



```
Private Sub Gas1_Click()
GASsize.Show
End Sub
```

```
Private Sub Liquid1_Click()
Liquidsize.Show
End Sub
```

```
Private Sub matbal1_Click()
Matbal.Show
End Sub
```

```
End Sub
Private Sub PFD1_Click()
PFD.Show
End Sub
```

```
Private Sub HP1_Click()
HP.LV1.Value = True
End Sub
```

```
Private Sub LaVolpeButton1_Click()
HP.LV2.Value = True
End Sub
```

```
Private Sub LaVolpeButton2_Click()
HP.LV3.Value = True
End Sub
```

```
Private Sub XPCommandButton1_Click()
Matbal.Show
End Sub
```

```
Private Sub Combo1_Click()
If Combo1.Text = "HP Separator" Then
F1.Visible = True
F2.Visible = False
Shape1.Visible = True
Shape2.Visible = False
Else
If Combo1.Text = "LP Separator" Then
F2.Visible = True
F1.Visible = False
Shape2.Visible = True
Shape1.Visible = False
End If
End If
End Sub
```

```

Private Sub LaVolpeButton21_Click()
Dim oExcel As Object
  Dim oBook As Object
  Dim oSheet As Object
  Set oExcel = CreateObject("Excel.Application")
  Set oBook = oExcel.Workbooks.Add
  Set oSheet = oBook.Worksheets(1)

  'Create the QueryTable
  Dim sNWind As String
  sNWind = _
    "C:\PSV\data\valve.mdb"
  Dim oQryTable As Object
  Set oQryTable = oSheet.QueryTables.Add( _
    "OLEDB;Provider=Microsoft.Jet.OLEDB.4.0;Data Source=" & _
    sNWind & ";", oSheet.Range("b2"), "Select * from matbal1")
  oQryTable.RefreshStyle = xlInsertEntireRows
  oQryTable.Refresh False
  'Save the Workbook and Quit Excel
  oBook.SaveAs "C:\PSV\excel\material balances.xls"
  oExcel.Visible = True
  ' oExcel.Quit

End Sub

Private Sub XPButtonText1_Click()
Adodc1.Recordset.MoveFirst
End Sub

Private Sub XPButtonText2_Click()
Adodc1.Recordset.MovePrevious
End Sub

Private Sub XPButtonText3_Click()
Adodc1.Recordset.MoveNext
End Sub

Private Sub XPButtonText4_Click()
Adodc1.Recordset.MoveLast
End Sub

Private Sub XPCommandButton1_Click()
Unload Me
End Sub

Private Sub Form_Load()
Line1.Visible = False

```

```

Line2.Visible = False
A2A.Visible = False
A2.Visible = True
A3.Visible = True
Q.Text = ""
SG.Text = ""
P.Text = ""
Adodc1.RecordSource = "select * from matbal1 where stream between 3 and 7"
Adodc1.Refresh
End Sub

```

```

Private Sub GoldButton24_Click()
On Error GoTo error:
If Q.Text > 0 And SG.Text > 0 And P.Text > 0 And Pb.Text > 0 And Kw.Text > 0
And Kp.Text > 0 And K.Text > 0 And Kv.Text > 0 And Kc.Text > 0 And Visc.Text
> 0 Then
Text1.Text = Q.Text * (SG.Text) ^ 0.5 / (38 * K.Text * Kp.Text * Kw.Text *
Kv.Text * Kc.Text * (1.25 * P.Text - Pb.Text) ^ 0.5)
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

```

```

Private Sub GoldButton30_Click()
On Error GoTo error:
If Combo1a.Text = "Balanced Bellow" And LAB.Caption = "Critical Flow" And
Pb3.Text >= 0 And Mass.Text > 0 And C.Text > 0 And Prel.Text > 0 And K1.Text >
0 And Kb.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0 And Mw.Text
> 0 Then
Text2.Text = Mass.Text * ((T.Text + 460) * Z.Text / Mw.Text) ^ 0.5 / (C.Text *
K1.Text * Kb.Text * Kc1.Text * Prel.Text)
Else
If Combo1a.Text = "Balanced Bellow" And LAB.Caption = "Sub Critical Flow" And
Pb3.Text >= 0 And Mass.Text > 0 And C.Text > 0 And Prel.Text > 0 And K1.Text >
0 And Kb.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0 And Mw.Text
> 0 Then
Text2.Text = Mass.Text * ((T.Text + 460) * Z.Text / Mw.Text) ^ 0.5 / (C.Text *
K1.Text * Kb.Text * Kc1.Text * Prel.Text)
Else
If Combo1a.Text = "Non-Balanced" And Pb3.Text >= 0 And LAB.Caption =
"Critical Flow" And Mass.Text > 0 And C.Text > 0 And Prel.Text > 0 And K1.Text
> 0 And Kb.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0 And
Mw.Text > 0 Then
Text2.Text = Mass.Text * ((T.Text + 460) * Z.Text / Mw.Text) ^ 0.5 / (C.Text *
K1.Text * Kb.Text * Kc1.Text * Prel.Text)
Else

```



```
If Combo1a.Text = "Non-Balanced" And F.Text > 0 And Pb3.Text >= 0 And
LAB.Caption = "Sub Critical Flow" And Mass.Text > 0 And C.Text > 0 And
Prel.Text > 0 And K1.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0
And Mw.Text > 0 Then
```

```
Text2.Text = Mass.Text * ((T.Text + 460) * Z.Text / (Mw.Text * (Pb3.Text + 14.7)
* (Prel.Text - (Pb3.Text + 14.7)))) ^ 0.5 / (735 * F.Text * K1.Text * Kc1.Text)
```

```
Exit Sub
```

```
error:
```

```
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
```

```
End If
```

```
End If
```

```
End If
```

```
End If
```

```
End Sub
```

```
Private Sub GoldButton36_Click()
```

```
Prel.Text = P2.Text * (1 + OP1.Text / 100) + 14.7
```

```
End Sub
```

```
Private Sub GoldButton41_Click()
```

```
On Error GoTo error:
```

```
If Prel.Text > 0 And Pb1.Text > 0 Then
```

```
r.Text = Pb1.Text / Prel.Text
```

```
Exit Sub
```

```
error:
```

```
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
```

```
End If
```

```
End Sub
```

```
Private Sub Kb_Change()
```

```
'If bp2.Text > 50 Then Kb.Text = 1
```

```
End Sub
```

```
Private Sub Kv1_Change()
```

```
Area.Text = Text1.Text / Kv1.Text
```

```
End Sub
```

```
Private Sub LaVolpeButton3_Click()
```

```
Adodc1.Refresh
```

```
End Sub
```

```
Private Sub LaVolpeButton4_Click(Index As Integer)
```

```
'Line1.Visible = False
```

```
'Line2.Visible = False
```

```
'Line3.Visible = False
```

```
'Line4.Visible = False
```

```
'Line5.Visible = True
```

```
'Line6.Visible = True
'A2A.Visible = True
'A2A.Caption = 4
Gas.Visible = True
Liquid.Visible = False
End Sub
```

```
Private Sub LV1_Click()
```

```
Dim x As Double
Dim Y As Double
Dim Z As Double
LV1.BackColor = &H80C0FF
LV2.BackColor = &HE0E0E0
LV3.BackColor = &HE0E0E0
LV4.BackColor = &HE0E0E0
A4.Visible = True
Line1.Visible = True
Line2.Visible = True
Line3.Visible = False
Line4.Visible = False
Line5.Visible = False
Line6.Visible = False
'SSFrame1.Visible = True
A2A.Visible = True
```

```
A2A.Caption = 5
A2.Visible = False
A3.Visible = True
```

```
Shape1.Visible = True
Adodc1.RecordSource = "select * from matbal1 where stream = 5"
Adodc1.Refresh
Gas.Visible = True
Liquid.Visible = False
```

```
If Text4.Text <= 51 Then
Pd1.Text = Text4.Text + 25
End If
```

```
If Text4.Text > 50 Then
Pd1.Text = Text4.Text * 1.1
End If
```

```
P2.Text = Pd1.Text
x = (Cp.Text + 1) / (Cp.Text - 1)
Y = 2 / (Cp.Text + 1)
Z1 = Cp.Text * (Y) ^ x
C.Text = 520 * Z1 ^ 0.5
```

```

Frame7.Visible = False
Frame8.Visible = False

```

```

End Sub

```

```

Private Sub LV2_Click()
LV2.BackColor = &H80C0FF
LV1.BackColor = &HE0E0E0
LV3.BackColor = &HE0E0E0
LV4.BackColor = &HE0E0E0
Frame7.Visible = False
Frame8.Visible = False

```

```

A4.Visible = False
Line3.Visible = True
Line4.Visible = True
Line1.Visible = False
Line2.Visible = False
Line5.Visible = False
Line6.Visible = False
A2A.Visible = True
A2A.Caption = 6
A3.Visible = False
A2.Visible = True
'SSFrame1.Visible = True
Adodc1.RecordSource = "select * from matball where stream = 6"
Adodc1.Refresh
Shape1.Visible = True
Gas.Visible = False
Liquid.Visible = True
If Text4.Text <= 51 Then
Pd.Text = Text4.Text + 25
End If
If Text4.Text > 50 Then
Pd.Text = Text4.Text * 1.1
End If
P.Text = Pd.Text

```

```

End Sub

```

```

Private Sub LV3_Click()
LV3.BackColor = &H80C0FF
LV2.BackColor = &HE0E0E0
LV1.BackColor = &HE0E0E0
LV4.BackColor = &HE0E0E0
'Formula.Show
End Sub

```

```

Private Sub run2_Click()
If Combo1.Text = "Non-Balanced" Then
If Pb / P <= 0.1 Then
Text1.Text = 1
Else
If Pb / P > 0.1 Then
Text1.Text = 2
End If
End If
End If
End Sub

Private Sub OP_Change()

On Error GoTo error:
If OP.Text > 0 Then
If OP.Text <= 10 Then
Combo1.Text = "Non-Balanced"
End If
If OP.Text > 10 Then
Combo1.Text = "Balanced Bellow"
End If

If OP.Text <= 25 Then
Kp.Text = -0.0014 * OP.Text ^ 2 + 0.073 * OP.Text + 0.016
End If

If OP.Text > 25 And OP.Text < 50 Then
Kp.Text = 0.00335 * OP.Text + 0.918
End If
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

Private Sub P2_Change()
Prel.Text = P2.Text * 1.1 + 14.7
Pcf.Text = Prel.Text * Rc.Text
End Sub

Private Sub P4_Change()
If P4.Text <= 50 Then
Pdesain.Text = P4.Text + 25
Prelief.Text = Pdesain.Text * 1.1 + 14.7
End If
If P4.Text > 50 Then
Pdesain.Text = P4.Text * 1.1

