

**Tulisan program pada lembar 1;**

Public Sub Menghapushitungan()

```
Lembar1.Activate  
Lembar1.Range("Q9:T34").Select  
Selection.ClearContents  
Range("V8:DB34").Select  
Selection.ClearContents  
Range("DE9:DF41").Select  
Selection.ClearContents  
Range("DG8:FN41").Select  
Selection.ClearContents  
Range("FQ8:GG34").Select  
Selection.ClearContents  
Range("GK8:GQ17").Select  
Selection.ClearContents  
Range("GT8:HC34").Select  
Selection.ClearContents  
Range("HI21:HL30").Select  
Selection.ClearContents  
Range("HO21:HR30").Select  
Selection.ClearContents  
Range("HW21:IE30").Select  
Selection.ClearContents  
Range("IJ19:IP45").Select  
Selection.ClearContents
```

End Sub

Public Sub MenentukanMntls()

```
Lembar1.Activate  
Lembar1.Range("Q9").Select  
ActiveCell.FormulaR1C1 = "=R[-1]C"  
Selection.AutoFill Destination:=Range("Q9:Q34"), Type:=xlFillDefault  
Range("Q9:Q34").Select  
Range("R9").Select  
ActiveCell.FormulaR1C1 = "=R[-1]C"  
Selection.AutoFill Destination:=Range("R9:R34"), Type:=xlFillDefault  
Range("R9:R34").Select  
Range("S9").Select  
ActiveCell.FormulaR1C1 = "=R[-1]C"  
Selection.AutoFill Destination:=Range("S9:S34"), Type:=xlFillDefault  
Range("S9:S34").Select  
Range("T9").Select  
ActiveCell.FormulaR1C1 = "=R[-1]C"  
Selection.AutoFill Destination:=Range("T9:T34"), Type:=xlFillDefault  
Range("T9:T34").Select  
Range("V8").Select
```

ActiveCell.FormulaR1C1 = "=RC[-20]"  
 Selection.AutoFill Destination:=Range("V8:V34"), Type:=xlFillDefault  
 Range("V8:V34").Select  
 Range("W8").Select  
 ActiveCell.FormulaR1C1 = "=RC[-20]"  
 Selection.AutoFill Destination:=Range("W8:W34"), Type:=xlFillDefault  
 Range("W8:W34").Select  
 Range("X8").Select  
 ActiveCell.FormulaR1C1 = "=RC[-20]"  
 Selection.AutoFill Destination:=Range("X8:X34"), Type:=xlFillDefault  
 Range("X8:X34").Select  
 Range("Y8").Select  
 ActiveCell.FormulaR1C1 = "=RC[-19]"  
 Selection.AutoFill Destination:=Range("Y8:Y34"), Type:=xlFillDefault  
 Range("Y8:Y34").Select  
 Range("Z8").Select  
 ActiveCell.FormulaR1C1 = "=170/(RC[-9]^0.5)"  
 Selection.AutoFill Destination:=Range("Z8:Z34"), Type:=xlFillDefault  
 Range("Z8:Z34").Select  
 Range("AA8").Select  
 ActiveCell.FormulaR1C1 = "=370/((RC[-10]-RC[-13])^0.5)"  
 Selection.AutoFill Destination:=Range("AA8:AA34"), Type:=xlFillDefault  
 Range("AA8:AA34").Select  
 Range("AB8").Select  
 ActiveCell.FormulaR1C1 = "=RC[-17]\*RC[-11]"  
 Selection.AutoFill Destination:=Range("AB8:AB34"), Type:=xlFillDefault  
 Range("AB8:AB34").Select  
 Range("AC8").Select  
 ActiveCell.FormulaR1C1 = "=RC[-18]\*RC[-12]"  
 Selection.AutoFill Destination:=Range("AC8:AC34"), Type:=xlFillDefault  
 Range("AC8:AC34").Select  
 Range("AD8").Select  
 ActiveCell.FormulaR1C1 =  
 "=((RC[-19]\*RC[-13])-(((RC[-19]\*RC[-13])-(RC[-22]\*(RC[-13]-RC[-16])))\*((RC[-5]-RC[-4])/(RC[-3]-RC[-4])))"  
 Selection.AutoFill Destination:=Range("AD8:AD34"), Type:=xlFillDefault  
 Range("AD8:AD34").Select  
 Range("AE8").Select  
 ActiveCell.FormulaR1C1 =  
 "=((PI()/RC[-13])\*((((PI()\*RC[-16])/RC[-13])^2)\*(RC[-18]\*RC[-22]))+(RC[-16]\*RC[-22]\*RC[-15]\*RC[-19]))^0.5"  
 Selection.AutoFill Destination:=Range("AE8:AE33"), Type:=xlFillDefault  
 Range("AE8:AE33").Select  
 Selection.AutoFill Destination:=Range("AE8:AE34"), Type:=xlFillDefault  
 Range("AE8:AE34").Select

```

Range("AH3").Select
Range("AF8").Activate
For n1 = 1 To 27
    Lamdas = ActiveCell.Offset(0, -7)
    Lamdaps = ActiveCell.Offset(0, -6)
    Lamdars = ActiveCell.Offset(0, -5)
    Kategori = ActiveCell
    If Lamdas <= Lamdaps Then Kategori = "Sayap kompak": GoTo 30 Else GoTo 10
10 If Lamdas <= Lamdars Then Kategori = "Sayap tidak kompak": GoTo 30 Else
    GoTo 20
20 Kategori = "Sayap langsing": GoTo 30
30 ActiveCell = Kategori
    ActiveCell.Offset(1, 0).Activate
Next n1
Range("AG8").Activate
For n2 = 1 To 27
    Mn = ActiveCell
    Mp = ActiveCell.Offset(0, -5)
    Mnsk = ActiveCell.Offset(0, -4)
    Mnstk = ActiveCell.Offset(0, -3)
    Mns1 = ActiveCell.Offset(0, -2)
    Kategori = ActiveCell.Offset(0, -1)
    If Kategori = "Sayap kompak" Then Mn = Mnsk: GoTo 70 Else GoTo 40
40 If Kategori = "Sayap tidak kompak" Then Mn = Mnstk: GoTo 70 Else GoTo 50
50 If Mns1 <= Mp Then Mn = Mns1: GoTo 70 Else GoTo 60
60 Mn = Mp
70 ActiveCell = Mn
    ActiveCell.Offset(1, 0).Activate
Next n2
End Sub
Public Sub MenentukanMntlb()
    Lembar1.Activate
    Lembar1.Range("A18").Select
    ActiveCell.FormulaR1C1 = "=RC[-33]"
    Selection.AutoFill Destination:=Range("A18:A134"), Type:=xlFillDefault
    Range("A18:A134").Select
    Range("AJ8").Select
    ActiveCell.FormulaR1C1 = "=RC[-33]"
    Selection.AutoFill Destination:=Range("AJ8:AJ34"), Type:=xlFillDefault
    Range("AJ8:AJ34").Select
    Range("AK8").Select
    ActiveCell.FormulaR1C1 = "=RC[-33]"
    Selection.AutoFill Destination:=Range("AK8:AK34"), Type:=xlFillDefault
    Range("AK8:AK34").Select
    Range("AL8").Select
    ActiveCell.FormulaR1C1 = "=RC[-31]"

```

```

Selection.AutoFill Destination:=Range("AL8:AL34"), Type:=xlFillDefault
Range("AL8:AL34").Select
Range("AM8").Select
ActiveCell.FormulaR1C1 = "=1680/(RC[-22]^0.5)"
Selection.AutoFill Destination:=Range("AM8:AM34"), Type:=xlFillDefault
Range("AM8:AM34").Select
Range("AN8").Select
ActiveCell.FormulaR1C1 = "=2550/(RC[-23]^0.5)"
Selection.AutoFill Destination:=Range("AN8:AN34"), Type:=xlFillDefault
Range("AN8:AN34").Select
Range("AO8").Select
ActiveCell.FormulaR1C1 = "=RC[-30]*RC[-24]"
Selection.AutoFill Destination:=Range("AO8:AO34"), Type:=xlFillDefault
Range("AO8:AO34").Select
Range("AP8").Select
ActiveCell.FormulaR1C1 =
"=(RC[-31]*RC[-25])-(((RC[-31]*RC[-25])-(RC[-34]*(RC[-25]-RC[-
28])))*(RC[-4]-RC[-3])/(RC[-2]-RC[-3]))"
Selection.AutoFill Destination:=Range("AP8:AP34"), Type:=xlFillDefault
Range("AP8:AP34").Select
Range("AQ8").Activate
For n3 = 1 To 27
Lamdab = ActiveCell.Offset(0, -5)
Lamdapb = ActiveCell.Offset(0, -4)
Lamdarb = ActiveCell.Offset(0, -3)
Kategori = ActiveCell
If Lamdab <= Lamdapb Then Kategori = "Badan kompak": GoTo 100 Else GoTo
80
80 If Lamdab <= Lamdarb Then Kategori = "Badan tidak kompak": GoTo 100 Else
GoTo 90
90 Kategori = "Badan langsing": GoTo 100
100 ActiveCell = Kategori
ActiveCell.Offset(1, 0).Activate
Next n3
Range("AR8").Activate
For n4 = 1 To 27
Mn = ActiveCell
Mnbk = ActiveCell.Offset(0, -3)
Mnbtb = ActiveCell.Offset(0, -2)
Kategori = ActiveCell.Offset(0, -1)
If Kategori = "Badan kompak" Then Mn = Mnbk: GoTo 130 Else GoTo 110
110 If Kategori = "Badan tidak kompak" Then Mn = Mnbtb: GoTo 130 Else GoTo
120
120 Mn = 0: GoTo 130
130 ActiveCell = Mn
ActiveCell.Offset(1, 0).Activate

```

```

Next n4
End Sub
Public Sub MenentukanMntpl()
    Lembar1.Activate
    Lembar1.Range("AT8").Select
    ActiveCell.FormulaR1C1 = "=RC[-44]"
    Selection.AutoFill Destination:=Range("AT8:AT34"), Type:=xlFillDefault
    Range("AT8:AT34").Select
    Range("AU8").Select
    ActiveCell.FormulaR1C1 = "=RC[-44]"
    Selection.AutoFill Destination:=Range("AU8:AU34"), Type:=xlFillDefault
    Range("AU8:AU34").Select
    Range("AV8").Select
    ActiveCell.FormulaR1C1 = "=RC[-44]"
    Selection.AutoFill Destination:=Range("AV8:AV34"), Type:=xlFillDefault
    Range("AV8:AV34").Select
    Range("AW8").Select
    ActiveCell.FormulaR1C1 = "=RC[-31]"
    Selection.AutoFill Destination:=Range("AW8:AW34"), Type:=xlFillDefault
    Range("AW8:AW34").Select
    Range("AX8").Select
    ActiveCell.FormulaR1C1 = "=1.76*RC[-40]*((RC[-35]/RC[-33])^0.5)"
    Selection.AutoFill Destination:=Range("AX8:AX34"), Type:=xlFillDefault
    Range("AX8:AX34").Select
    Range("AY8").Select
    ActiveCell.FormulaR1C1 = _
        "=((RC[-41]*((PI()/RC[-43])*((RC[-36]*RC[-35]*RC[-39]*RC[-46])/2)^0.5))*((1+((1+(((4*RC[-38])/RC[-42])*((RC[-43]/(RC[-35]*RC[-39]))^2))*((RC[-34]-RC[-37])^2))))^0.5)^0.5)/(RC[-34]-RC[-37])"
    Selection.AutoFill Destination:=Range("AY8:AY34"), Type:=xlFillDefault
    Range("AY8:AY34").Select
    Range("AZ8").Select
    ActiveCell.FormulaR1C1 = "=RC[-41]*RC[-35]"
    Selection.AutoFill Destination:=Range("AZ8:AZ34"), Type:=xlFillDefault
    Range("AZ8:AZ34").Select
    Range("BA8").Select
    ActiveCell.FormulaR1C1 = "=RC[-42]*RC[-36]"
    Selection.AutoFill Destination:=Range("BA8:BA34"), Type:=xlFillDefault
    Range("BA8:BA34").Select
    Range("BB8").Select
    ActiveCell.FormulaR1C1 = _
        "=RC[-34]*((RC[-43]*RC[-37])-(((RC[-43]*RC[-37])-(RC[-46]*(RC[-37]-RC[-40])))*(RC[-5]-RC[-4])/(RC[-3]-RC[-4])))"
    Selection.AutoFill Destination:=Range("BB8:BB34"), Type:=xlFillDefault
    Range("BB8:BB34").Select
    Range("BC8").Select

