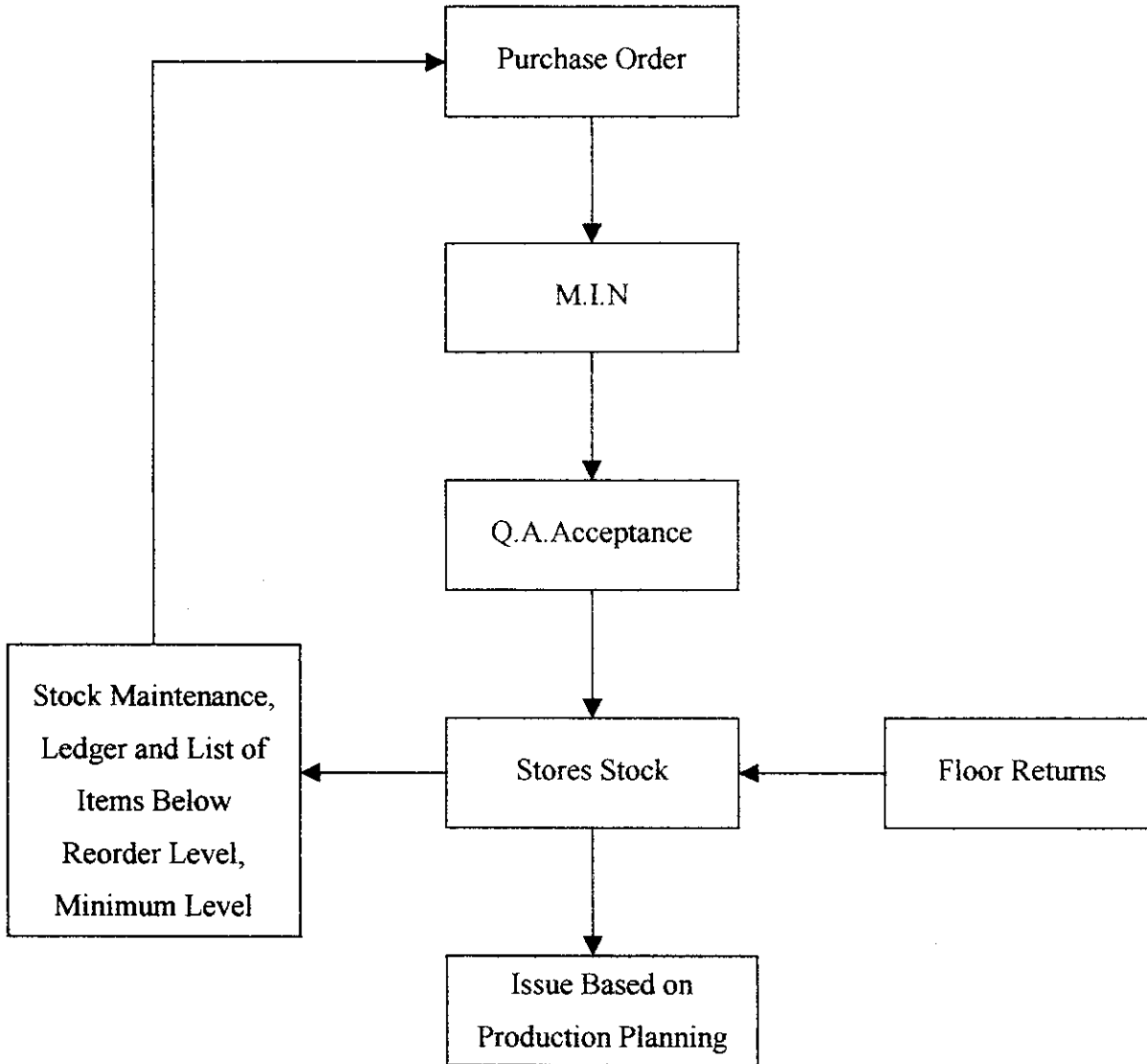
Here, each program unit is tested individually. So any errors in a unit is debugged. Sample data is given for unit testing. The unit test results are recorded for further reference. During unit testing the functionality of the program unit, validations and limitations are tested.