```

```
Prelief.Text = Pdesain.Text * 1.1 + 14.7
End If
```

```
End Sub
```

```
Private Sub Pb_Change()
bp.Text = Pb.Text / P.Text * 100
If bp.Text <= 15 Then
Kw.Text = 1
End If
If bp.Text > 15 Then
Kw.Text = -0.01 * bp.Text + 1.185
End If
End Sub
```

```
Private Sub Pb3_Change()
Dim aa As Double
Dim bb As Double
Dim cc As Double
Dim dd As Double
Dim pesan As Integer
Kb.Locked = False
```

```
On Error GoTo error:
If Pb3.Text >= 0 Then
bp2.Text = Pb3.Text / P2.Text * 100
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
Pcf.Text = Prel.Text * Rc.Text
If Combo1a.Text = "Non-Balanced" Then
Kb.Text = 1
If bp2.Text > 10 Then
pesan = MsgBox("Apakah anda akan menggunakan tipe balance?", vbQuestion +
vbYesNo, "Pesan")
If pesan = vbYes Then
Combo1a.Text = "Balanced Bellow"
bp2.Text = Pb3.Text / P2.Text * 100
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
LAB.Visible = False
End If
If pesan = vbNo Then
Combo4.Text = 10
Pb3.Text = 0
Kb.Text = 1
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
End If
End If
End If
```

```

If Combo1a.Text = "Balanced Bellow" Then
If Combo4.Text = 10 And bp2.Text < 30 Then
Kb.Text = 1
Else
If Combo4.Text = 16 And bp2.Text < 37.8 Then
Kb.Text = 1
Else
If Combo4.Text = 20 And bp2.Text < 32.5 Then
Kb.Text = 1
Else
If Combo4.Text = 10 And bp2.Text > 30 And bp2.Text < 50 Then
Kb.Text = -0.0003 * Val(bp2.Text) ^ 2 + 0.0082 * Val(bp2.Text) + 1.0291
Else
If Combo4.Text = 16 And bp2.Text > 37.8 And bp2.Text < 50 Then
Kb.Text = -0.0075 * Val(bp2.Text) + 1.2808
'Kb.Text = ""
Kb.BackColor = &H80C0FF
Else
If Combo4.Text = 10 And bp2.Text > 50 Then
MsgBox "Backpressure untuk balanced bellow harus < 50%", vbQuestion + 1,
"Pesan"
Kb.BackColor = &H80C0FF
Kb.Text = 0.69
'Kb.Locked = True
Else
If Combo4.Text = 16 And bp2.Text > 50 Then
MsgBox "Backpressure untuk balanced bellow harus < 50%", vbQuestion + 1,
"Pesan"
Kb.BackColor = &H80C0FF
Kb.Text = 0.69
'Kb.Locked = True

Else
If Combo4.Text = 20 And bp2.Text > 32.5 And bp2.Text < 50 Then
Kb.Text = -0.000055 * Val(bp2.Text) ^ 2 + 0.0003 * Val(bp2.Text) + 1.0484
Kb.BackColor = &H80C0FF

Else
If Combo4.Text = 20 And bp2.Text > 50 Then
MsgBox "Backpressure untuk balanced bellow harus < 50%", vbQuestion + 1,
"Pesan"
Kb.BackColor = &H80C0FF
Kb.Text = 0.69
'Kb.Locked = True

End If
End If
End If

```

```
End If
End If
End If
End If
End If
```

```
If Combo1a.Text = "Pilot-Operated" Then
If bp2.Text < 50 Then
Kb.Text = 1
Else
If bp2.Text > 50 Then
Kb.Text = ""
Kb.BackColor = &H80C0FF
End If
End If
End If
End If
End If
```

```
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
Pcf.Text = Prel.Text * Rc.Text
```

```
'-----
=====
```

```
If Combo1a.Text = "Non-Balanced" And Combo3.Text = "custom" Then
Rc.Locked = False
Kb.Text = 1
Pb3.Visible = True
GoldButton44.Visible = True
Pb3.Text = 0
Pb3.Locked = True
bp2.Text = 0 / P2.Text * 100
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
Pcf.Text = Prel.Text * Rc.Text
```

```
If Val(Pb3.Text) < Val(Pcf.Text) Then
LAB.Visible = True
LAB.Caption = "Critical Flow"
r.Text = (Pb3.Text + 14.7) / Prel.Text
r1.Visible = False
r.Visible = False
F.Visible = False
F1.Visible = False
Else
If Val(Pb3.Text) > Val(Pcf.Text) Then
LAB.Caption = "Sub Critical Flow"
r.Text = Pb3.Text / Prel.Text
r1.Visible = True
```

```

r.Visible = True
aa = Cp.Text / (Cp.Text - 1)
bb = r.Text ^ (2 / Cp.Text)
cc = 1 - r.Text ^ ((Cp.Text - 1) / Cp.Text)
dd = 1 - r.Text
F.Text = (aa * bb * (cc / dd)) ^ 0.5
r1.Visible = True
r.Visible = True
F.Visible = True
F1.Visible = True

End If
End If
End If
Command1.Value = True

'-----
=====
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

Private Sub Pd1_Change()
If Pd1.Text <= 50 Then
P2.Text = Pd1.Text + 25
Else
If Pd1.Text > 50 Then
P2.Text = Pd1.Text * 1.1
End If
End If
End Sub

Private Sub Rc_Change()

Pcf.Text = Prel.Text * Rc.Text
End Sub

Private Sub Re_Change()
Dim a As Single
If Re.Text < 200 Then
Kv1.Text = 0.27 * (Log(Re.Text) / Log(2.718282)) - 0.65
Else
If Re.Text >= 200 And Re.Text < 100000 Then
a = Log(Re.Text) / Log(2.71828)
Kv1.Text = -0.00777 * a ^ 2 + 0.165 * a + 0.128
Else

```



```

If Re.Text > 100000 Then
Kv1.Text = 1
End If
End If
End If
End Sub

```

```

Private Sub Text1_Change()

```

```

On Error GoTo error:
If SG.Text > 0 And Q.Text > 0 And Visc.Text > 0 And Text1.Text > 0 Then
Re.Text = 2800 * SG.Text * Q.Text * (Visc.Text * Text1.Text)
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

```

```

Private Sub Text2_Change()

```

```

If Text2.Text < 0.11 Then
Text5.Text = "D"
Else
If Text2.Text >= 0.11 And Text2.Text < 0.196 Then
Text5.Text = "E"
Else
If Text2.Text >= 0.196 And Text2.Text < 0.307 Then
Text5.Text = "F"
Else
If Text2.Text >= 0.307 And Text2.Text < 0.503 Then
Text5.Text = "G"
Else
If Text2.Text >= 0.503 And Text2.Text < 0.785 Then
Text5.Text = "H"
Else
If Text2.Text >= 0.785 And Text2.Text < 1.28 Then
Text5.Text = "J"
Else
If Text2.Text >= 1.28 And Text2.Text < 1.84 Then
Text5.Text = "K"
Else
If Text2.Text >= 1.84 And Text2.Text < 2.85 Then
Text5.Text = "L"
Else
If Text2.Text >= 2.85 And Text2.Text < 3.6 Then
Text5.Text = "M"
Else
If Text2.Text >= 1.36 And Text2.Text < 4.34 Then
Text5.Text = "N"

```

```

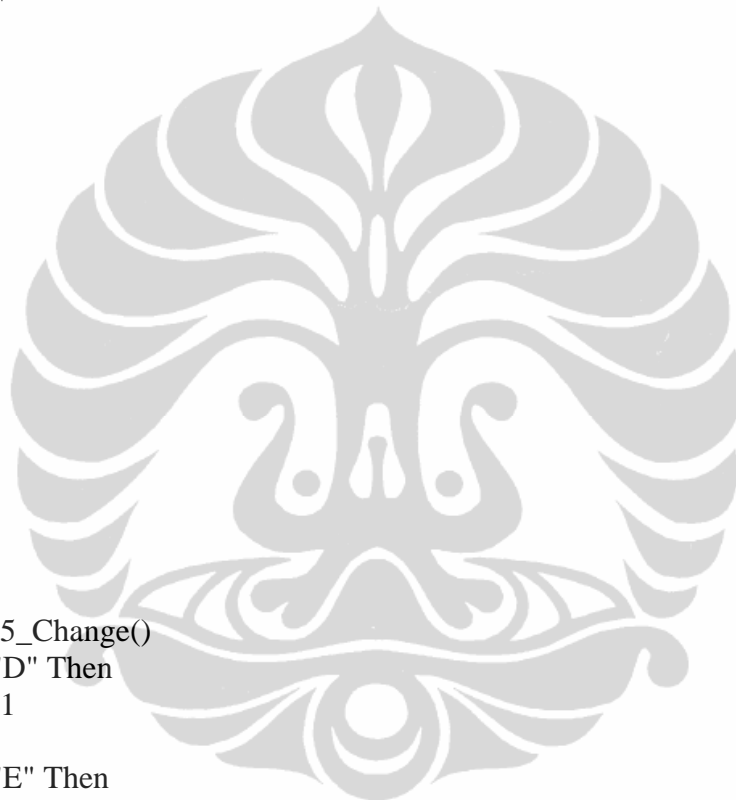
Else
If Text2.Text >= 4.34 And Text2.Text < 6.38 Then
Text5.Text = "P"
Else
If Text2.Text >= 6.38 And Text2.Text < 11.05 Then
Text5.Text = "Q"
Else
If Text2.Text >= 11.05 And Text2.Text < 16 Then
Text5.Text = "R"
Else
If Text2.Text >= 16 And Text2.Text < 26 Then
Text5.Text = "T"
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End Sub