```

```

ActiveCell.FormulaR1C1 =
    "=(PI()/RC[-37])*((((PI()*RC[-40])/RC[-37])^2)*(RC[-42]*RC[-
46]))+(RC[-40]*RC[-46]*RC[-39]*RC[-43])^0.5"
Selection.AutoFill Destination:=Range("BC8:BC34"), Type:=xlFillDefault
Range("BC8:BC34").Select
Range("BD8").Select
Range("BD8").Activate
For n5 = 1 To 27
    Lb = ActiveCell.Offset(0, -7)
    Lp = ActiveCell.Offset(0, -6)
    Lr = ActiveCell.Offset(0, -5)
    Kategori = ActiveCell
    If Lb <= Lp Then Kategori = "Bentang pendek": GoTo 160 Else GoTo 140
140 If Lb <= Lr Then Kategori = "Bentang menengah": GoTo 160 Else GoTo 150
150 Kategori = "Bentang panjang": GoTo 160
160 ActiveCell = Kategori
    ActiveCell.Offset(1, 0).Activate
Next n5
Lembar1.Activate
Lembar1.Range("BE8").Activate
For n6 = 1 To 27
    Mn = ActiveCell
    Mp = ActiveCell.Offset(0, -5)
    Mnpk = ActiveCell.Offset(0, -4)
    Mnm = ActiveCell.Offset(0, -3)
    Mnpg = ActiveCell.Offset(0, -2)
    Kategori = ActiveCell.Offset(0, -1)
    If Kategori = "Bentang pendek" Then Mn = Mnpk: GoTo 220 Else GoTo 170
170 If Kategori = "Bentang menengah" Then GoTo 180 Else GoTo 200
180 If Mnm <= Mp Then Mn = Mnm: GoTo 220 Else GoTo 190
190 Mn = Mp: GoTo 220
200 If Mnpg <= Mp Then Mn = Mnpg: GoTo 220 Else GoTo 210
210 Mn = Mp: GoTo 220
220 ActiveCell = Mn
    ActiveCell.Offset(1, 0).Activate
Next n6
End Sub
Public Sub MenentukanMnpakai()
    Lembar1.Activate
    Lembar1.Range("BG8").Select
    ActiveCell.FormulaR1C1 = "=RC[-57]"
    Selection.AutoFill Destination:=Range("BG8:BG34"), Type:=xlFillDefault
    Range("BG8:BG34").Select
    Range("BH8").Select
    ActiveCell.FormulaR1C1 = "=RC[-57]"
    Selection.AutoFill Destination:=Range("BH8:BH34"), Type:=xlFillDefault

```

```

Range("BH8:BH34").Select
Range("BI8").Select
ActiveCell.FormulaR1C1 = "=RC[-57]"
Selection.AutoFill Destination:=Range("BI8:BI34"), Type:=xlFillDefault
Range("BI8:BI34").Select
Range("BJ8").Select
ActiveCell.FormulaR1C1 = "=RC[-29]"
Selection.AutoFill Destination:=Range("BJ8:BJ34"), Type:=xlFillDefault
Range("BJ8:BJ34").Select
Range("BK8").Select
ActiveCell.FormulaR1C1 = "=RC[-19]"
Selection.AutoFill Destination:=Range("BK8:BK34"), Type:=xlFillDefault
Range("BK8:BK34").Select
Range("BL8").Select
ActiveCell.FormulaR1C1 = "=RC[-7]"
Selection.AutoFill Destination:=Range("BL8:BL34"), Type:=xlFillDefault
Range("BL8:BL34").Select
Range("BM8").Select
Range("BM8").Activate
For n7 = 1 To 27
Mntls = ActiveCell.Offset(0, -3)
Mntlb = ActiveCell.Offset(0, -2)
Mntpl = ActiveCell.Offset(0, -1)
Mnkecil = ActiveCell
If Mntls < Mntlb Then Mnkecil = Mntls Else Mnkecil = Mntlb
If Mnkecil < Mntpl Then Mnkecil = Mnkecil Else Mnkecil = Mntpl
ActiveCell = Mnkecil
ActiveCell.Offset(1, 0).Activate
Next n7
Range("BN8").Activate
For n8 = 1 To 27
Mntls = ActiveCell.Offset(0, -4)
Mntlb = ActiveCell.Offset(0, -3)
Mntpl = ActiveCell.Offset(0, -2)
Mnkecil = ActiveCell.Offset(0, -1)
Batas = ActiveCell
If Mnkecil = Mntls And Mnkecil = Mntlb And Mnkecil = Mntpl Then Batas =
"Tekuk lokal dan tekuk puntir lateral": GoTo 290 Else GoTo 230
230 If Mnkecil = Mntls And Mnkecil = Mntlb Then Batas = "Tekuk lokal": GoTo
290 Else GoTo 240
240 If Mnkecil = Mntls And Mnkecil = Mntpl Then Batas = "Tekuk lokal sayap dan
tekuk puntir lateral": GoTo 290 Else GoTo 250
250 If Mnkecil = Mntlb And Mnkecil = Mntpl Then Batas = "Tekuk lokal badan dan
tekuk puntir lateral": GoTo 290 Else GoTo 260
260 If Mnkecil = Mntls Then Batas = "Tekuk lokal sayap": GoTo 290 Else GoTo
270

```



```

270 If Mnkecil = Mntlb Then Batas = "Tekuk lokal badan": GoTo 290 Else GoTo
280
280 Batas = "Tekuk puntir lateral"
290 ActiveCell = Batas
    ActiveCell.Offset(1, 0).Activate
    Next n8
    Range("BO8").Select
    ActiveCell.FormulaR1C1 = "=RC[-35]"
    Selection.AutoFill Destination:=Range("BO8:BO34"), Type:=xlFillDefault
    Range("BO8:BO34").Select
    Range("BP8").Select
    ActiveCell.FormulaR1C1 = "=RC[-25]"
    Selection.AutoFill Destination:=Range("BP8:BP34"), Type:=xlFillDefault
    Range("BP8:BP34").Select
    Range("BQ8").Select
    ActiveCell.FormulaR1C1 = "=RC[-13]"
    Selection.AutoFill Destination:=Range("BQ8:BQ34"), Type:=xlFillDefault
    Range("BQ8:BQ34").Select
End Sub
Public Sub MengetahuiProfilBajayangAman()
    Lembar1.Activate
    Lembar1.Range("BS8").Select
    ActiveCell.FormulaR1C1 = "=RC[-69]"
    Selection.AutoFill Destination:=Range("BS8:BS34"), Type:=xlFillDefault
    Range("BS8:BS34").Select
    Range("BT8").Select
    ActiveCell.FormulaR1C1 = "=RC[-69]"
    Selection.AutoFill Destination:=Range("BT8:BT34"), Type:=xlFillDefault
    Range("BT8:BT34").Select
    Range("BU8").Select
    ActiveCell.FormulaR1C1 = "=RC[-69]"
    Selection.AutoFill Destination:=Range("BU8:BU34"), Type:=xlFillDefault
    Range("BU8:BU34").Select
    Range("BV8").Select
    ActiveCell.FormulaR1C1 = "=(0.9*RC[-9])/1000000"
    Selection.AutoFill Destination:=Range("BV8:BV34"), Type:=xlFillDefault
    Range("BV8:BV34").Select
    Range("BW8").Select
    ActiveCell.FormulaR1C1 = "=RC[-56]/1000000"
    Selection.AutoFill Destination:=Range("BW8:BW34"), Type:=xlFillDefault
    Range("BW8:BW34").Select
    Range("BX8").Select
    ActiveCell.FormulaR1C1 = "=RC[-10]"
    Selection.AutoFill Destination:=Range("BX8:BX34"), Type:=xlFillDefault
    Range("BX8:BX34").Select
    Range("BY8").Select

```

```

ActiveCell.FormulaR1C1 = "=RC[-10]"
Selection.AutoFill Destination:=Range("BY8:BY34"), Type:=xlFillDefault
Range("BY8:BY34").Select
Range("BZ8").Select
ActiveCell.FormulaR1C1 = "=RC[-10]"
Selection.AutoFill Destination:=Range("BZ8:BZ34"), Type:=xlFillDefault
Range("BZ8:BZ34").Select
Range("CA8").Select
ActiveCell.FormulaR1C1 = "=RC[-10]"
Selection.AutoFill Destination:=Range("CA8:CA34"), Type:=xlFillDefault
Range("CA8:CA34").Select
Range("BV8").Activate
For n9 = 1 To 27
    FMnpakai = ActiveCell
    Mu = ActiveCell.Offset(0, 1)
    If FMnpakai >= Mu Then GoTo 310 Else GoTo 300
300 ActiveCell.Offset(0, -3) = Empty
    ActiveCell.Offset(0, -2) = Empty
    ActiveCell.Offset(0, -1) = Empty
    ActiveCell = Empty
    ActiveCell.Offset(0, 1) = Empty
    ActiveCell.Offset(0, 2) = Empty
    ActiveCell.Offset(0, 3) = Empty
    ActiveCell.Offset(0, 4) = Empty
    ActiveCell.Offset(0, 5) = Empty
310 ActiveCell.Offset(1, 0).Activate
    Next n9
    Range("BS8:CA34").Select
    Selection.Copy
    Range("BS8").Select
    Selection.PasteSpecial Paste:=xlValues, Operation:=xlNone, SkipBlanks:= _
        False, Transpose:=False
    Application.CutCopyMode = False
    Selection.Sort Key1:=Range("BS8"), Order1:=xlAscending, Header:=xlGuess, _
        OrderCustom:=1, MatchCase:=False, Orientation:=xlTopToBottom
End Sub
Public Sub MengetahuiProfilBajayangAmanBerdasarkanUrutanMomen()
    Lembar1.Activate
    Lembar1.Range("BS8:BV34").Select
    Selection.Copy
    Range("CC8").Select
    Selection.PasteSpecial Paste:=xlValues, Operation:=xlNone, SkipBlanks:= _
        False, Transpose:=False
    Range("BX8:CA34").Select
    Application.CutCopyMode = False
    Selection.Copy