---

*system testing and implementation*

#### 4. SYSTEM FLOW DIAGRAM



**M.I.N.** - Material Inwards Note

**Q.A.** - Quality Assurance

### **3.4 Output Design:**

Outputs from a system is required primarily to communicate the result of processing to the users and to provide permanent copy of these results. While designing the output, the type of the report content format have been taken into consideration.

The reports of the system are generated so as to meet the requirements of top middle and downline management. The report are designed as per the requirements of the client.

## TRANS

<b>Column Name</b>	<b>Type</b>	<b>Description</b>
DOC_NO	VARCHAR2(6)	Document number
WORK_ORD_NO	VARCHAR2(15)	Work order number
TRAN_CODE	VARCHAR2(2)	Transaction code (1-Receipt,2-Issues)
REF_NO	VARCHAR2(6)	Reference number
REF_DT	DATE	Reference date
DRG_NO	VARCHAR2(9)	Drawing number
QTY_ISSU	NUMBER(9,2)	Quantity of items issued
QTY_RECE	NUMBER(9,2)	Quantity of items received
DEPT_NO	VARCHAR2(4)	Department number
ENTRY_BY	VARCHAR2(2)	Person's code who made transaction

## MAINT

Column Name	Type	Description
STORE_NO	VARCHAR2(2)	Store number for item storage
DRG_NO	VARCHAR2(9)	Drawing number of the item
DESCRIPTION	VARCHAR2(35)	Description of the item
UNIT	VARCHAR2(2)	Unit of measurement
RATE	NUMBER(9,2)	Amount of the item
MINI_LEVEL	NUMBER(9,2)	Minimum level
REORDER_LEVEL	NUMBER(9,2)	Reorder level
MAX_LEVEL	NUMBER(9,2)	Maximum level
LOCATION	VARCHAR2(10)	Location for storing the item in stores
OB_YEAR	NUMBER(9,2)	Opening year
OB_MONTH	NUMBER(9,2)	Opening month
STATUS_FLAG	VARCHAR2(1)	Status of item
STDATE	DATE	System date



- 5 Shopmade component
- 6 Consumable Item
- 7 Imported items
- 8 Tools
- 9 Machinery Spares

The next seven digits represent:-

- Machine
- Machine part
- Running Sl No.

**Machine:**

The **second and third digits** refers to the machine. It can be any of the following:

- 01 - Blowroom lines
- 02 - Casting
- 03 - DrawFrame Machinery
- 04 - Combining Machinery
- 05 - Speed Frame (Simplex)
- 06 & 07 - Ring Frame
- 09 - Common items
- 99 - Pirm Winder

#### 4. Back:

If this Back button is clicked, it will go to the previous screen.

### 3.2. Code Design:

The codes in the system enables easy way of updation an identifying the items easily. It is a normal practice that all the primary keys should have a codification scheme. Based on the codification scheme, the data are allowed to be entered. This increases the system flexibility as user cannot give any type of data which will affect the system performance. There is codification scheme laid out for this project and is given below:

#### 1. Department Code: 99 AAA

13 - Spindle & Rings Unit

AAA - Running Sl. No.

#### 2. Material Code:

The material code is identified as **drawing number**. There are nine digits.

The **first digit** is the main category. It can be any of the following:-

- 1 Casting
- 2 Raw Material
- 3 Non-metal
- 4 Purchase Component



## **Standard Procedures adapted for Screens**

When a screen is invoked generally the user can see the following modes & operations:-

1. Save
2. Delete
3. Cancel
4. Back

The underscored letters are the hot keys for the corresponding buttons (ie instead of clicking the button, the same can be activated by pressing alt plus the underscored letter).

1. Save:

This button is used to save the details that are given as input by the users.

2. Delete:

Any entry in the database can be deleted by activating this button.

3. Cancel:

If the user wants to cancel the changes which he has done already, then he should click this Cancel Button.

The objective followed while doing input design are controlling the data entered (ie) preventing the entry of invalid data, all the validation checks to be done on the data entered are specified.

The input screens used in this system are classified into

- Maintenance Screen
- Transaction Screen.

#### **Maintenance Screen:**

The input design of the maintenance screen includes the initial data entry and updations made at later stage. The data are entered through the maintenance screen.

#### **Transaction Screen:**

The screen design for the transaction screen deals with designing input screens for the various transactions made in the system. The transactions are the processes that takes place continuously in an organisation.