```

```

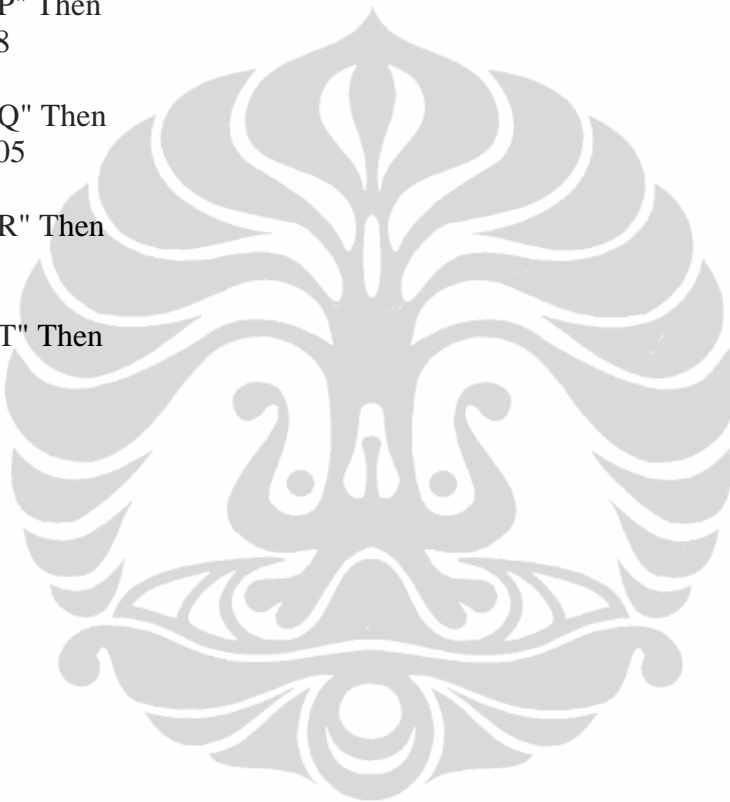
Private Sub Text5_Change()
If Text5.Text = "D" Then
Text6.Text = 0.11
Else
If Text5.Text = "E" Then
Text6.Text = 0.196
Else
If Text5.Text = "F" Then
Text6.Text = 0.307
Else
If Text5.Text = "G" Then
Text6.Text = 0.503
Else
If Text5.Text = "H" Then
Text6.Text = 0.786
Else
If Text5.Text = "J" Then
Text6.Text = 1.28
Else
If Text5.Text = "K" Then

```

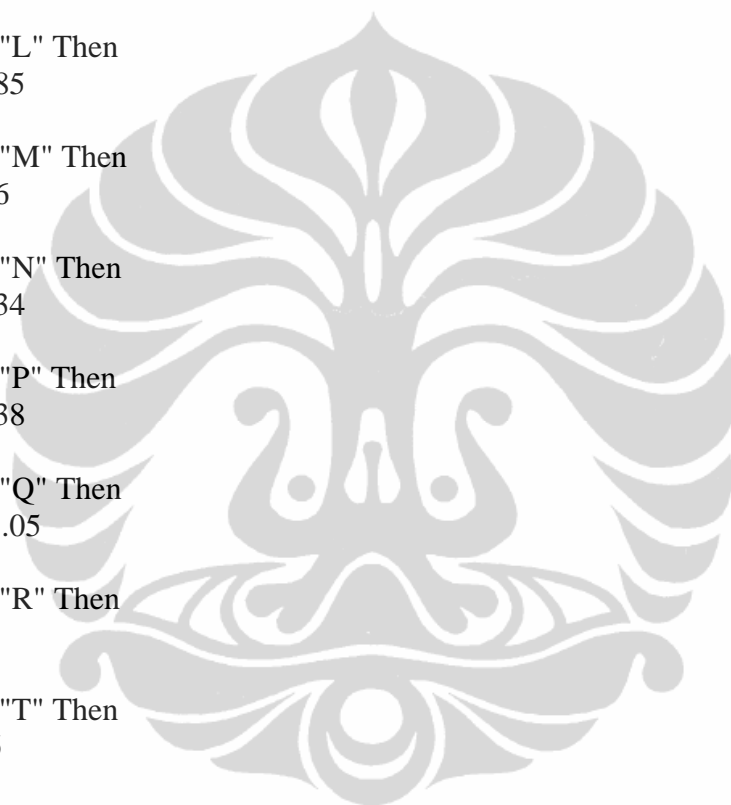


```
Text6.Text = 1.84
Else
If Text5.Text = "L" Then
Text6.Text = 2.85
Else
If Text5.Text = "M" Then
Text6.Text = 3.6
Else
If Text5.Text = "N" Then
Text6.Text = 4.34
Else
If Text5.Text = "P" Then
Text6.Text = 6.38
Else
If Text5.Text = "Q" Then
Text6.Text = 11.05
Else
If Text5.Text = "R" Then
Text6.Text = 11
Else
If Text5.Text = "T" Then
Text6.Text = 26
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End Sub
```

```
Private Sub Text5a_Change()
If Text5a.Text = "D" Then
Text6a.Text = 0.11
Else
If Text5a.Text = "E" Then
Text6a.Text = 0.196
Else
If Text5a.Text = "F" Then
Text6a.Text = 0.307
Else
```



```
If Text5a.Text = "G" Then  
Text6a.Text = 0.503  
Else  
If Text5a.Text = "H" Then  
Text6a.Text = 0.786  
Else  
If Text5a.Text = "J" Then  
Text6a.Text = 1.28  
Else  
If Text5a.Text = "K" Then  
Text6a.Text = 1.84  
Else  
If Text5a.Text = "L" Then  
Text6a.Text = 2.85  
Else  
If Text5a.Text = "M" Then  
Text6a.Text = 3.6  
Else  
If Text5a.Text = "N" Then  
Text6a.Text = 4.34  
Else  
If Text5a.Text = "P" Then  
Text6a.Text = 6.38  
Else  
If Text5a.Text = "Q" Then  
Text6a.Text = 11.05  
Else  
If Text5a.Text = "R" Then  
Text6a.Text = 11  
Else  
If Text5a.Text = "T" Then  
Text6a.Text = 26  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End Sub
```



```

Private Sub Text6_Change()
Text7.Text = (14 / 11 * Text6.Text) ^ 0.5
End Sub

Private Sub Text6a_Change()
Text7a.Text = (14 / 11 * Text6a.Text) ^ 0.5
End Sub

Private Sub x3_Click()
Adodc1.RecordSource = "select * from matbal1 where stream between 3 and 7"
Adodc1.Refresh
End Sub

Private Sub XPCCommandButton1_Click()
Shell ("c:/program files/hyprotech/HYSYS 3.1/hysys.exe"), 1
End Sub

Private Sub XPCCommandButton2_Click()
Unload Me
PFD.Show
End Sub

Private Sub Form_Load()
Line1.Visible = False
Line2.Visible = False
A2A.Visible = False
A2.Visible = True
A3.Visible = True
Q.Text = ""
SG.Text = ""
P.Text = ""
Adodc1.RecordSource = "select * from matbal1 where stream between 1 and 4"
Adodc1.Refresh
With AGPopUp1
    .AddPopUpItem "&Copy", "mnuCopy"
End With
End Sub

Private Sub GoldButton24_Click()
On Error GoTo error:
If Q.Text > 0 And SG.Text > 0 And P.Text > 0 And Pb.Text > 0 And Kw.Text > 0
And Kp.Text > 0 And K.Text > 0 And Kv.Text > 0 And Kc.Text > 0 And Visc.Text
> 0 Then
Text1.Text = Q.Text * (SG.Text) ^ 0.5 / (38 * K.Text * Kp.Text * Kw.Text *
Kv.Text * Kc.Text * (1.25 * P.Text - Pb.Text) ^ 0.5)
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"

```

End If
End Sub

```
Private Sub GoldButton30_Click()
On Error GoTo error:
If Combo1a.Text = "Balanced Bellow" And LAB.Caption = "Critical Flow" And
Pb3.Text >= 0 And Mass.Text > 0 And C.Text > 0 And Prel.Text > 0 And K1.Text >
0 And Kb.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0 And Mw.Text
> 0 Then
Text2.Text = Mass.Text * ((T.Text + 460) * Z.Text / Mw.Text) ^ 0.5 / (C.Text *
K1.Text * Kb.Text * Kc1.Text * Prel.Text)
Else
If Combo1a.Text = "Balanced Bellow" And LAB.Caption = "Sub Critical Flow" And
Pb3.Text >= 0 And Mass.Text > 0 And C.Text > 0 And Prel.Text > 0 And K1.Text >
0 And Kb.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0 And Mw.Text
> 0 Then
Text2.Text = Mass.Text * ((T.Text + 460) * Z.Text / Mw.Text) ^ 0.5 / (C.Text *
K1.Text * Kb.Text * Kc1.Text * Prel.Text)
Else
If Combo1a.Text = "Non-Balanced" And Pb3.Text >= 0 And LAB.Caption =
"Critical Flow" And Mass.Text > 0 And C.Text > 0 And Prel.Text > 0 And K1.Text
> 0 And Kb.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0 And
Mw.Text > 0 Then
Text2.Text = Mass.Text * ((T.Text + 460) * Z.Text / Mw.Text) ^ 0.5 / (C.Text *
K1.Text * Kb.Text * Kc1.Text * Prel.Text)
Else
If Combo1a.Text = "Non-Balanced" And F.Text > 0 And Pb3.Text >= 0 And
LAB.Caption = "Sub Critical Flow" And Mass.Text > 0 And C.Text > 0 And
Prel.Text > 0 And K1.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0
And Mw.Text > 0 Then
Text2.Text = Mass.Text * ((T.Text + 460) * Z.Text / (Mw.Text * (Pb3.Text + 14.7)
* (Prel.Text - (Pb3.Text + 14.7)))) ^ 0.5 / (735 * F.Text * K1.Text * Kc1.Text)
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End If
End If
End If
End Sub
```

```
Private Sub GoldButton36_Click()
Prel.Text = P2.Text * (1 + OP1.Text / 100) + 14.7
End Sub
```

```
Private Sub GoldButton41_Click()
On Error GoTo error:
If Prel.Text > 0 And Pb1.Text > 0 Then
```

```

r.Text = Pb1.Text / Prel.Text
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If

End Sub

Private Sub GoldButton46_Click()

End Sub

Private Sub Kb_Change()
'If bp2.Text > 50 Then Kb.Text = 1
End Sub

Private Sub Kv1_Change()
Area.Text = Text1.Text / Kv1.Text
End Sub

Private Sub LaVolpeButton21_Click()
Dim oExcel As Object
    Dim oBook As Object
    Dim oSheet As Object
    Set oExcel = CreateObject("Excel.Application")
    Set oBook = oExcel.Workbooks.Add
    Set oSheet = oBook.Worksheets(1)

    'Create the QueryTable
    Dim sNWind As String
    sNWind = _
        "C:\PSV\data\valve.mdb"
    Dim oQryTable As Object
    Set oQryTable = oSheet.QueryTables.Add( _
        "OLEDB;Provider=Microsoft.Jet.OLEDB.4.0;Data Source=" & _
        sNWind & ";", oSheet.Range("b2"), "Select * from matbal1")
    oQryTable.RefreshStyle = xlInsertEntireRows
    oQryTable.Refresh False
    'Save the Workbook and Quit Excel
    oBook.SaveAs "C:\PSV\excel\HP separator.xls"
    oExcel.Visible = True
    ' oExcel.Quit

End Sub

Private Sub LaVolpeButton3_Click()
Adodc1.RecordSource = "select * from matbal1 where stream between 1 and 4"
Adodc1.Refresh