```

```

Range("CG8").Select
Selection.PasteSpecial Paste:=xlValues, Operation:=xlNone, SkipBlanks:= _
    False, Transpose:=False
Application.CutCopyMode = False
Range("CC8:CJ34").Select
Selection.Sort Key1:=Range("CF8"), Order1:=xlAscending, Header:=xlGuess, _
    OrderCustom:=1, MatchCase:=False, Orientation:=xlTopToBottom
End Sub
Public Sub MengetahuiProfilBajayangAmanBerdasarkanUrutanBerat()
    Lembar1.Activate
    Lembar1.Range("CC8:CJ34").Select
    Selection.Copy
    Range("CL8").Select
    Selection.PasteSpecial Paste:=xlValues, Operation:=xlNone, SkipBlanks:= _
        False, Transpose:=False
    Application.CutCopyMode = False
    Selection.Sort Key1:=Range("CM8"), Order1:=xlAscending, Header:=xlGuess, _
        OrderCustom:=1, MatchCase:=False, Orientation:=xlTopToBottom
End Sub
Public Sub MengetahuiProfilBajayangAmanBerdasarkanUrutanTinggi()
    Lembar1.Activate
    Lembar1.Range("CL8:CS34").Select
    Selection.Copy
    Range("CU8").Select
    Selection.PasteSpecial Paste:=xlValues, Operation:=xlNone, SkipBlanks:= _
        False, Transpose:=False
    Application.CutCopyMode = False
    Selection.Sort Key1:=Range("CW8"), Order1:=xlAscending, Header:=xlGuess, _
        OrderCustom:=1, MatchCase:=False, Orientation:=xlTopToBottom
End Sub
Public Sub Menetapkan10ProfilyangEkonomis()
    Lembar1.Activate
    Lembar1.Range("CL8:CO17").Select
    Selection.Copy
    Range("HI21").Select
    Selection.PasteSpecial Paste:=xlValues, Operation:=xlNone, SkipBlanks:= _
        False, Transpose:=False
    Range("CU8:CX17").Select
    Application.CutCopyMode = False
    Selection.Copy
    Range("HO21").Select
    Selection.PasteSpecial Paste:=xlValues, Operation:=xlNone, SkipBlanks:= _
        False, Transpose:=False
    Application.CutCopyMode = False
    Range("HR31").Select
    Range("CL8:CO17").Select

```

```

Selection.Copy
Range("HI21").Select
Selection.PasteSpecial Paste:=xlValues, Operation:=xlNone, SkipBlanks:= _
    False, Transpose:=False
Range("CU8:CX17").Select
Application.CutCopyMode = False
Selection.Copy
Range("HO21").Select
Selection.PasteSpecial Paste:=xlValues, Operation:=xlNone, SkipBlanks:= _
    False, Transpose:=False
End Sub
Public Sub MenentukanKondisiSayap()
    Lembar1.Activate
    Lembar1.Range("FQ8").Select
    ActiveCell.FormulaR1C1 = "=RC[-171]"
    Selection.AutoFill Destination:=Range("FQ8:FQ34"), Type:=xlFillDefault
    Range("FQ8:FQ34").Select
    Range("FR8").Select
    ActiveCell.FormulaR1C1 = "=RC[-171]"
    Selection.AutoFill Destination:=Range("FR8:FR34"), Type:=xlFillDefault
    Range("FR8:FR34").Select
    Range("FS8").Select
    ActiveCell.FormulaR1C1 = "=RC[-171]"
    Selection.AutoFill Destination:=Range("FS8:FS34"), Type:=xlFillDefault
    Range("FS8:FS34").Select
    Range("FT8").Select
    ActiveCell.FormulaR1C1 = "=RC[-159]"
    Selection.AutoFill Destination:=Range("FT8:FT34"), Type:=xlFillDefault
    Range("FT8:FT34").Select
    Range("FU8").Select
    ActiveCell.FormulaR1C1 = "=RC[-159]"
    Selection.AutoFill Destination:=Range("FU8:FU34"), Type:=xlFillDefault
    Range("FU8:FU34").Select
    Range("FV8").Select
    ActiveCell.FormulaR1C1 = "=RC[-159]"
    Selection.AutoFill Destination:=Range("FV8:FV34"), Type:=xlFillDefault
    Range("FV8:FV34").Select
    Range("FW8").Select
    ActiveCell.FormulaR1C1 = "=RC[-159]"
    Selection.AutoFill Destination:=Range("FW8:FW34"), Type:=xlFillDefault
    Range("FW8:FW34").Select
    Range("FX8").Select
    ActiveCell.FormulaR1C1 = "=(0.9*RC[-147])/1000000"
    Selection.AutoFill Destination:=Range("FX8:FX34"), Type:=xlFillDefault
    Range("FX8:FX34").Select
    Range("FY8").Select

```

```

ActiveCell.FormulaR1C1 = "=RC[-3]/1000000"
Selection.AutoFill Destination:=Range("FY8:FY34"), Type:=xlFillDefault
Range("FY8:FY34").Select
Range("GA8").Select
ActiveCell.FormulaR1C1 = "=(0.9*RC[-139])/1000000"
Selection.AutoFill Destination:=Range("GA8:GA34"), Type:=xlFillDefault
Range("GA8:GA34").Select
Range("GB8").Select
ActiveCell.FormulaR1C1 = "=RC[-6]/1000000"
Selection.AutoFill Destination:=Range("GB8:GB34"), Type:=xlFillDefault
Range("GB8:GB34").Select
Range("GD8").Select
ActiveCell.FormulaR1C1 = "=(0.9*RC[-129])/1000000"
Selection.AutoFill Destination:=Range("GD8:GD34"), Type:=xlFillDefault
Range("GD8:GD34").Select
Range("GE8").Select
ActiveCell.FormulaR1C1 = "=RC[-9]/1000000"
Selection.AutoFill Destination:=Range("GE8:GE34"), Type:=xlFillDefault
Range("GE8:GE34").Select
Range("FZ8").Select
Range("FZ8").Activate
For n19 = 1 To 27
Kondisitls = ActiveCell
FMntls = ActiveCell.Offset(0, -2)
Mu = ActiveCell.Offset(0, -1)
If FMntls >= Mu Then Kondisitls = "Aman" Else Kondisitls = "Tidak aman"
ActiveCell = Kondisitls
ActiveCell.Offset(1, 0).Activate
Next n19
End Sub
Public Sub MenentukanKondisiBadan()
Lembar1.Activate
Lembar1.Range("GC8").Activate
For n20 = 1 To 27
Kondisitlb = ActiveCell
FMntlb = ActiveCell.Offset(0, -2)
Mu = ActiveCell.Offset(0, -1)
If FMntlb >= Mu Then Kondisitlb = "Aman" Else Kondisitlb = "Tidak aman"
ActiveCell = Kondisitlb
ActiveCell.Offset(1, 0).Activate
Next n20
End Sub
Public Sub MenentukanKondisiProfil()
Lembar1.Activate
Lembar1.Range("GF8").Activate
For n21 = 1 To 27

```

```

Kondisitpl = ActiveCell
FMntpl = ActiveCell.Offset(0, -2)
Mu = ActiveCell.Offset(0, -1)
If FMntpl >= Mu Then Kondisitpl = "Aman" Else Kondisitpl = "Tidak aman"
ActiveCell = Kondisitpl
ActiveCell.Offset(1, 0).Activate
Next n21
End Sub
Public Sub KesimpulanStabilitas()
Lembar1.Activate
Lembar1.Range("GG8").Activate
For n22 = 1 To 27
Kesimpulan = ActiveCell
Kondisitls = ActiveCell.Offset(0, -7)
Kondisitlb = ActiveCell.Offset(0, -4)
Kondisitpl = ActiveCell.Offset(0, -1)
If Kondisitls = "Aman" And Kondisitlb = "Aman" And Kondisitpl = "Aman" Then
Kesimpulan = "Profil dapat dipakai" Else Kesimpulan = "Profil tidak dapat dipakai"
ActiveCell = Kesimpulan
ActiveCell.Offset(1, 0).Activate
Next n22
End Sub
Public Sub StabilitasProfilTerpilih()
Lembar1.Activate
Range("GI25:GJ34").Select
Selection.Copy
ActiveWindow.SmallScroll Down:=-14
Range("GI8").Select
Selection.PasteSpecial Paste:=xlValues, Operation:=xlNone, SkipBlanks:= _
False, Transpose:=False
Lembar1.Range("FQ8").Activate
For n23 = 1 To 27
If ActiveCell = Range("GI8") And ActiveCell.Offset(0, 1) = Range("GJ8") Then
GoTo 630 Else GoTo 640
630 Range("GK8") = ActiveCell.Offset(0, 7)
Range("GL8") = ActiveCell.Offset(0, 9)
Range("GM8") = ActiveCell.Offset(0, 10)
Range("GN8") = ActiveCell.Offset(0, 12)
Range("GO8") = ActiveCell.Offset(0, 13)
Range("GP8") = ActiveCell.Offset(0, 15)
Range("GQ8") = ActiveCell.Offset(0, 16)
640 ActiveCell.Offset(1, 0).Activate
Next n23
Range("FQ8").Activate
For n24 = 1 To 27

```

```

    If ActiveCell = Range("GI9") And ActiveCell.Offset(0, 1) = Range("GJ9") Then
GoTo 650 Else GoTo 660
650 Range("GK9") = ActiveCell.Offset(0, 7)
    Range("GL9") = ActiveCell.Offset(0, 9)
    Range("GM9") = ActiveCell.Offset(0, 10)
    Range("GN9") = ActiveCell.Offset(0, 12)
    Range("GO9") = ActiveCell.Offset(0, 13)
    Range("GP9") = ActiveCell.Offset(0, 15)
    Range("GQ9") = ActiveCell.Offset(0, 16)
660 ActiveCell.Offset(1, 0).Activate
    Next n24
    Range("FQ8").Activate
    For n25 = 1 To 27
        If ActiveCell = Range("GI10") And ActiveCell.Offset(0, 1) = Range("GJ10")
Then GoTo 670 Else GoTo 680
670 Range("GK10") = ActiveCell.Offset(0, 7)
        Range("GL10") = ActiveCell.Offset(0, 9)
        Range("GM10") = ActiveCell.Offset(0, 10)
        Range("GN10") = ActiveCell.Offset(0, 12)
        Range("GO10") = ActiveCell.Offset(0, 13)
        Range("GP10") = ActiveCell.Offset(0, 15)
        Range("GQ10") = ActiveCell.Offset(0, 16)
680 ActiveCell.Offset(1, 0).Activate
        Next n25
        Range("FQ8").Activate
        For n26 = 1 To 27
            If ActiveCell = Range("GI11") And ActiveCell.Offset(0, 1) = Range("GJ11")
Then GoTo 690 Else GoTo 700
690 Range("GK11") = ActiveCell.Offset(0, 7)
                Range("GL11") = ActiveCell.Offset(0, 9)
                Range("GM11") = ActiveCell.Offset(0, 10)
                Range("GN11") = ActiveCell.Offset(0, 12)
                Range("GO11") = ActiveCell.Offset(0, 13)
                Range("GP11") = ActiveCell.Offset(0, 15)
                Range("GQ11") = ActiveCell.Offset(0, 16)
700 ActiveCell.Offset(1, 0).Activate
                Next n26
                Range("FQ8").Activate
                For n27 = 1 To 27
                    If ActiveCell = Range("GI12") And ActiveCell.Offset(0, 1) = Range("GJ12")
Then GoTo 710 Else GoTo 720
710 Range("GK12") = ActiveCell.Offset(0, 7)
                        Range("GL12") = ActiveCell.Offset(0, 9)
                        Range("GM12") = ActiveCell.Offset(0, 10)
                        Range("GN12") = ActiveCell.Offset(0, 12)
                        Range("GO12") = ActiveCell.Offset(0, 13)

```

```

Range("GP12") = ActiveCell.Offset(0, 15)
Range("GQ12") = ActiveCell.Offset(0, 16)
720 ActiveCell.Offset(1, 0).Activate
Next n27
Range("FQ8").Activate
For n28 = 1 To 27
If ActiveCell = Range("GI13") And ActiveCell.Offset(0, 1) = Range("GJ13")
Then GoTo 730 Else GoTo 740
730 Range("GK13") = ActiveCell.Offset(0, 7)
Range("GL13") = ActiveCell.Offset(0, 9)
Range("GM13") = ActiveCell.Offset(0, 10)
Range("GN13") = ActiveCell.Offset(0, 12)
Range("GO13") = ActiveCell.Offset(0, 13)
Range("GP13") = ActiveCell.Offset(0, 15)
Range("GQ13") = ActiveCell.Offset(0, 16)
740 ActiveCell.Offset(1, 0).Activate
Next n28
Range("FQ8").Activate
For n29 = 1 To 27
If ActiveCell = Range("GI14") And ActiveCell.Offset(0, 1) = Range("GJ14")
Then GoTo 750 Else GoTo 760
750 Range("GK14") = ActiveCell.Offset(0, 7)
Range("GL14") = ActiveCell.Offset(0, 9)
Range("GM14") = ActiveCell.Offset(0, 10)
Range("GN14") = ActiveCell.Offset(0, 12)
Range("GO14") = ActiveCell.Offset(0, 13)
Range("GP14") = ActiveCell.Offset(0, 15)
Range("GQ14") = ActiveCell.Offset(0, 16)
760 ActiveCell.Offset(1, 0).Activate
Next n29
Range("FQ8").Activate
For n30 = 1 To 27
If ActiveCell = Range("GI15") And ActiveCell.Offset(0, 1) = Range("GJ15")
Then GoTo 770 Else GoTo 780
770 Range("GK15") = ActiveCell.Offset(0, 7)
Range("GL15") = ActiveCell.Offset(0, 9)
Range("GM15") = ActiveCell.Offset(0, 10)
Range("GN15") = ActiveCell.Offset(0, 12)
Range("GO15") = ActiveCell.Offset(0, 13)
Range("GP15") = ActiveCell.Offset(0, 15)
Range("GQ15") = ActiveCell.Offset(0, 16)
780 ActiveCell.Offset(1, 0).Activate
Next n30
Range("FQ8").Activate
For n31 = 1 To 27

```



```

If ActiveCell = Range("GI16") And ActiveCell.Offset(0, 1) = Range("GJ16")
Then GoTo 790 Else GoTo 800
790 Range("GK16") = ActiveCell.Offset(0, 7)
Range("GL16") = ActiveCell.Offset(0, 9)
Range("GM16") = ActiveCell.Offset(0, 10)
Range("GN16") = ActiveCell.Offset(0, 12)
Range("GO16") = ActiveCell.Offset(0, 13)
Range("GP16") = ActiveCell.Offset(0, 15)
Range("GQ16") = ActiveCell.Offset(0, 16)
800 ActiveCell.Offset(1, 0).Activate
Next n31
Range("FQ8").Activate
For n32 = 1 To 27
If ActiveCell = Range("GI17") And ActiveCell.Offset(0, 1) = Range("GJ17")
Then GoTo 810 Else GoTo 820
810 Range("GK17") = ActiveCell.Offset(0, 7)
Range("GL17") = ActiveCell.Offset(0, 9)
Range("GM17") = ActiveCell.Offset(0, 10)
Range("GN17") = ActiveCell.Offset(0, 12)
Range("GO17") = ActiveCell.Offset(0, 13)
Range("GP17") = ActiveCell.Offset(0, 15)
Range("GQ17") = ActiveCell.Offset(0, 16)
820 ActiveCell.Offset(1, 0).Activate
Next n32
Range("GI8:GQ17").Select
Selection.Copy
Range("HW21").Select
Selection.PasteSpecial Paste:=xlValues, Operation:=xlNone, SkipBlanks:= _
False, Transpose:=False
Application.CutCopyMode = False
End Sub
Public Sub MenetapkanKuatMomenNominalTerfaktorTiapProfil()
Lembar1.Activate
Lembar1.Range("GT8").Select
ActiveCell.FormulaR1C1 = "=RC[-200]"
Selection.AutoFill Destination:=Range("GT8:GT34"), Type:=xlFillDefault
Range("GT8:GT34").Select
Range("GU8").Select
ActiveCell.FormulaR1C1 = "=RC[-200]"
Selection.AutoFill Destination:=Range("GU8:GU34"), Type:=xlFillDefault
Range("GU8:GU34").Select
Range("GV8").Select
ActiveCell.FormulaR1C1 = "=RC[-187]"
Selection.AutoFill Destination:=Range("GV8:GV34"), Type:=xlFillDefault
Range("GV8:GV34").Select
Range("GW8").Select

```

```

ActiveCell.FormulaR1C1 = "=RC[-187]"
Selection.AutoFill Destination:=Range("GW8:GW34"), Type:=xlFillDefault
Range("GW8:GW34").Select
Range("GX8").Select
ActiveCell.FormulaR1C1 = "=RC[-186]"
Selection.AutoFill Destination:=Range("GX8:GX34"), Type:=xlFillDefault
Range("GX8:GX34").Select
Range("GY8").Select
ActiveCell.FormulaR1C1 = "=0.9*RC[-142]"
Selection.AutoFill Destination:=Range("GY8:GY34"), Type:=xlFillDefault
Range("GY8:GY34").Select
Range("GZ8").Select
ActiveCell.FormulaR1C1 = "=RC[-142]"
Selection.AutoFill Destination:=Range("GZ8:GZ34"), Type:=xlFillDefault
Range("GZ8:GZ34").Select
Range("HA8").Select
ActiveCell.FormulaR1C1 = "=RC[-142]"
Selection.AutoFill Destination:=Range("HA8:HA34"), Type:=xlFillDefault
Range("HA8:HA34").Select
Range("HB8").Select
ActiveCell.FormulaR1C1 = "=RC[-142]"
Selection.AutoFill Destination:=Range("HB8:HB34"), Type:=xlFillDefault
Range("HB8:HB34").Select
Range("HC8").Select
ActiveCell.FormulaR1C1 = "=RC[-142]"
Selection.AutoFill Destination:=Range("HC8:HC34"), Type:=xlFillDefault
Range("HC8:HC34").Select
Range("GT8:GU34").Select
Selection.Copy
Range("IJ19").Select
Selection.PasteSpecial Paste:=xlValues, Operation:=xlNone, SkipBlanks:= _
    False, Transpose:=False
Range("GY8:HC34").Select
Application.CutCopyMode = False
Selection.Copy
Range("IL19").Select
Selection.PasteSpecial Paste:=xlValues, Operation:=xlNone, SkipBlanks:= _
    False, Transpose:=False
Application.CutCopyMode = False
Range("IJ19").Select
End Sub
Public Sub MenggambarGrafik()
'Data properties penampang dan data masukan profil
    Lembar1.Activate
    Lembar1.Range("B8").Activate
    For n10 = 1 To 27

```

```

    Profil = ActiveCell
    Berat = ActiveCell.Offset(0, 1)
    If Profil = Range("DE8") And Berat = Range("DF8") Then GoTo 320 Else GoTo
330
320 Lembar1.Range("DG8") = ActiveCell.Offset(0, 2)
    Lembar1.Range("DH8") = ActiveCell.Offset(0, 3)
    Lembar1.Range("DI8") = ActiveCell.Offset(0, 4)
    Lembar1.Range("DJ8") = ActiveCell.Offset(0, 5)
    Lembar1.Range("DK8") = ActiveCell.Offset(0, 6)
    Lembar1.Range("DL8") = ActiveCell.Offset(0, 7)
    Lembar1.Range("DM8") = ActiveCell.Offset(0, 8)
    Lembar1.Range("DN8") = ActiveCell.Offset(0, 9)
    Lembar1.Range("DO8") = ActiveCell.Offset(0, 10)
    Lembar1.Range("DP8") = ActiveCell.Offset(0, 11)
    Lembar1.Range("DQ8") = ActiveCell.Offset(0, 12)
    Lembar1.Range("DR8") = ActiveCell.Offset(0, 13)
    Lembar1.Range("DS8") = ActiveCell.Offset(0, 14)
    Lembar1.Range("DT8") = ActiveCell.Offset(0, 15)
    Lembar1.Range("DV8") = ActiveCell.Offset(0, 17)
    Lembar1.Range("DW8") = ActiveCell.Offset(0, 18)
    Lembar1.Range("DU39") = ActiveCell.Offset(0, 47)
    Lembar1.Range("DU40") = ActiveCell.Offset(0, 48)
    Lembar1.Range("DU41") = ActiveCell.Offset(0, 49)
330 ActiveCell.Offset(1, 0).Activate
    Next n10
    Range("DG8").Select
    Selection.AutoFill Destination:=Range("DG8:DG41"), Type:=xlFillDefault
    Range("DG8:DG41").Select
    Range("DH8").Select
    Selection.AutoFill Destination:=Range("DH8:DH41"), Type:=xlFillDefault
    Range("DH8:DH41").Select
    Range("DI8").Select
    Selection.AutoFill Destination:=Range("DI8:DI41"), Type:=xlFillDefault
    Range("DI8:DI41").Select
    Range("DJ8").Select
    Selection.AutoFill Destination:=Range("DJ8:DJ41"), Type:=xlFillDefault
    Range("DJ8:DJ41").Select
    Range("DK8").Select
    Selection.AutoFill Destination:=Range("DK8:DK41"), Type:=xlFillDefault
    Range("DK8:DK41").Select
    Range("DL8").Select
    Selection.AutoFill Destination:=Range("DL8:DL41"), Type:=xlFillDefault
    Range("DL8:DL41").Select
    Range("DM8").Select
    Selection.AutoFill Destination:=Range("DM8:DM41"), Type:=xlFillDefault
    Range("DM8:DM41").Select