```

End Sub

Private Sub LV1_Click()

Dim x As Double

Dim Y As Double

Dim Z As Double

LV1.BackColor = &H80C0FF

LV2.BackColor = &HE0E0E0

LV3.BackColor = &HE0E0E0

A4.Visible = True

Line1.Visible = True

Line2.Visible = True

Line3.Visible = False

Line4.Visible = False

A2A.Visible = True

A2A.Caption = 2

A2.Visible = False

A3.Visible = True

Shape1.Visible = True

Adodc1.RecordSource = "select * from matbal1 where stream = 2"

Adodc1.Refresh

Gas.Visible = True

Liquid.Visible = False

If Text4.Text <= 51 Then

Pd1.Text = Text4.Text + 25

End If

If Text4.Text > 50 Then

Pd1.Text = Text4.Text * 1.1

End If

P2.Text = Pd1.Text

$x = (Cp.Text + 1) / (Cp.Text - 1)$

$Y = 2 / (Cp.Text + 1)$

$Z1 = Cp.Text * (Y)^x$

$C.Text = 520 * Z1^{0.5}$

End Sub

Private Sub LV2_Click()

LV2.BackColor = &H80C0FF

LV1.BackColor = &HE0E0E0

LV3.BackColor = &HE0E0E0

A4.Visible = False

Line3.Visible = True

Line4.Visible = True


```

Line1.Visible = False
Line2.Visible = False
A2A.Visible = True

A2A.Caption = 3
A3.Visible = False
A2.Visible = True
Adodc1.RecordSource = "select * from matbal1 where stream = 3"
Adodc1.Refresh
Shape1.Visible = True
Gas.Visible = False
Liquid.Visible = True
If Text4.Text <= 51 Then
Pd.Text = Text4.Text + 25
End If
If Text4.Text > 50 Then
Pd.Text = Text4.Text * 1.1
End If
P.Text = Pd.Text

End Sub

Private Sub LV3_Click()
LV3.BackColor = &H80C0FF
LV2.BackColor = &HE0E0E0
LV1.BackColor = &HE0E0E0
'Formula.Show
End Sub

Private Sub run2_Click()
If Combo1.Text = "Non-Balanced" Then
If Pb / P <= 0.1 Then
Text1.Text = 1
Else
If Pb / P > 0.1 Then
Text1.Text = 2
End If
End If
End If
End Sub

Private Sub OP_Change()

On Error GoTo error:
If OP.Text > 0 Then
If OP.Text <= 10 Then
Combo1.Text = "Non-Balanced"
End If

```

```

If OP.Text > 10 Then
Combo1.Text = "Balanced Bellow"
End If

If OP.Text <= 25 Then
Kp.Text = -0.0014 * OP.Text ^ 2 + 0.073 * OP.Text + 0.016
End If

If OP.Text > 25 And OP.Text < 50 Then
Kp.Text = 0.00335 * OP.Text + 0.918
End If
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub
Private Sub Pb_Change()
bp.Text = Pb.Text / P.Text * 100
If bp.Text <= 15 Then
Kw.Text = 1
End If
If bp.Text > 15 Then
Kw.Text = -0.01 * bp.Text + 1.185
End If
End Sub
Private Sub Pb3_Change()
Dim aa As Double
Dim bb As Double
Dim cc As Double
Dim dd As Double
Dim pesan As Integer
Kb.Locked = False

On Error GoTo error:
If Pb3.Text >= 0 Then
bp2.Text = Pb3.Text / P2.Text * 100
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
Pcf.Text = Prel.Text * Rc.Text
If Combo1a.Text = "Non-Balanced" Then
Kb.Text = 1
If bp2.Text > 10 Then
pesan = MsgBox("Apakah anda akan menggunakan tipe balance?", vbQuestion +
vbYesNo, "Pesan")
If pesan = vbYes Then
Combo1a.Text = "Balanced Bellow"
bp2.Text = Pb3.Text / P2.Text * 100
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
LAB.Visible = False

```

```

End If
If pesan = vbNo Then
Combo4.Text = 10
Pb3.Text = 0
Kb.Text = 1
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
End If
End If
End If

```

```

If Combo1a.Text = "Balanced Bellow" Then
If Combo4.Text = 10 And bp2.Text < 30 Then
Kb.Text = 1
Else
If Combo4.Text = 16 And bp2.Text < 37.8 Then
Kb.Text = 1
Else
If Combo4.Text = 20 And bp2.Text < 32.5 Then
Kb.Text = 1
Else
If Combo4.Text = 10 And bp2.Text > 30 And bp2.Text < 50 Then
Kb.Text = -0.0003 * Val(bp2.Text) ^ 2 + 0.0082 * Val(bp2.Text) + 1.0291
Else
If Combo4.Text = 16 And bp2.Text > 37.8 And bp2.Text < 50 Then
Kb.Text = -0.0075 * Val(bp2.Text) + 1.2808
'Kb.Text = ""
Kb.BackColor = &H80C0FF
Else
If Combo4.Text = 10 And bp2.Text > 50 Then
MsgBox "Backpressure untuk balanced bellow harus < 50%", vbQuestion + 1,
"Pesan"
Kb.BackColor = &H80C0FF
Kb.Text = 0.69
'Kb.Locked = True
Else
If Combo4.Text = 16 And bp2.Text > 50 Then
MsgBox "Backpressure untuk balanced bellow harus < 50%", vbQuestion + 1,
"Pesan"
Kb.BackColor = &H80C0FF
Kb.Text = 0.69
'Kb.Locked = True

Else
If Combo4.Text = 20 And bp2.Text > 32.5 And bp2.Text < 50 Then
Kb.Text = -0.000055 * Val(bp2.Text) ^ 2 + 0.0003 * Val(bp2.Text) + 1.0484
Kb.BackColor = &H80C0FF

```

```

Else
If Combo4.Text = 20 And bp2.Text > 50 Then
MsgBox "Backpressure untuk balanced bellow harus < 50%", vbQuestion + 1,
"Pesan"
Kb.BackColor = &H80C0FF
Kb.Text = 0.69
'Kb.Locked = True

End If
End If
End If
End If
End If
End If
End If
End If

If Combo1a.Text = "Pilot-Operated" Then
If bp2.Text < 50 Then
Kb.Text = 1
Else
If bp2.Text > 50 Then
Kb.Text = ""
Kb.BackColor = &H80C0FF
End If
End If
End If
End If
End If

Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
Pcf.Text = Prel.Text * Rc.Text
'=====
=====

If Combo1a.Text = "Non-Balanced" And Combo3.Text = "custom" Then
Rc.Locked = False
Kb.Text = 1
Pb3.Visible = True
GoldButton44.Visible = True
Pb3.Text = 0
Pb3.Locked = True
bp2.Text = 0 / P2.Text * 100
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
Pcf.Text = Prel.Text * Rc.Text

If Val(Pb3.Text) < Val(Pcf.Text) Then
LAB.Visible = True

```

```

LAB.Caption = "Critical Flow"
r.Text = (Pb3.Text + 14.7) / Prel.Text
r1.Visible = False
r.Visible = False
F.Visible = False
F1.Visible = False
Else
If Val(Pb3.Text) > Val(Pcf.Text) Then
LAB.Caption = "Sub Critical Flow"
r.Text = Pb3.Text / Prel.Text
r1.Visible = True
r.Visible = True
aa = Cp.Text / (Cp.Text - 1)
bb = r.Text ^ (2 / Cp.Text)
cc = 1 - r.Text ^ ((Cp.Text - 1) / Cp.Text)
dd = 1 - r.Text
F.Text = (aa * bb * (cc / dd)) ^ 0.5
r1.Visible = True
r.Visible = True
F.Visible = True
F1.Visible = True

End If
End If
End If
Command1.Value = True

'=====
=====
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

Private Sub Rc_Change()
Pcf.Text = Prel.Text * Rc.Text
End Sub

Private Sub Re_Change()
Dim a As Single
If Re.Text < 200 Then
Kv1.Text = 0.27 * (Log(Re.Text) / Log(2.718282)) - 0.65
Else
If Re.Text >= 200 And Re.Text < 100000 Then
a = Log(Re.Text) / Log(2.71828)
Kv1.Text = -0.00777 * a ^ 2 + 0.165 * a + 0.128
Else

```

```

If Re.Text > 100000 Then
Kv1.Text = 1
End If
End If
End If
End Sub

```

```

Private Sub Text1_Change()

```

```

On Error GoTo error:
If SG.Text > 0 And Q.Text > 0 And Visc.Text > 0 And Text1.Text > 0 Then
Re.Text = 2800 * SG.Text * Q.Text * (Visc.Text * Text1.Text)
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

```

```

Private Sub Text1_Click()

```

```

On Error GoTo error:
If SG.Text > 0 And Q.Text > 0 And Visc.Text > 0 And Text1.Text > 0 Then
Re.Text = 2800 * SG.Text * Q.Text * (Visc.Text * Text1.Text)
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

```

```

Private Sub Text2_Change()

```

```

If Text2.Text < 0.11 Then
Text5.Text = "D"
Else
If Text2.Text >= 0.11 And Text2.Text < 0.196 Then
Text5.Text = "E"
Else
If Text2.Text >= 0.196 And Text2.Text < 0.307 Then
Text5.Text = "F"
Else
If Text2.Text >= 0.307 And Text2.Text < 0.503 Then
Text5.Text = "G"
Else
If Text2.Text >= 0.503 And Text2.Text < 0.785 Then
Text5.Text = "H"
Else
If Text2.Text >= 0.785 And Text2.Text < 1.28 Then
Text5.Text = "J"
Else