```

Range("DN8").Select  
 Selection.AutoFill Destination:=Range("DN8:DN41"), Type:=xlFillDefault  
 Range("DN8:DN41").Select  
 Range("DO8").Select  
 Selection.AutoFill Destination:=Range("DO8:DO41"), Type:=xlFillDefault  
 Range("DO8:DO41").Select  
 Range("DP8").Select  
 Selection.AutoFill Destination:=Range("DP8:DP41"), Type:=xlFillDefault  
 Range("DP8:DP41").Select  
 Range("DQ8").Select  
 Selection.AutoFill Destination:=Range("DQ8:DQ41"), Type:=xlFillDefault  
 Range("DQ8:DQ41").Select  
 Range("DR8").Select  
 Selection.AutoFill Destination:=Range("DR8:DR41"), Type:=xlFillDefault  
 Range("DR8:DR41").Select  
 Range("DS8").Select  
 Selection.AutoFill Destination:=Range("DS8:DS41"), Type:=xlFillDefault  
 Range("DS8:DS41").Select  
 Range("DT8").Select  
 Selection.AutoFill Destination:=Range("DT8:DT41"), Type:=xlFillDefault  
 Range("DT8:DT41").Select  
 Range("DU8").Select  
 ActiveCell.FormulaR1C1 = "=0"  
 Range("DU9").Select  
 ActiveCell.FormulaR1C1 = "=R[-1]C+1000"  
 Selection.AutoFill Destination:=Range("DU9:DU38"), Type:=xlFillDefault  
 Range("DU9:DU38").Select  
 Range("DV8").Select  
 Selection.AutoFill Destination:=Range("DV8:DV41"), Type:=xlFillDefault  
 Range("DV8:DV41").Select  
 Range("DW8").Select  
 Selection.AutoFill Destination:=Range("DW8:DW41"), Type:=xlFillDefault  
 Range("DW8:DW41").Select  
 'Kuat momen nominal Mn tiap profil berdasarkan stabilitas tekuk lokal sayap ( Mntls )

Lembar1.Activate  
 Range("DX8").Select  
 ActiveCell.FormulaR1C1 = "=RC[-15]"  
 Range("DX9").Select  
 ActiveCell.FormulaR1C1 = "=R[-1]C"  
 Selection.AutoFill Destination:=Range("DX9:DX41"), Type:=xlFillDefault  
 Range("DX9:DX41").Select  
 Range("DY8").Select  
 ActiveCell.FormulaR1C1 = "=170/(RC[-5]^0.5)"  
 Selection.AutoFill Destination:=Range("DY8:DY41"), Type:=xlFillDefault  
 Range("DY8:DY41").Select

```

Range("DZ8").Select
Application.CutCopyMode = False
ActiveCell.FormulaR1C1 = "=370/((RC[-6]-RC[-9])^0.5)"
Selection.AutoFill Destination:=Range("DZ8:DZ41"), Type:=xlFillDefault
Range("DZ8:DZ41").Select
Range("EA8").Select
ActiveCell.FormulaR1C1 = "=RC[-13]*RC[-7]"
Selection.AutoFill Destination:=Range("EA8:EA41"), Type:=xlFillDefault
Range("EA8:EA41").Select
Range("EB8").Select
ActiveCell.FormulaR1C1 = "=RC[-14]*RC[-8]"
Range("EB8").Select
Selection.AutoFill Destination:=Range("EB8:EB41"), Type:=xlFillDefault
Range("EB8:EB41").Select
Range("EC8").Select
ActiveCell.FormulaR1C1 =
"=(RC[-15]*RC[-9])-(((RC[-15]*RC[-9])-(RC[-18]*(RC[-9]-RC[-12]))*((RC[-
5]-RC[-4])/(RC[-3]-RC[-4])))"
Selection.AutoFill Destination:=Range("EC8:EC41"), Type:=xlFillDefault
Range("EC8:EC41").Select
Range("ED8").Select
ActiveCell.FormulaR1C1 =
"=((PI())/RC[-9])*((((PI())*RC[-12])/RC[-9])^2)*(RC[-14]*RC[-18])+((RC[-
12]*RC[-18]*RC[-11]*RC[-15])^0.5)"
Selection.AutoFill Destination:=Range("ED8:ED41"), Type:=xlFillDefault
Range("ED8:ED41").Select
Lembar1.Range("EE8").Activate
For n11 = 1 To 34
Lamdas = ActiveCell.Offset(0, -7)
Lamdaps = ActiveCell.Offset(0, -6)
Lamdars = ActiveCell.Offset(0, -5)
Kategori = ActiveCell
If Lamdas <= Lamdaps Then Kategori = "Sayap kompak": GoTo 360 Else GoTo
340
340 If Lamdas <= Lamdars Then Kategori = "Sayap tidak kompak": GoTo 360 Else
GoTo 350
350 Kategori = "Sayap langsing": GoTo 360
360 ActiveCell = Kategori
ActiveCell.Offset(1, 0).Activate
Next n11
Lembar1.Range("EF8").Activate
For n12 = 1 To 34
Mn = ActiveCell
Mp = ActiveCell.Offset(0, -5)
Mnsk = ActiveCell.Offset(0, -4)
Mnstk = ActiveCell.Offset(0, -3)

```

```

Mnsl = ActiveCell.Offset(0, -2)
Kategori = ActiveCell.Offset(0, -1)
If Kategori = "Sayap kompak" Then Mn = Mnsk: GoTo 400 Else GoTo 370
370 If Kategori = "Sayap tidak kompak" Then Mn = Mnstk: GoTo 400 Else GoTo
380
380 If Mnsl <= Mp Then Mn = Mnsl: GoTo 400 Else GoTo 390
390 Mn = Mp
400 ActiveCell = Mn
    ActiveCell.Offset(1, 0).Activate
    Next n12
'Kuat momen nominal Mn tiap profil berdasarkan stabilitas tekuk lokal badan (
Mntlb )
    Range("EG8").Select
    ActiveCell.FormulaR1C1 = "=RC[-23]"
    Selection.AutoFill Destination:=Range("EG8:EG41"), Type:=xlFillDefault
    Range("EG8:EG41").Select
    Range("EH8").Select
    ActiveCell.FormulaR1C1 = "=1680/(RC[-14]^0.5)"
    Selection.AutoFill Destination:=Range("EH8:EH41"), Type:=xlFillDefault
    Range("EH8:EH41").Select
    Range("EI8").Select
    ActiveCell.FormulaR1C1 = "=2550/(RC[-15]^0.5)"
    Selection.AutoFill Destination:=Range("EI8:EI41"), Type:=xlFillDefault
    Range("EI8:EI41").Select
    Range("EJ8").Select
    ActiveCell.FormulaR1C1 = "=RC[-22]*RC[-16]"
    Selection.AutoFill Destination:=Range("EJ8:EJ41"), Type:=xlFillDefault
    Range("EJ8:EJ41").Select
    Range("EK8").Select
    ActiveCell.FormulaR1C1 =
        "=(RC[-23]*RC[-17]-(((RC[-23]*RC[-17])-(RC[-26]*(RC[-17]-RC[-
20])))*(RC[-4]-RC[-3])/(RC[-2]-RC[-3])))"
    Selection.AutoFill Destination:=Range("EK8:EK41"), Type:=xlFillDefault
    Range("EK8:EK41").Select
    Lembar1.Activate
    Lembar1.Range("EL8").Activate
    For n13 = 1 To 34
        Lamdab = ActiveCell.Offset(0, -5)
        Lamdapb = ActiveCell.Offset(0, -4)
        Lamdarb = ActiveCell.Offset(0, -3)
        Kategori = ActiveCell
        If Lamdab <= Lamdapb Then Kategori = "Badan kompak": GoTo 430 Else GoTo
410
410 If Lamdab <= Lamdarb Then Kategori = "Badan tidak kompak": GoTo 430 Else
GoTo 410
420 Kategori = "Badan langsing": GoTo 430

```

```

430 ActiveCell = Kategori
    ActiveCell.Offset(1, 0).Activate
    Next n13
    Lembar1.Range("EM8").Activate
    For n14 = 1 To 34
        Mn = ActiveCell
        Mnbk = ActiveCell.Offset(0, -3)
        Mnbtk = ActiveCell.Offset(0, -2)
        Kategori = ActiveCell.Offset(0, -1)
        If Kategori = "Badan kompak" Then Mn = Mnbk: GoTo 460 Else GoTo 440
440 If Kategori = "Badan tidak kompak" Then Mn = Mnbtk: GoTo 460 Else GoTo
450
450 Mn = 0: GoTo 460
460 ActiveCell = Mn
    ActiveCell.Offset(1, 0).Activate
    Next n14
'Kuat momen nominal Mn tiap profil berdasarkan stabilitas tekuk puntir lateral (
Mntpl )
    Range("EN8").Select
    ActiveCell.FormulaR1C1 = "=RC[-19]"
    Selection.AutoFill Destination:=Range("EN8:EN41"), Type:=xlFillDefault
    Range("EN8:EN41").Select
    Range("EO8").Select
    ActiveCell.FormulaR1C1 = "=1.76*RC[-28]*((RC[-23]/RC[-21])^0.5)"
    Selection.AutoFill Destination:=Range("EO8:EO41"), Type:=xlFillDefault
    Range("EO8:EO41").Select
    Range("EP8").Select
    ActiveCell.FormulaR1C1 =
    "=((RC[-29]*(((PI()/RC[-31]))*((RC[-24]*RC[-23]*RC[-27]*RC[-
34])/2)^0.5))*((1+((1+(((4*RC[-26])/RC[-30])*((RC[-31]/(RC[-23]*RC[-
27]))^2))*((RC[-22]-RC[-25])^2)))^0.5))^0.5)/(RC[-22]-RC[-25])"
    Selection.AutoFill Destination:=Range("EP8:EP41"), Type:=xlFillDefault
    Range("EP8:EP41").Select
    Range("EQ8").Select
    ActiveCell.FormulaR1C1 = "=RC[-29]*RC[-23]"
    Selection.AutoFill Destination:=Range("EQ8:EQ41"), Type:=xlFillDefault
    Range("EQ8:EQ41").Select
    Range("ER8").Select
    ActiveCell.FormulaR1C1 = "=RC[-30]*RC[-24]"
    Selection.AutoFill Destination:=Range("ER8:ER41"), Type:=xlFillDefault
    Range("ER8:ER41").Select
    Range("ES8").Select
    ActiveCell.FormulaR1C1 =
    "=RC[-22]*((RC[-31]*RC[-25])-(((RC[-31]*RC[-25])-(RC[-34]*(RC[-25]-
RC[-28]))*((RC[-5]-RC[-4])/(RC[-3]-RC[-4]))))"
    Selection.AutoFill Destination:=Range("ES8:ES41"), Type:=xlFillDefault

```

```

Range("ES8:ES41").Select
Range("ET8").Select
ActiveCell.FormulaR1C1 =
  "=((PI())/RC[-6])*(((((((PI())*RC[-28])/RC[-6])^2)*(RC[-30]*RC[-34]))+(RC[-
28]*RC[-34]*RC[-27]*RC[-31]))^0.5)"
Selection.AutoFill Destination:=Range("ET8:ET41"), Type:=xlFillDefault
Range("ET8:ET41").Select
Lembar1.Activate
Lembar1.Range("EU8").Activate
For n15 = 1 To 34
  Lb = ActiveCell.Offset(0, -7)
  Lp = ActiveCell.Offset(0, -6)
  Lr = ActiveCell.Offset(0, -5)
  Kategori = ActiveCell
  If Lb <= Lp Then Kategori = "Bentang pendek": GoTo 490 Else GoTo 470
470 If Lb <= Lr Then Kategori = "Bentang menengah": GoTo 490 Else GoTo 480
480 Kategori = "Bentang panjang": GoTo 490
490 ActiveCell = Kategori
  ActiveCell.Offset(1, 0).Activate
Next n15
Lembar1.Range("EV8").Activate
For n16 = 1 To 34
  Mn = ActiveCell
  Mp = ActiveCell.Offset(0, -5)
  Mnpk = ActiveCell.Offset(0, -4)
  Mnm = ActiveCell.Offset(0, -3)
  Mnpg = ActiveCell.Offset(0, -2)
  Kategori = ActiveCell.Offset(0, -1)
  If Kategori = "Bentang pendek" Then Mn = Mnpk: GoTo 550 Else GoTo 500
500 If Kategori = "Bentang menengah" Then GoTo 510 Else GoTo 530
510 If Mnm <= Mp Then Mn = Mnm: GoTo 550 Else GoTo 520
520 Mn = Mp: GoTo 550
530 If Mnpg <= Mp Then Mn = Mnpg: GoTo 550 Else GoTo 540
540 Mn = Mp: GoTo 550
550 ActiveCell = Mn
  ActiveCell.Offset(1, 0).Activate
Next n16
'Kuat momen nominal yang menentukan (Mnpakai), yaitu Mn terkecil diantara
Mntls, Mntlb dan Mntpl
Range("EW8").Select
ActiveCell.FormulaR1C1 = "=RC[-17]"
Selection.AutoFill Destination:=Range("EW8:EW41"), Type:=xlFillDefault
Range("EW8:EW41").Select
Range("EX8").Select
ActiveCell.FormulaR1C1 = "=RC[-11]"
Selection.AutoFill Destination:=Range("EX8:EX41"), Type:=xlFillDefault

```



```

Range("EX8:EX41").Select
Range("EY8").Select
ActiveCell.FormulaR1C1 = "=RC[-3]"
Selection.AutoFill Destination:=Range("EY8:EY41"), Type:=xlFillDefault
Range("EY8:EY41").Select
Lembar1.Range("EZ8").Activate
For n17 = 1 To 34
Mntls = ActiveCell.Offset(0, -3)
Mntlb = ActiveCell.Offset(0, -2)
Mntpl = ActiveCell.Offset(0, -1)
Mnkecil = ActiveCell
If Mntls <= Mntlb Then Mnkecil = Mntls Else Mnkecil = Mntlb
If Mnkecil < Mntpl Then Mnkecil = Mnkecil Else Mnkecil = Mntpl
ActiveCell = Mnkecil
ActiveCell.Offset(1, 0).Activate
Next n17
Lembar1.Range("FA8").Activate
For n18 = 1 To 34
Mntls = ActiveCell.Offset(0, -4)
Mntlb = ActiveCell.Offset(0, -3)
Mntpl = ActiveCell.Offset(0, -2)
Mnkecil = ActiveCell.Offset(0, -1)
Batas = ActiveCell
If Mnkecil = Mntls And Mnkecil = Mntlb And Mnkecil = Mntpl Then Batas =
"Tekuk lokal dan tekuk puntir lateral": GoTo 620 Else GoTo 560
560 If Mnkecil = Mntls And Mnkecil = Mntlb Then Batas = "Tekuk lokal": GoTo
620 Else GoTo 570
570 If Mnkecil = Mntls And Mnkecil = Mntpl Then Batas = "Tekuk lokal sayap dan
tekuk puntir lateral": GoTo 620 Else GoTo 580
580 If Mnkecil = Mntlb And Mnkecil = Mntpl Then Batas = "Tekuk lokal badan dan
tekuk puntir lateral": GoTo 620 Else GoTo 590
590 If Mnkecil = Mntls Then Batas = "Tekuk lokal sayap": GoTo 620 Else GoTo
600
600 If Mnkecil = Mntlb Then Batas = "Tekuk lokal badan": GoTo 620 Else GoTo
610
610 Batas = "Tekuk puntir lateral"
620 ActiveCell = Batas
ActiveCell.Offset(1, 0).Activate
Next n18
Lembar1.Activate
Lembar1.Range("FB8").Select
ActiveCell.FormulaR1C1 = "=RC[-23]"
Selection.AutoFill Destination:=Range("FB8:FB41"), Type:=xlFillDefault
Range("FB8:FB41").Select
Range("FC8").Select
ActiveCell.FormulaR1C1 = "=RC[-17]"

```

Selection.AutoFill Destination:=Range("FC8:FC41"), Type:=xlFillDefault  
Range("FC8:FC41").Select  
Range("FD8").Select  
ActiveCell.FormulaR1C1 = "=RC[-9]"  
Selection.AutoFill Destination:=Range("FD8:FD41"), Type:=xlFillDefault  
Range("FD8:FD41").Select  
Range("DE8").Select  
Range("FF8").Select  
ActiveCell.FormulaR1C1 = "=RC[-18]"  
Selection.AutoFill Destination:=Range("FF8:FF41"), Type:=xlFillDefault  
Range("FF8:FF41").Select  
Range("FG8").Select  
ActiveCell.FormulaR1C1 = "=RC[-7]"  
Selection.AutoFill Destination:=Range("FG8:FG41"), Type:=xlFillDefault  
Range("FG8:FG41").Select  
Range("FH8").Select  
ActiveCell.FormulaR1C1 = "Lb horizontal"  
Range("FH9").Select  
ActiveCell.FormulaR1C1 = "=0"  
Range("FH10").Select  
ActiveCell.FormulaR1C1 = "=R[29]C[-2]"  
Range("FI9").Select  
ActiveCell.FormulaR1C1 = "=R[30]C[-2]"  
Range("FI10").Select  
ActiveCell.FormulaR1C1 = "=R[-1]C"  
Range("FH11").Select  
ActiveCell.FormulaR1C1 = "Lb vertikal"  
Range("FH12").Select  
ActiveCell.FormulaR1C1 = "=R[-2]C"  
Range("FH13").Select  
ActiveCell.FormulaR1C1 = "=R[-1]C"  
Range("FI12").Select  
ActiveCell.FormulaR1C1 = "=0"  
Range("FI13").Select  
ActiveCell.FormulaR1C1 = "=R[-3]C"  
Range("FH11").Select  
ActiveCell.FormulaR1C1 = "Lb vertikal"  
Range("FH14").Select  
ActiveCell.FormulaR1C1 = "Lp horizuontal"  
Range("FH14").Select  
ActiveCell.FormulaR1C1 = "Lp horizontal"  
Range("FH15").Select  
ActiveCell.FormulaR1C1 = "=0"  
Range("FH16").Select  
ActiveCell.FormulaR1C1 = "=R[24]C[-2]"  
Range("FI15").Select

```

ActiveCell.FormulaR1C1 = "=R[25]C[-2]"
Range("FI16").Select
ActiveCell.FormulaR1C1 = "=R[-1]C"
Range("FH17").Select
ActiveCell.FormulaR1C1 = "Lp vertikal"
Range("FH18").Select
ActiveCell.FormulaR1C1 = "=R[-2]C"
Range("FH19").Select
ActiveCell.FormulaR1C1 = "=R[-1]C"
Range("FI18").Select
ActiveCell.FormulaR1C1 = "=0"
Range("FI19").Select
ActiveCell.FormulaR1C1 = "=R[-3]C"
Range("FH20").Select
ActiveCell.FormulaR1C1 = "Lr horizontal"
Range("FH21").Select
ActiveCell.FormulaR1C1 = "=0"
Range("FH22").Select
ActiveCell.FormulaR1C1 = "=R[19]C[-2]"
Range("FI21").Select
ActiveCell.FormulaR1C1 = "=R[20]C[-2]"
Range("FI22").Select
ActiveCell.FormulaR1C1 = "=R[-1]C"
Range("FH23").Select
ActiveCell.FormulaR1C1 = "Lr vertikal"
Range("FH24").Select
ActiveCell.FormulaR1C1 = "=R[-2]C"
Range("FH25").Select
ActiveCell.FormulaR1C1 = "=R[-1]C"
Range("FI24").Select
ActiveCell.FormulaR1C1 = "=0"
Range("FI25").Select
ActiveCell.FormulaR1C1 = "=R[-3]C"
Range("FF8:FI41").Select
With Selection
    .HorizontalAlignment = xlLeft
    .VerticalAlignment = xlBottom
    .WrapText = False
    .Orientation = 0
    .AddIndent = False
    .IndentLevel = 0
    .ShrinkToFit = False
    .MergeCells = False
End With
Range("FF8:FG41").Select
Selection.Copy

```

```
Range("FF8").Select
Selection.PasteSpecial Paste:=xlValues, Operation:=xlNone, SkipBlanks:= _
    False, Transpose:=False
Application.CutCopyMode = False
Range("FH8:FI25").Select
Selection.Copy
Range("FH8").Select
Selection.PasteSpecial Paste:=xlValues, Operation:=xlNone, SkipBlanks:= _
    False, Transpose:=False
Application.CutCopyMode = False
Range("FF8:FG41").Select
Selection.Sort Key1:=Range("FF8"), Order1:=xlAscending, Header:=xlGuess, _
    OrderCustom:=1, MatchCase:=False, Orientation:=xlTopToBottom
Range("FJ8").Select
Range("FK8").Select
ActiveCell.FormulaR1C1 = "=RC[-5]/1000"
Selection.AutoFill Destination:=Range("FK8:FK41"), Type:=xlFillDefault
Range("FK8:FK41").Select
Range("FL8").Select
ActiveCell.FormulaR1C1 = "=RC[-5]/1000000"
Selection.AutoFill Destination:=Range("FL8:FL41"), Type:=xlFillDefault
Range("FL8:FL41").Select
Range("FM8").Select
ActiveCell.FormulaR1C1 = "=RC[-5]"
Range("FM9").Select
ActiveCell.FormulaR1C1 = "=RC[-5]/1000"
Selection.AutoFill Destination:=Range("FM9:FM10"), Type:=xlFillDefault
Range("FM9:FM10").Select
Range("FM11").Select
ActiveCell.FormulaR1C1 = "=RC[-5]"
Range("FM12").Select
ActiveCell.FormulaR1C1 = "=RC[-5]/1000"
Selection.AutoFill Destination:=Range("FM12:FM13"), Type:=xlFillDefault
Range("FM12:FM13").Select
Range("FM14").Select
ActiveCell.FormulaR1C1 = "=RC[-5]"
Range("FM15").Select
ActiveCell.FormulaR1C1 = "=RC[-5]/1000"
Selection.AutoFill Destination:=Range("FM15:FM16"), Type:=xlFillDefault
Range("FM15:FM16").Select
Range("FM17").Select
ActiveCell.FormulaR1C1 = "=RC[-5]"
Range("FM18").Select
ActiveCell.FormulaR1C1 = "=RC[-5]/1000"
Selection.AutoFill Destination:=Range("FM18:FM19"), Type:=xlFillDefault
Range("FM18:FM19").Select
```

```
Range("FM20").Select
ActiveCell.FormulaR1C1 = "=RC[-5]"
Range("FM21").Select
ActiveCell.FormulaR1C1 = "=RC[-5]/1000"
Selection.AutoFill Destination:=Range("FM21:FM22"), Type:=xlFillDefault
Range("FM21:FM22").Select
Range("FM23").Select
ActiveCell.FormulaR1C1 = "=RC[-5]"
Range("FM24").Select
ActiveCell.FormulaR1C1 = "=RC[-5]/1000"
Selection.AutoFill Destination:=Range("FM24:FM25"), Type:=xlFillDefault
Range("FM24:FM25").Select
Range("FN9").Select
ActiveCell.FormulaR1C1 = "=RC[-5]/1000000"
Selection.AutoFill Destination:=Range("FN9:FN10"), Type:=xlFillDefault
Range("FN9:FN10").Select
Range("FN12").Select
ActiveCell.FormulaR1C1 = "=RC[-5]/1000000"
Selection.AutoFill Destination:=Range("FN12:FN13"), Type:=xlFillDefault
Range("FN12:FN13").Select
Range("FN15").Select
ActiveCell.FormulaR1C1 = "=RC[-5]/1000000"
Range("FN15").Select
Selection.AutoFill Destination:=Range("FN15:FN16"), Type:=xlFillDefault
Range("FN15:FN16").Select
Range("FN18").Select
ActiveCell.FormulaR1C1 = "=RC[-5]/1000000"
Selection.AutoFill Destination:=Range("FN18:FN19"), Type:=xlFillDefault
Range("FN18:FN19").Select
Range("FN21").Select
ActiveCell.FormulaR1C1 = "=RC[-5]/1000000"
Selection.AutoFill Destination:=Range("FN21:FN22"), Type:=xlFillDefault
Range("FN21:FN22").Select
Range("FN24").Select
ActiveCell.FormulaR1C1 = "=RC[-5]/1000000"
Selection.AutoFill Destination:=Range("FN24:FN25"), Type:=xlFillDefault
Range("FN24:FN25").Select
Range("FO4").Select
End Sub
```