```

```

If Text2.Text >= 1.28 And Text2.Text < 1.84 Then
Text5.Text = "K"
Else
If Text2.Text >= 1.84 And Text2.Text < 2.85 Then
Text5.Text = "L"
Else
If Text2.Text >= 2.85 And Text2.Text < 3.6 Then
Text5.Text = "M"
Else
If Text2.Text >= 1.36 And Text2.Text < 4.34 Then
Text5.Text = "N"
Else
If Text2.Text >= 4.34 And Text2.Text < 6.38 Then
Text5.Text = "P"
Else
If Text2.Text >= 6.38 And Text2.Text < 11.05 Then
Text5.Text = "Q"
Else
If Text2.Text >= 11.05 And Text2.Text < 16 Then
Text5.Text = "R"
Else
If Text2.Text >= 16 And Text2.Text < 26 Then
Text5.Text = "T"
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End Sub

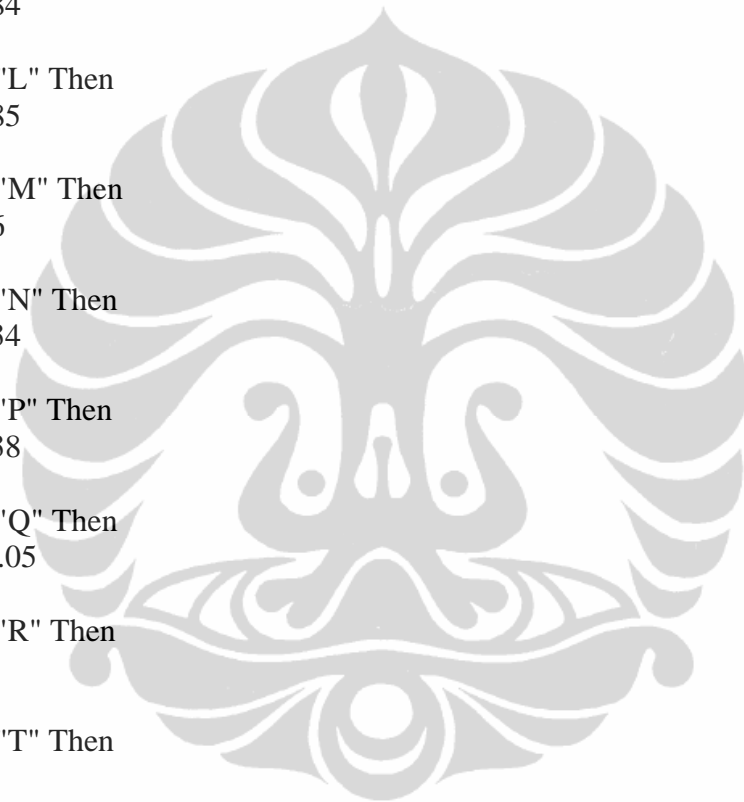
```

```

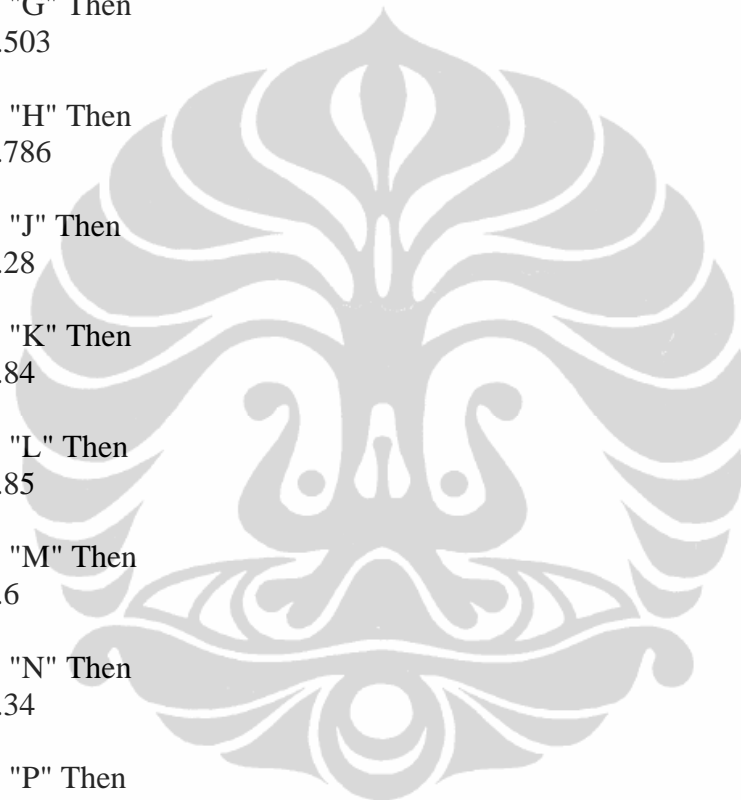
Private Sub Text5_Change()
If Text5.Text = "D" Then
Text6.Text = 0.11
Else
If Text5.Text = "E" Then
Text6.Text = 0.196
Else
If Text5.Text = "F" Then
Text6.Text = 0.307

```

```
Else
If Text5.Text = "G" Then
Text6.Text = 0.503
Else
If Text5.Text = "H" Then
Text6.Text = 0.786
Else
If Text5.Text = "J" Then
Text6.Text = 1.28
Else
If Text5.Text = "K" Then
Text6.Text = 1.84
Else
If Text5.Text = "L" Then
Text6.Text = 2.85
Else
If Text5.Text = "M" Then
Text6.Text = 3.6
Else
If Text5.Text = "N" Then
Text6.Text = 4.34
Else
If Text5.Text = "P" Then
Text6.Text = 6.38
Else
If Text5.Text = "Q" Then
Text6.Text = 11.05
Else
If Text5.Text = "R" Then
Text6.Text = 11
Else
If Text5.Text = "T" Then
Text6.Text = 26
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End Sub
```




```
Private Sub Text5a_Change()  
If Text5a.Text = "D" Then  
Text6a.Text = 0.11  
Else  
If Text5a.Text = "E" Then  
Text6a.Text = 0.196  
Else  
If Text5a.Text = "F" Then  
Text6a.Text = 0.307  
Else  
If Text5a.Text = "G" Then  
Text6a.Text = 0.503  
Else  
If Text5a.Text = "H" Then  
Text6a.Text = 0.786  
Else  
If Text5a.Text = "J" Then  
Text6a.Text = 1.28  
Else  
If Text5a.Text = "K" Then  
Text6a.Text = 1.84  
Else  
If Text5a.Text = "L" Then  
Text6a.Text = 2.85  
Else  
If Text5a.Text = "M" Then  
Text6a.Text = 3.6  
Else  
If Text5a.Text = "N" Then  
Text6a.Text = 4.34  
Else  
If Text5a.Text = "P" Then  
Text6a.Text = 6.38  
Else  
If Text5a.Text = "Q" Then  
Text6a.Text = 11.05  
Else  
If Text5a.Text = "R" Then  
Text6a.Text = 11  
Else  
If Text5a.Text = "T" Then  
Text6a.Text = 26  
End If  
End If  
End If  
End If  
End If
```



```

End If
End If
End If
End If
End If
End If
End If
End If
End If
End Sub

```

```

Private Sub Text6_Change()
Text7.Text = (14 / 11 * Text6.Text) ^ 0.5
End Sub

```

```

Private Sub Text6a_Change()
Text7a.Text = (14 / 11 * Text6a.Text) ^ 0.5
End Sub

```

```

Private Sub update1_Click()
On Error GoTo errupdate:
Adodc1.Recordset.Update
update1.Enabled = False
DataGrid1.AllowDelete = False
Exit Sub
errupdate:
MsgBox Err.Description
End Sub

```

```

Private Sub XPCCommandButton1_Click()
Shell ("c:/program files/hyprotech/HYSYS 3.1/hysys.exe"), 1
End Sub

```

```

Private Sub XPCCommandButton2_Click()
Unload Me
PFD.Show
End Sub

```

```

Private Sub Form_Load()
Dim x As Double
Dim Y As Double
Dim Z As Double
x = (Cp.Text + 1) / (Cp.Text - 1)
Y = 2 / (Cp.Text + 1)
Z1 = Cp.Text * (Y) ^ x
C.Text = 520 * Z1 ^ 0.5
End Sub

```

```

Private Sub GoldButton30_Click()
On Error GoTo error:
If Combo1a.Text = "Balanced Bellow" And LAB.Caption = "Critical Flow" And
Pb3.Text >= 0 And Mass.Text > 0 And C.Text > 0 And Prel.Text > 0 And K1.Text >
0 And Kb.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0 And Mw.Text
> 0 Then
Text2.Text = Mass.Text * ((T.Text + 460) * Z.Text / Mw.Text) ^ 0.5 / (C.Text *
K1.Text * Kb.Text * Kc1.Text * Prel.Text)
Else
If Combo1a.Text = "Balanced Bellow" And LAB.Caption = "Sub Critical Flow" And
Pb3.Text >= 0 And Mass.Text > 0 And C.Text > 0 And Prel.Text > 0 And K1.Text >
0 And Kb.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0 And Mw.Text
> 0 Then
Text2.Text = Mass.Text * ((T.Text + 460) * Z.Text / Mw.Text) ^ 0.5 / (C.Text *
K1.Text * Kb.Text * Kc1.Text * Prel.Text)
Else
If Combo1a.Text = "Non-Balanced" And Pb3.Text >= 0 And LAB.Caption =
"Critical Flow" And Mass.Text > 0 And C.Text > 0 And Prel.Text > 0 And K1.Text
> 0 And Kb.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0 And
Mw.Text > 0 Then
Text2.Text = Mass.Text * ((T.Text + 460) * Z.Text / Mw.Text) ^ 0.5 / (C.Text *
K1.Text * Kb.Text * Kc1.Text * Prel.Text)
Else
If Combo1a.Text = "Non-Balanced" And F.Text > 0 And Pb3.Text >= 0 And
LAB.Caption = "Sub Critical Flow" And Mass.Text > 0 And C.Text > 0 And
Prel.Text > 0 And K1.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0
And Mw.Text > 0 Then
Text2.Text = Mass.Text * (((T.Text + 460) * Z.Text / (Mw.Text * (Pb3.Text + 14.7)
* (Prel.Text - (Pb3.Text + 14.7)))) ^ 0.5 / (735 * F.Text * K1.Text * Kc1.Text)
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End If
End If
End If
End Sub

```

```

Private Sub LaVolpeButton10_Click()
If Text3b.Text > 0 And Text4b.Text > 0 Then
Text5b.Text = Val(Text3b.Text) + Val(Text4b.Text)
If Text5b.Text > 25 Then
Text6b.Text = 25
Else
Text6b.Text = Text5b.Text
End If
End If

```

```

Text7b.Text = Val(Text6b.Text) - Val(Text3b.Text)
If Text7b.Text > 0 Then
Text8b.Text = Text7b.Text
End If
End Sub

```

```

Private Sub LaVolpeButton18_Click()
On Error GoTo error:
If Text8b.Text > 0 And Text1b.Text > 0 Then
Text9.Text = 1 - 2 * Text8b.Text / Text1b.Text
Text9.Text = Format(Text9, "###.##")
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

```

```

Private Sub LaVolpeButton19_Click()
On Error GoTo error:
If Text8b.Text > 0 And Text1b.Text > 0 And Text2b.Text > 0 And Text10.Text > 0
Then
Text11.Text = 22 / 7 * Text1b.Text * (Text8b.Text + ((Text2b.Text - Text1b.Text) *
Text10.Text / 180))
Text11.Text = Format(Text11, "###.##")

Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