**Tulisan program pada lembar 2;**

```
Private Sub KembaliLembar2_Click()  
    Tampilan3.Show  
End Sub
```

**Tulisan program pada lembar 3;**

```
Private Sub KembaliLembar3_Click()  
    Tampilan5.Show  
End Sub
```

**Tulisan program pada lembar 4;**

```
Private Sub KembaliLembar4_Click()  
    Tampilan6.Show  
End Sub
```

**Tulisan program pada lembar grafik;**

```
Public Sub Picture4_click()  
    Tampilan4.Show  
End Sub
```

**Tulisan program pada Tampilan 1;**

```
Private Sub Judul1_Click()  
    Tampilan1.Hide  
    Tampilan2.Show  
End Sub
```

```
Private Sub Judul2_Click()  
    Tampilan1.Hide  
    Tampilan2.Show  
End Sub
```

```
Private Sub Judul3_Click()  
    Tampilan1.Hide  
    Tampilan2.Show  
End Sub
```

```
Private Sub Judul1_MouseMove(ByVal Button As Integer, ByVal Shift As Integer,  
ByVal X As Single, ByVal Y As Single)  
    Judul1.ForeColor = &HFF&  
    Judul2.ForeColor = &H800000  
    Judul3.ForeColor = &H800000
```

```
Penyusun1.ForeColor = &H800000
Penyusun2.ForeColor = &H800000
Dosen1.ForeColor = &H800000
Dosen2.ForeColor = &H800000
End Sub
```

```
Private Sub Judul2_MouseMove(ByVal Button As Integer, ByVal Shift As Integer,
ByVal X As Single, ByVal Y As Single)
```

```
    Judul1.ForeColor = &H800000
    Judul2.ForeColor = &HFF&
    Judul3.ForeColor = &H800000
    Penyusun1.ForeColor = &H800000
    Penyusun2.ForeColor = &H800000
    Dosen1.ForeColor = &H800000
    Dosen2.ForeColor = &H800000
End Sub
```

```
Private Sub Judul3_MouseMove(ByVal Button As Integer, ByVal Shift As Integer,
ByVal X As Single, ByVal Y As Single)
```

```
    Judul1.ForeColor = &H800000
    Judul2.ForeColor = &H800000
    Judul3.ForeColor = &HFF&
    Penyusun1.ForeColor = &H800000
    Penyusun2.ForeColor = &H800000
    Dosen1.ForeColor = &H800000
    Dosen2.ForeColor = &H800000
End Sub
```

```
Private Sub Penyusun1_MouseMove(ByVal Button As Integer, ByVal Shift As
Integer, ByVal X As Single, ByVal Y As Single)
```

```
    Judul1.ForeColor = &H800000
    Judul2.ForeColor = &H800000
    Judul3.ForeColor = &H800000
    Penyusun1.ForeColor = &HFF&
    Penyusun2.ForeColor = &H800000
    Dosen1.ForeColor = &H800000
    Dosen2.ForeColor = &H800000
End Sub
```

```
Private Sub Penyusun2_MouseMove(ByVal Button As Integer, ByVal Shift As
Integer, ByVal X As Single, ByVal Y As Single)
```

```
    Judul1.ForeColor = &H800000
    Judul2.ForeColor = &H800000
    Judul3.ForeColor = &H800000
    Penyusun1.ForeColor = &H800000
    Penyusun2.ForeColor = &HFF&
```

```
Dosen1.ForeColor = &H800000
Dosen2.ForeColor = &H800000
End Sub
```

```
Private Sub Dosen1_MouseMove(ByVal Button As Integer, ByVal Shift As Integer,
ByVal X As Single, ByVal Y As Single)
    Judul1.ForeColor = &H800000
    Judul2.ForeColor = &H800000
    Judul3.ForeColor = &H800000
    Penyusun1.ForeColor = &H800000
    Penyusun2.ForeColor = &H800000
    Dosen1.ForeColor = &HFF&
    Dosen2.ForeColor = &H800000
End Sub
```

```
Private Sub Dosen2_MouseMove(ByVal Button As Integer, ByVal Shift As Integer,
ByVal X As Single, ByVal Y As Single)
    Judul1.ForeColor = &H800000
    Judul2.ForeColor = &H800000
    Judul3.ForeColor = &H800000
    Penyusun1.ForeColor = &H800000
    Penyusun2.ForeColor = &H800000
    Dosen1.ForeColor = &H800000
    Dosen2.ForeColor = &HFF&
End Sub
```

```
Private Sub UserForm_QueryClose(Cancel As Integer, CloseMode As Integer)
    ProgramBaja.Close
End Sub
```

### **Tulisan program pada Tampilan 2;**

```
Private Sub Judul1_Click()
    Tampilan1.Hide
    Tampilan2.Show
End Sub
```

```
Private Sub Judul2_Click()
    Tampilan1.Hide
    Tampilan2.Show
End Sub
```

```
Private Sub Judul3_Click()
    Tampilan1.Hide
    Tampilan2.Show
End Sub
```



Private Sub Judul1\_MouseMove(ByVal Button As Integer, ByVal Shift As Integer,  
ByVal X As Single, ByVal Y As Single)

Judul1.ForeColor = &HFF&  
Judul2.ForeColor = &H800000  
Judul3.ForeColor = &H800000  
Penyusun1.ForeColor = &H800000  
Penyusun2.ForeColor = &H800000  
Dosen1.ForeColor = &H800000  
Dosen2.ForeColor = &H800000

End Sub

Private Sub Judul2\_MouseMove(ByVal Button As Integer, ByVal Shift As Integer,  
ByVal X As Single, ByVal Y As Single)

Judul1.ForeColor = &H800000  
Judul2.ForeColor = &HFF&  
Judul3.ForeColor = &H800000  
Penyusun1.ForeColor = &H800000  
Penyusun2.ForeColor = &H800000  
Dosen1.ForeColor = &H800000  
Dosen2.ForeColor = &H800000

End Sub

Private Sub Judul3\_MouseMove(ByVal Button As Integer, ByVal Shift As Integer,  
ByVal X As Single, ByVal Y As Single)

Judul1.ForeColor = &H800000  
Judul2.ForeColor = &H800000  
Judul3.ForeColor = &HFF&  
Penyusun1.ForeColor = &H800000  
Penyusun2.ForeColor = &H800000  
Dosen1.ForeColor = &H800000  
Dosen2.ForeColor = &H800000

End Sub

Private Sub Penyusun1\_MouseMove(ByVal Button As Integer, ByVal Shift As  
Integer, ByVal X As Single, ByVal Y As Single)

Judul1.ForeColor = &H800000  
Judul2.ForeColor = &H800000  
Judul3.ForeColor = &H800000  
Penyusun1.ForeColor = &HFF&  
Penyusun2.ForeColor = &H800000  
Dosen1.ForeColor = &H800000  
Dosen2.ForeColor = &H800000

End Sub

```
Private Sub Penyusun2_MouseMove(ByVal Button As Integer, ByVal Shift As Integer, ByVal X As Single, ByVal Y As Single)
```

```
    Judul1.ForeColor = &H800000  
    Judul2.ForeColor = &H800000  
    Judul3.ForeColor = &H800000  
    Penyusun1.ForeColor = &H800000  
    Penyusun2.ForeColor = &HFF&  
    Dosen1.ForeColor = &H800000  
    Dosen2.ForeColor = &H800000
```

```
End Sub
```

```
Private Sub Dosen1_MouseMove(ByVal Button As Integer, ByVal Shift As Integer, ByVal X As Single, ByVal Y As Single)
```

```
    Judul1.ForeColor = &H800000  
    Judul2.ForeColor = &H800000  
    Judul3.ForeColor = &H800000  
    Penyusun1.ForeColor = &H800000  
    Penyusun2.ForeColor = &H800000  
    Dosen1.ForeColor = &HFF&  
    Dosen2.ForeColor = &H800000
```

```
End Sub
```

```
Private Sub Dosen2_MouseMove(ByVal Button As Integer, ByVal Shift As Integer, ByVal X As Single, ByVal Y As Single)
```

```
    Judul1.ForeColor = &H800000  
    Judul2.ForeColor = &H800000  
    Judul3.ForeColor = &H800000  
    Penyusun1.ForeColor = &H800000  
    Penyusun2.ForeColor = &H800000  
    Dosen1.ForeColor = &H800000  
    Dosen2.ForeColor = &HFF&
```

```
End Sub
```

```
Private Sub UserForm_QueryClose(Cancel As Integer, CloseMode As Integer)
```

```
    ProgramBaja.Close
```

```
End Sub
```

### **Tulisan program pada Tampilan 3;**

```
Private Sub Fytampilan3_Change()
```

```
    Lembar1.Range("Q8") = Fytampilan3.Text
```

```
End Sub
```

```
Private Sub Kembalitampilan3_Click()
```

```
    Tampilan3.Hide
```

```
    Tampilan2.Show
```

End Sub

```
Private Sub Lbtampilan3_Change()  
    Lembar1.Range("R8") = Lbtampilan3.Text
```

End Sub

```
Private Sub Lihathasiltampilan3_Click()
```

```
    Tampilan3.Hide  
    Lembar2.Activate
```

End Sub

```
Private Sub Mutampilan3_Change()
```

```
    Lembar1.Range("S8") = Mutampilan3.Text
```

End Sub

```
Private Sub Cbtampilan3_Change()
```

```
    Lembar1.Range("T8") = Cbtampilan3.Text
```

End Sub

```
Private Sub Hitungtampilan3_Click()
```

```
    Lembar1.Menghapushitungan  
    Lembar1.MenentukanMntls  
    Lembar1.MenentukanMntlb  
    Lembar1.MenentukanMntpl  
    Lembar1.MenentukanMnpakai  
    Lembar1.MengetahuiProfilBajayangAman  
    Lembar1.MengetahuiProfilBajayangAmanBerdasarkanUrutanMomen  
    Lembar1.MengetahuiProfilBajayangAmanBerdasarkanUrutanBerat  
    Lembar1.MengetahuiProfilBajayangAmanBerdasarkanUrutanTinggi  
    Lembar1.Menetapkan10ProfilyangEkonomis
```

End Sub

```
Private Sub UserForm_QueryClose(Cancel As Integer, CloseMode As Integer)
```

```
    ProgramBaja.Close
```