```

```

Private Sub LaVolpeButton23_Click()
On Error GoTo error:
If Text12.Text > 0 And Text11.Text > 0 Then
Text13.Text = 21000 * Text12.Text * Text11.Text ^ 0.82
Text13.Text = Format(Text13, "###.##")

Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If

```

```

Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If

```

```

End Sub

```

```

Private Sub LaVolpeButton28_Click()
On Error GoTo error:
If Text13.Text > 0 And Text14.Text > 0 Then
Text15.Text = Text13.Text / Text14.Text

```

```

Mass.Text = Text15.Text
Text15.Text = Format(Text15, "###.##")
Mass.Text = Format(Mass, "###.##")
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

```

```

Private Sub LaVolpeButton45_Click()
On Error GoTo error:
If Text1b.Text > 0 And Text8b.Text > 0 Then
Text24.Text = Text1b.Text * Text8b.Text * 22 / 7
Text24.Text = Format(Text24, "###.##")
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

```

```

Private Sub LaVolpeButton51_Click()
On Error GoTo error:
If Text23.Text > 0 And Text22.Text > 0 Then
Text18.Text = Text23.Text / Text22.Text
Text18.Text = Format(Text18, "###.##")
Mass.Text = Text18.Text
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

```

```

Private Sub LaVolpeButton64_Click()
On Error GoTo error:
If Text19.Text > 0 And Text24.Text > 0 Then
Text23.Text = 21000 * Text19.Text * (Text24.Text) ^ 0.82
Text23.Text = Format(Text23, "###.##")
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

```

```

Private Sub P2_Change()
Prel.Text = P2.Text * 1.1 + 14.7
End Sub

```

```

Private Sub Pb3_Change()

```

```

Dim aa As Double
Dim bb As Double
Dim cc As Double
Dim dd As Double
Dim pesan As Integer
Kb.Locked = False
bp2.Text = Pb3.Text / P2.Text * 100
On Error GoTo error:
If Pb3.Text >= 0 Then
bp2.Text = Pb3.Text / P2.Text * 100
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
Pcf.Text = Prel.Text * Rc.Text
If Combo1a.Text = "Non-Balanced" Then
Kb.Text = 1
If bp2.Text > 10 Then
pesan = MsgBox("Apakah anda akan menggunakan tipe balance?", vbQuestion +
vbYesNo, "Pesan")
If pesan = vbYes Then
Combo1a.Text = "Balanced Bellow"
bp2.Text = Pb3.Text / P2.Text * 100
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
LAB.Visible = False
End If
If pesan = vbNo Then
Combo4.Text = 10
Pb3.Text = 0
Kb.Text = 1
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
End If
End If
End If

If Combo1a.Text = "Balanced Bellow" Then
If Combo4.Text = 10 And bp2.Text < 30 Then
Kb.Text = 1
Else
If Combo4.Text = 16 And bp2.Text < 37.8 Then
Kb.Text = 1
Else
If Combo4.Text = 20 And bp2.Text < 32.5 Then
Kb.Text = 1
Else
If Combo4.Text = 10 And bp2.Text > 30 And bp2.Text < 50 Then
Kb.Text = -0.0003 * Val(bp2.Text) ^ 2 + 0.0082 * Val(bp2.Text) + 1.0291
Else
If Combo4.Text = 16 And bp2.Text > 37.8 And bp2.Text < 50 Then
Kb.Text = -0.0075 * Val(bp2.Text) + 1.2808

```

```

'Kb.Text = ""
Kb.BackColor = &H80C0FF
Else
If Combo4.Text = 10 And bp2.Text > 50 Then
MsgBox "Backpressure untuk balanced bellow harus < 50%", vbQuestion + 1,
"Pesan"
Kb.BackColor = &H80C0FF
Kb.Text = 0.69
'Kb.Locked = True
Else
If Combo4.Text = 16 And bp2.Text > 50 Then
MsgBox "Backpressure untuk balanced bellow harus < 50%", vbQuestion + 1,
"Pesan"
Kb.BackColor = &H80C0FF
Kb.Text = 0.69
'Kb.Locked = True

Else
If Combo4.Text = 20 And bp2.Text > 32.5 And bp2.Text < 50 Then
Kb.Text = -0.000055 * Val(bp2.Text) ^ 2 + 0.0003 * Val(bp2.Text) + 1.0484
Kb.BackColor = &H80C0FF

Else
If Combo4.Text = 20 And bp2.Text > 50 Then
MsgBox "Backpressure untuk balanced bellow harus < 50%", vbQuestion + 1,
"Pesan"
Kb.BackColor = &H80C0FF
Kb.Text = 0.69
'Kb.Locked = True

End If
End If
End If
End If
End If
End If
End If
End If

If Combo1a.Text = "Pilot-Operated" Then
If bp2.Text < 50 Then
Kb.Text = 1
Else
If bp2.Text > 50 Then
Kb.Text = ""
Kb.BackColor = &H80C0FF
End If
End If

```

```
End If
End If
End If
```

```
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
Pcf.Text = Prel.Text * Rc.Text
```

```
'=====
=====
```

```
If Combo1a.Text = "Non-Balanced" And Combo3.Text = "custom" Then
Rc.Locked = False
Kb.Text = 1
Pb3.Visible = True
GoldButton44.Visible = True
Pb3.Text = 0
Pb3.Locked = True
bp2.Text = 0 / P2.Text * 100
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
Pcf.Text = Prel.Text * Rc.Text
```

```
If Val(Pb3.Text) < Val(Pcf.Text) Then
LAB.Visible = True
LAB.Caption = "Critical Flow"
r.Text = (Pb3.Text + 14.7) / Prel.Text
r1.Visible = False
r.Visible = False
F.Visible = False
F1.Visible = False
Else
If Val(Pb3.Text) > Val(Pcf.Text) Then
LAB.Caption = "Sub Critical Flow"
r.Text = Pb3.Text / Prel.Text
r1.Visible = True
r.Visible = True
aa = Cp.Text / (Cp.Text - 1)
bb = r.Text ^ (2 / Cp.Text)
cc = 1 - r.Text ^ ((Cp.Text - 1) / Cp.Text)
dd = 1 - r.Text
F.Text = (aa * bb * (cc / dd)) ^ 0.5
r1.Visible = True
r.Visible = True
F.Visible = True
F1.Visible = True
```

```
End If
End If
End If
Command1.Value = True
```



```

=====
=====
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

Private Sub Prel_Change()
Pcf.Text = Prel.Text * Rc.Text
End Sub

Private Sub Rc_Change()
Pcf.Text = Prel.Text * Rc.Text
End Sub

Private Sub Text2_Change()
If Text2.Text < 0.11 Then
Text5.Text = "D"
Else
If Text2.Text >= 0.11 And Text2.Text < 0.196 Then
Text5.Text = "E"
Else
If Text2.Text >= 0.196 And Text2.Text < 0.307 Then
Text5.Text = "F"
Else
If Text2.Text >= 0.307 And Text2.Text < 0.503 Then
Text5.Text = "G"
Else
If Text2.Text >= 0.503 And Text2.Text < 0.785 Then
Text5.Text = "H"
Else
If Text2.Text >= 0.785 And Text2.Text < 1.28 Then
Text5.Text = "J"
Else
If Text2.Text >= 1.28 And Text2.Text < 1.84 Then
Text5.Text = "K"
Else
If Text2.Text >= 1.84 And Text2.Text < 2.85 Then
Text5.Text = "L"
Else
If Text2.Text >= 2.85 And Text2.Text < 3.6 Then
Text5.Text = "M"
Else
If Text2.Text >= 1.36 And Text2.Text < 4.34 Then
Text5.Text = "N"
Else

```

```

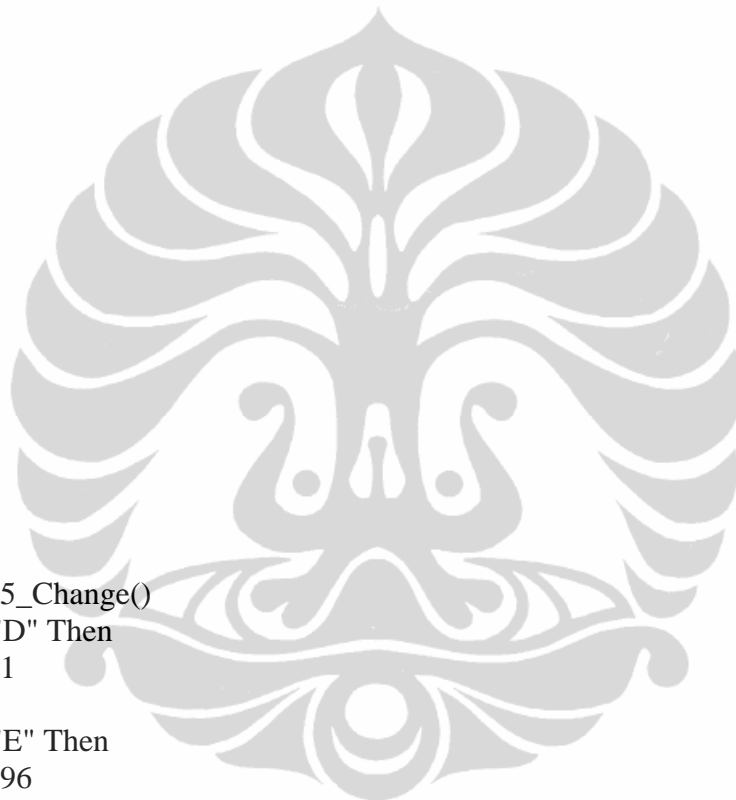
If Text2.Text >= 4.34 And Text2.Text < 6.38 Then
Text5.Text = "P"
Else
If Text2.Text >= 6.38 And Text2.Text < 11.05 Then
Text5.Text = "Q"
Else
If Text2.Text >= 11.05 And Text2.Text < 16 Then
Text5.Text = "R"
Else
If Text2.Text >= 16 And Text2.Text < 26 Then
Text5.Text = "T"
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End Sub

```

```

Private Sub Text5_Change()
If Text5.Text = "D" Then
Text6.Text = 0.11
Else
If Text5.Text = "E" Then
Text6.Text = 0.196
Else
If Text5.Text = "F" Then
Text6.Text = 0.307
Else
If Text5.Text = "G" Then
Text6.Text = 0.503
Else
If Text5.Text = "H" Then
Text6.Text = 0.786
Else
If Text5.Text = "J" Then
Text6.Text = 1.28
Else
If Text5.Text = "K" Then
Text6.Text = 1.84

```



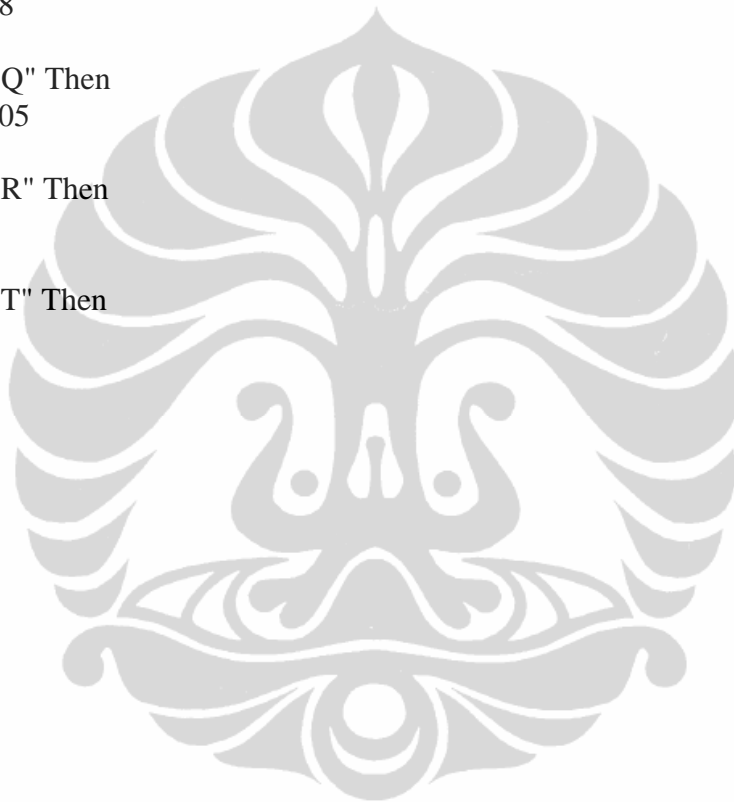
```

Else
If Text5.Text = "L" Then
Text6.Text = 2.85
Else
If Text5.Text = "M" Then
Text6.Text = 3.6
Else
If Text5.Text = "N" Then
Text6.Text = 4.34
Else
If Text5.Text = "P" Then
Text6.Text = 6.38
Else
If Text5.Text = "Q" Then
Text6.Text = 11.05
Else
If Text5.Text = "R" Then
Text6.Text = 11
Else
If Text5.Text = "T" Then
Text6.Text = 26
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End Sub

Private Sub Text6_Change()
Text7.Text = (14 / 11 * Text6.Text) ^ 0.5
End Sub

Private Sub Form_Load()
Dim x As Double
Dim Y As Double
Dim Z As Double
x = (Cp.Text + 1) / (Cp.Text - 1)
Y = 2 / (Cp.Text + 1)
Z1 = Cp.Text * (Y) ^ x

```



```
C.Text = 520 * Z1 ^ 0.5
```

```
End Sub
```

```
Private Sub GoldButton30_Click()
```

```
On Error GoTo error:
```

```
If Combo1a.Text = "Balanced Bellow" And LAB.Caption = "Critical Flow" And  
Pb3.Text >= 0 And Mass.Text > 0 And C.Text > 0 And Prel.Text > 0 And K1.Text >  
0 And Kb.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0 And Mw.Text  
> 0 Then
```

```
Text2.Text = Mass.Text * ((T.Text + 460) * Z.Text / Mw.Text) ^ 0.5 / (C.Text *  
K1.Text * Kb.Text * Kc1.Text * Prel.Text)
```

```
Else
```

```
If Combo1a.Text = "Balanced Bellow" And LAB.Caption = "Sub Critical Flow" And  
Pb3.Text >= 0 And Mass.Text > 0 And C.Text > 0 And Prel.Text > 0 And K1.Text >  
0 And Kb.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0 And Mw.Text  
> 0 Then
```

```
Text2.Text = Mass.Text * ((T.Text + 460) * Z.Text / Mw.Text) ^ 0.5 / (C.Text *  
K1.Text * Kb.Text * Kc1.Text * Prel.Text)
```

```
Else
```

```
If Combo1a.Text = "Non-Balanced" And Pb3.Text >= 0 And LAB.Caption =  
"Critical Flow" And Mass.Text > 0 And C.Text > 0 And Prel.Text > 0 And K1.Text  
> 0 And Kb.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0 And  
Mw.Text > 0 Then
```

```
Text2.Text = Mass.Text * ((T.Text + 460) * Z.Text / Mw.Text) ^ 0.5 / (C.Text *  
K1.Text * Kb.Text * Kc1.Text * Prel.Text)
```

```
Else
```

```
If Combo1a.Text = "Non-Balanced" And F.Text > 0 And Pb3.Text >= 0 And  
LAB.Caption = "Sub Critical Flow" And Mass.Text > 0 And C.Text > 0 And  
Prel.Text > 0 And K1.Text > 0 And Kc1.Text > 0 And T.Text > 0 And Z.Text > 0  
And Mw.Text > 0 Then
```

```
Text2.Text = Mass.Text * ((T.Text + 460) * Z.Text / (Mw.Text * (Pb3.Text + 14.7)  
* (Prel.Text - (Pb3.Text + 14.7)))) ^ 0.5 / (735 * F.Text * K1.Text * Kc1.Text)
```

```
Exit Sub
```

```
error:
```

```
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
```

```
End If
```

```
End If
```

```
End If
```

```
End If
```

```
End Sub
```

```
Private Sub P2_Change()
```

```
Prel.Text = P2.Text * 1.1 + 14.7
```

```
End Sub
```

```
Private Sub Pb3_Change()
```

```
Dim aa As Double
```

```
Dim bb As Double
```

```

Dim cc As Double
Dim dd As Double
Dim pesan As Integer
Kb.Locked = False
bp2.Text = Pb3.Text / P2.Text * 100
On Error GoTo error:
If Pb3.Text >= 0 Then
bp2.Text = Pb3.Text / P2.Text * 100
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
Pcf.Text = Prel.Text * Rc.Text
If Combo1a.Text = "Non-Balanced" Then
Kb.Text = 1
If bp2.Text > 10 Then
pesan = MsgBox("Apakah anda akan menggunakan tipe balance?", vbQuestion +
vbYesNo, "Pesan")
If pesan = vbYes Then
Combo1a.Text = "Balanced Bellow"
bp2.Text = Pb3.Text / P2.Text * 100
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
LAB.Visible = False
End If
If pesan = vbNo Then
Combo4.Text = 10
Pb3.Text = 0
Kb.Text = 1
Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7
End If
End If
End If

If Combo1a.Text = "Balanced Bellow" Then
If Combo4.Text = 10 And bp2.Text < 30 Then
Kb.Text = 1
Else
If Combo4.Text = 16 And bp2.Text < 37.8 Then
Kb.Text = 1
Else
If Combo4.Text = 20 And bp2.Text < 32.5 Then
Kb.Text = 1
Else
If Combo4.Text = 10 And bp2.Text > 30 And bp2.Text < 50 Then
Kb.Text = -0.0003 * Val(bp2.Text) ^ 2 + 0.0082 * Val(bp2.Text) + 1.0291
Else
If Combo4.Text = 16 And bp2.Text > 37.8 And bp2.Text < 50 Then
Kb.Text = -0.0075 * Val(bp2.Text) + 1.2808
'Kb.Text = ""
Kb.BackColor = &H80C0FF

```

```

Else
If Combo4.Text = 10 And bp2.Text > 50 Then
MsgBox "Backpressure untuk balanced bellow harus < 50%", vbQuestion + 1,
"Pesan"
Kb.BackColor = &H80C0FF
Kb.Text = 0.69
'Kb.Locked = True
Else
If Combo4.Text = 16 And bp2.Text > 50 Then
MsgBox "Backpressure untuk balanced bellow harus < 50%", vbQuestion + 1,
"Pesan"
Kb.BackColor = &H80C0FF
Kb.Text = 0.69
'Kb.Locked = True

Else
If Combo4.Text = 20 And bp2.Text > 32.5 And bp2.Text < 50 Then
Kb.Text = -0.000055 * Val(bp2.Text) ^ 2 + 0.0003 * Val(bp2.Text) + 1.0484
Kb.BackColor = &H80C0FF

Else
If Combo4.Text = 20 And bp2.Text > 50 Then
MsgBox "Backpressure untuk balanced bellow harus < 50%", vbQuestion + 1,
"Pesan"
Kb.BackColor = &H80C0FF
Kb.Text = 0.69
'Kb.Locked = True

End If
End If
End If
End If
End If
End If
End If
End If

If Combo1a.Text = "Pilot-Operated" Then
If bp2.Text < 50 Then
Kb.Text = 1
Else
If bp2.Text > 50 Then
Kb.Text = ""
Kb.BackColor = &H80C0FF
End If
End If
End If
End If

```

End If

Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7

Pcf.Text = Prel.Text * Rc.Text

'=====

=====

If Combo1a.Text = "Non-Balanced" And Combo3.Text = "custom" Then

Rc.Locked = False

Kb.Text = 1

Pb3.Visible = True

GoldButton44.Visible = True

Pb3.Text = 0

Pb3.Locked = True

bp2.Text = 0 / P2.Text * 100

Prel.Text = P2.Text * (1 + Combo4.Text / 100) + 14.7

Pcf.Text = Prel.Text * Rc.Text

If Val(Pb3.Text) < Val(Pcf.Text) Then

LAB.Visible = True

LAB.Caption = "Critical Flow"

r.Text = (Pb3.Text + 14.7) / Prel.Text

r1.Visible = False

r.Visible = False

F.Visible = False

F1.Visible = False

Else

If Val(Pb3.Text) > Val(Pcf.Text) Then

LAB.Caption = "Sub Critical Flow"

r.Text = Pb3.Text / Prel.Text

r1.Visible = True

r.Visible = True

aa = Cp.Text / (Cp.Text - 1)

bb = r.Text ^ (2 / Cp.Text)

cc = 1 - r.Text ^ ((Cp.Text - 1) / Cp.Text)

dd = 1 - r.Text

F.Text = (aa * bb * (cc / dd)) ^ 0.5

r1.Visible = True

r.Visible = True

F.Visible = True

F1.Visible = True

End If

End If

End If

Command1.Value = True

```

=====
=====
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

```

```

Private Sub Prel_Change()
Pcf.Text = Prel.Text * Rc.Text
End Sub

```

```

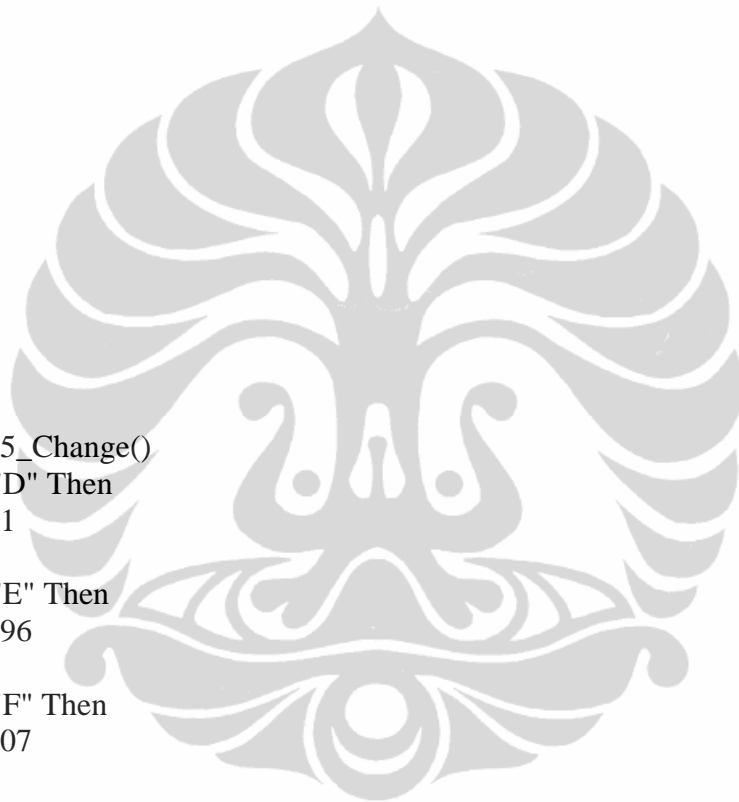
Private Sub Text2_Change()
If Text2.Text < 0.11 Then
Text5.Text = "D"
Else
If Text2.Text >= 0.11 And Text2.Text < 0.196 Then
Text5.Text = "E"
Else
If Text2.Text >= 0.196 And Text2.Text < 0.307 Then
Text5.Text = "F"
Else
If Text2.Text >= 0.307 And Text2.Text < 0.503 Then
Text5.Text = "G"
Else
If Text2.Text >= 0.503 And Text2.Text < 0.785 Then
Text5.Text = "H"
Else
If Text2.Text >= 0.785 And Text2.Text < 1.28 Then
Text5.Text = "J"
Else
If Text2.Text >= 1.28 And Text2.Text < 1.84 Then
Text5.Text = "K"
Else
If Text2.Text >= 1.84 And Text2.Text < 2.85 Then
Text5.Text = "L"
Else
If Text2.Text >= 2.85 And Text2.Text < 3.6 Then
Text5.Text = "M"
Else
If Text2.Text >= 1.36 And Text2.Text < 4.34 Then
Text5.Text = "N"
Else
If Text2.Text >= 4.34 And Text2.Text < 6.38 Then
Text5.Text = "P"
Else
If Text2.Text >= 6.38 And Text2.Text < 11.05 Then

```



```
Text5.Text = "Q"  
Else  
If Text2.Text >= 11.05 And Text2.Text < 16 Then  
Text5.Text = "R"  
Else  
If Text2.Text >= 16 And Text2.Text < 26 Then  
Text5.Text = "T"  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End If  
End Sub
```

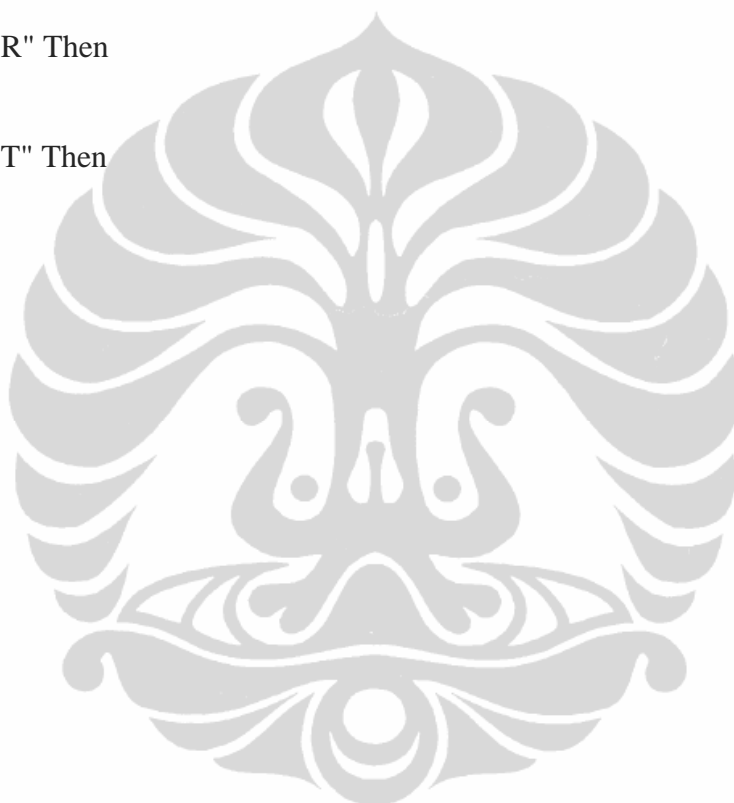
```
Private Sub Text5_Change()  
If Text5.Text = "D" Then  
Text6.Text = 0.11  
Else  
If Text5.Text = "E" Then  
Text6.Text = 0.196  
Else  
If Text5.Text = "F" Then  
Text6.Text = 0.307  
Else  
If Text5.Text = "G" Then  
Text6.Text = 0.503  
Else  
If Text5.Text = "H" Then  
Text6.Text = 0.786  
Else  
If Text5.Text = "J" Then  
Text6.Text = 1.28  
Else  
If Text5.Text = "K" Then  
Text6.Text = 1.84  
Else  
If Text5.Text = "L" Then  
Text6.Text = 2.85  
Else
```



```

If Text5.Text = "M" Then
Text6.Text = 3.6
Else
If Text5.Text = "N" Then
Text6.Text = 4.34
Else
If Text5.Text = "P" Then
Text6.Text = 6.38
Else
If Text5.Text = "Q" Then
Text6.Text = 11.05
Else
If Text5.Text = "R" Then
Text6.Text = 11
Else
If Text5.Text = "T" Then
Text6.Text = 26
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End Sub

```



```

Private Sub Text6_Change()
Text7.Text = (14 / 11 * Text6.Text) ^ 0.5
End Sub

```

```

Private Sub GoldButton24_Click()
Dim a As Single
On Error GoTo error:
If Visc.Text > 0 And Q.Text > 0 And SG.Text > 0 And P.Text > 0 And Pb.Text > 0
And Kw.Text > 0 And Kp.Text > 0 And K.Text > 0 And Kv.Text > 0 And Kc.Text >
0 And Visc.Text > 0 Then
Text1.Text = Q.Text * (SG.Text) ^ 0.5 / (38 * K.Text * Kp.Text * Kw.Text *
Kv.Text * Kc.Text * (1.25 * P.Text - Pb.Text) ^ 0.5)
Re.Text = 2800 * SG.Text * Q.Text * (Visc.Text * Text1.Text)
Exit Sub

```

```

error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If

End Sub

Private Sub Kv1_Change()
Area.Text = Text1.Text / Kv1.Text

End Sub

Private Sub OP_Change()

On Error GoTo error:
If OP.Text > 0 Then
If OP.Text <= 10 Then
Combo1.Text = "Non-Balanced"
End If
If OP.Text > 10 Then
Combo1.Text = "Balanced Bellow"
End If

If OP.Text <= 25 Then
Kp.Text = -0.0014 * OP.Text ^ 2 + 0.073 * OP.Text + 0.016
End If

If OP.Text > 25 And OP.Text < 50 Then
Kp.Text = 0.00335 * OP.Text + 0.918
End If
Exit Sub
error:
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
End If
End Sub

Private Sub Pb_Change()
bp.Text = Pb.Text / P.Text * 100
If bp.Text <= 15 Then
Kw.Text = 1
End If
If bp.Text > 15 Then
Kw.Text = -0.01 * bp.Text + 1.185
End If
End Sub

Private Sub Re_Change()
Dim a As Single
If Re.Text < 200 Then

```

```
Kv1.Text = 0.27 * (Log(Re.Text) / Log(2.718282)) - 0.65
```

```
Else
```

```
If Re.Text >= 200 And Re.Text < 100000 Then
```

```
a = Log(Re.Text) / Log(2.71828)
```

```
Kv1.Text = -0.00777 * a ^ 2 + 0.165 * a + 0.128
```

```
Else
```

```
If Re.Text > 100000 Then
```

```
Kv1.Text = 1
```

```
End If
```

```
End If
```

```
End If
```

```
End Sub
```

```
Private Sub Text1_Change()
```

```
On Error GoTo error:
```

```
If SG.Text > 0 And Q.Text > 0 And Visc.Text > 0 And Text1.Text > 0 Then
```

```
Re.Text = 2800 * SG.Text * Q.Text * (Visc.Text * Text1.Text)
```

```
Exit Sub
```

```
error:
```

```
MsgBox "Input Data Belum Lengkap!", vbQuestion + vbOKOnly, "Pesan"
```

```
End If
```

```
End Sub
```

```
Private Sub Text5a_Change()
```

```
If Text5a.Text = "D" Then
```

```
Text6a.Text = 0.11
```

```
Else
```

```
If Text5a.Text = "E" Then
```

```
Text6a.Text = 0.196
```

```
Else
```

```
If Text5a.Text = "F" Then
```

```
Text6a.Text = 0.307
```

```
Else
```

```
If Text5a.Text = "G" Then
```

```
Text6a.Text = 0.503
```

```
Else
```

```
If Text5a.Text = "H" Then
```

```
Text6a.Text = 0.786
```

```
Else
```

```
If Text5a.Text = "J" Then
```

```
Text6a.Text = 1.28
```

```
Else
```

```
If Text5a.Text = "K" Then
```

```
Text6a.Text = 1.84
```

```
Else
```

```
If Text5a.Text = "L" Then
```

```
Text6a.Text = 2.85
```

```
Else
If Text5a.Text = "M" Then
Text6a.Text = 3.6
Else
If Text5a.Text = "N" Then
Text6a.Text = 4.34
Else
If Text5a.Text = "P" Then
Text6a.Text = 6.38
Else
If Text5a.Text = "Q" Then
Text6a.Text = 11.05
Else
If Text5a.Text = "R" Then
Text6a.Text = 11
Else
If Text5a.Text = "T" Then
Text6a.Text = 26
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End If
End Sub
```

```
Private Sub Text6a_Change()
Text7a.Text = (14 / 11 * Text6a.Text) ^ 0.5
End Sub
```