End Sub

#### **Tulisan program pada Tampilan 4;**

```
Private Sub Fytampilan4_Change()
```

```
    Lembar1.Range("Q8") = Fytampilan4.Text
```

End Sub

```
Private Sub Hitungtampilan4_Click()
```

```
    Lembar1.Menghapushitungan  
    Lembar1.MenentukanMntls  
    Lembar1.MenentukanMntlb  
    Lembar1.MenentukanMntpl
```

```
Lembar1.MenentukanMnpakai  
Lembar1.MenggambarGrafik  
End Sub
```

```
Private Sub Kembalitampilan4_Click()  
    Tampilan4.Hide  
    Tampilan2.Show  
End Sub
```

```
Private Sub Lbtampilan4_Change()  
    Lembar1.Range("R8") = Lbtampilan4.Text  
End Sub
```

```
Private Sub Lihathasilampilan4_Click()  
    Tampilan4.Hide  
    Grafik1.Activate  
End Sub
```

```
Private Sub Mutampilan4_Change()  
    Lembar1.Range("S8") = Mutampilan4.Text  
End Sub
```

```
Private Sub Cbtampilan4_Change()  
    Lembar1.Range("T8") = Fytampilan4.Text  
End Sub
```

```
Private Sub Profiltampilan4_Change()  
    Lembar1.Range("DE8") = Profiltampilan4.Text  
End Sub
```

```
Private Sub Berattampilan4_Change()  
    Lembar1.Range("DF8") = Berattampilan4.Text  
End Sub
```

**Tulisan program pada Tampilan 5;**

```
Private Sub B10T5_Change()  
    Lembar1.Range("GJ34") = B10T5.Text  
End Sub
```

```
Private Sub B1T5_Change()  
    Lembar1.Range("GJ25") = B1T5.Text  
End Sub
```

```
Private Sub B2T5_Change()  
    Lembar1.Range("GJ26") = B2T5.Text
```

End Sub

```
Private Sub B3T5_Change()  
    Lembar1.Range("GJ27") = B3T5.Text  
End Sub
```

```
Private Sub B4T5_Change()  
    Lembar1.Range("GJ28") = B4T5.Text  
End Sub
```

```
Private Sub B5T5_Change()  
    Lembar1.Range("GJ29") = B5T5.Text  
End Sub
```

```
Private Sub B6T5_Change()  
    Lembar1.Range("GJ30") = B6T5.Text  
End Sub
```

```
Private Sub B7T5_Change()  
    Lembar1.Range("GJ31") = B7T5.Text  
End Sub
```

```
Private Sub B8T5_Change()  
    Lembar1.Range("GJ32") = B8T5.Text  
End Sub
```

```
Private Sub B9T5_Change()  
    Lembar1.Range("GJ33") = B9T5.Text  
End Sub
```

```
Private Sub Kembalitampilan5_Click()  
    Tampilan5.Hide  
    Tampilan2.Show  
End Sub
```

```
Private Sub Lihathasiltampilan5_Click()  
    Tampilan5.Hide  
    Lembar3.Activate  
End Sub
```

```
Private Sub Fytampilan5_Change()  
    Lembar1.Range("Q8") = Fytampilan5.Text  
End Sub
```

```
Private Sub Lbtampilan5_Change()  
    Lembar1.Range("R8") = Lbtampilan5.Text
```

End Sub

```
Private Sub Mutampilan5_Change()  
    Lembar1.Range("S8") = Mutampilan5.Text  
End Sub
```

```
Private Sub Cbtampilan5_Change()  
    Lembar1.Range("T8") = Cbtampilan5.Text  
End Sub
```

```
Private Sub P10T5_Change()  
    Lembar1.Range("GI34") = P10T5.Text  
End Sub
```

```
Private Sub P1T5_Change()  
    Lembar1.Range("GI25") = P1T5.Text  
End Sub
```

```
Private Sub P2T5_Change()  
    Lembar1.Range("GI26") = P2T5.Text  
End Sub
```

```
Private Sub P3T5_Change()  
    Lembar1.Range("GI27") = P3T5.Text  
End Sub
```

```
Private Sub P4T5_Change()  
    Lembar1.Range("GI28") = P4T5.Text  
End Sub
```

```
Private Sub P5T5_Change()  
    Lembar1.Range("GI29") = P5T5.Text  
End Sub
```

```
Private Sub P6T5_Change()  
    Lembar1.Range("GI30") = P6T5.Text  
End Sub
```

```
Private Sub P7T5_Change()  
    Lembar1.Range("GI31") = P7T5.Text  
End Sub
```

```
Private Sub P8T5_Change()  
    Lembar1.Range("GI32") = P8T5.Text  
End Sub
```

```
Private Sub P9T5_Change()  
    Lembar1.Range("G133") = P9T5.Text  
End Sub
```

```
Private Sub Hitungtampilan5_Click()  
    Lembar1.Menghapushitungan  
    Lembar1.MenentukanMntls  
    Lembar1.MenentukanMntlb  
    Lembar1.MenentukanMntpl  
    Lembar1.MenentukanKondisiSayap  
    Lembar1.MenentukanKondisiBadan  
    Lembar1.MenentukanKondisiProfil  
    Lembar1.KesimpulanStabilitas  
    Lembar1.StabilitasProfilTerpilih  
End Sub
```

```
Private Sub UserForm_QueryClose(Cancel As Integer, CloseMode As Integer)  
    ProgramBaja.Close  
End Sub
```

**Tulisan program pada Tampilan 6;**

```
Private Sub Fytampilan6_Change()  
    Lembar1.Range("Q8") = Fytampilan6.Text  
End Sub
```

```
Private Sub Kembalitampilan6_Click()  
    Tampilan6.Hide  
    Tampilan2.Show  
End Sub
```

```
Private Sub Lbtampilan6_Change()  
    Lembar1.Range("R8") = Lbtampilan6.Text  
End Sub
```

```
Private Sub Cbtampilan6_Change()  
    Lembar1.Range("T8") = Cbtampilan6.Text  
End Sub
```

```
Private Sub Hitungtampilan6_Click()  
    Lembar1.Menghapushitungan  
    Lembar1.MenentukanMntls  
    Lembar1.MenentukanMntlb  
    Lembar1.MenentukanMntpl  
    Lembar1.MenentukanMnpakai  
    Lembar1.MenetapkanKuatMomenNominalTerfaktorTiapProfil
```

End Sub

Private Sub Lihathasilampilan6\_Click()

    Tampilan6.Hide

    Lembar4.Activate

End Sub

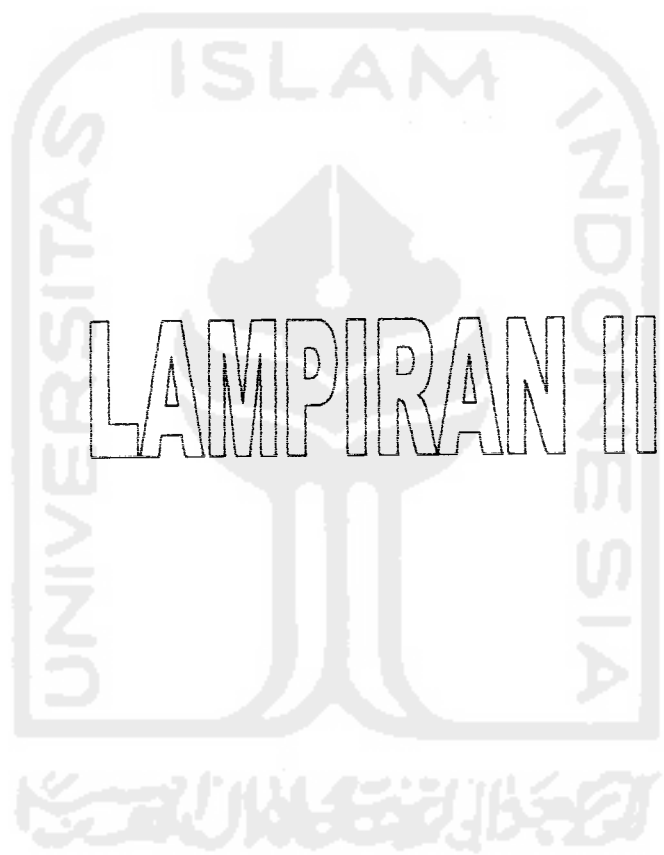
Private Sub UserForm\_QueryClose(Cancel As Integer, CloseMode As Integer)

    ProgramBaja.Close

End Sub

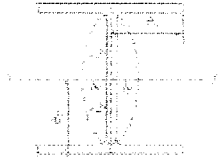






# WIDE FLANGE SHAPE

Geometrical moment of inertia  $I = Ai^2$   
 Radius of gyration of area  $i = \sqrt{I/A}$   
 Modulus of section  $Z = I/e$   
 (A = sectional area)



JIS G3192/TIS 1227-194 (DIBENTUK DENGAN GILING PANAS )

UKURAN

| Ukuran Nominal | Standar ukuran Profil |     |    |    | Bagian          |        | momen           |                 | Acuan Informatif |       | Modulus         |                 |
|----------------|-----------------------|-----|----|----|-----------------|--------|-----------------|-----------------|------------------|-------|-----------------|-----------------|
|                | H x B                 | t1  | t2 | r  | Luas            | Massa  | Inersia         |                 | Jari-jari        |       | Tampang         |                 |
|                |                       |     |    |    | A               | kg/m   | Ix              | Iy              | ix               | iy    | Zx              | Zy              |
| mm x mm        | mm                    | mm  | mm | mm | cm <sup>2</sup> | kg/m   | cm <sup>4</sup> | cm <sup>4</sup> | cm               | cm    | cm <sup>3</sup> | cm <sup>3</sup> |
| 100 x 100      | 100 x 100             | 6   | 8  | 10 | 21.90           | 17.20  | 363             | 134.0           | 4.18             | 2.47  | 76.5            | 26.7            |
| 125 x 125      | 125 x 125             | 6.5 | 9  | 0  | 30.31           | 23.80  | 847             | 293.0           | 5.29             | 3.11  | 136.0           | 47.0            |
| 150 x 75       | 150 x 75              | 5   | 7  | 8  | 17.85           | 14.00  | 666             | 49.5            | 6.11             | 1.66  | 88.8            | 13.2            |
| 150 x 100      | 148 x 100             | 6   | 9  | 11 | 26.84           | 21.10  | 1020            | 151.0           | 6.17             | 2.37  | 136.0           | 30.1            |
| 150 x 150      | 150 x 150             | 7   | 10 | 11 | 40.14           | 31.50  | 1640            | 563.0           | 6.39             | 3.75  | 219.0           | 75.1            |
| 175 x 175      | 175 x 175             | 7.5 | 11 | 12 | 51.21           | 40.20  | 2880            | 984.0           | 7.50             | 4.38  | 330.0           | 112.0           |
| 200 x 100      | 198 x 99              | 4.5 | 7  | 11 | 23.18           | 18.20  | 1580            | 114.0           | 8.26             | 2.21  | 160.0           | 23.0            |
|                | 200 x 100             | 5.5 | 8  | 11 | 27.16           | 21.30  | 1840            | 134.0           | 8.24             | 2.22  | 184.0           | 26.8            |
| 200 x 200      | 200 x 200             | 8   | 12 | 13 | 63.53           | 49.90  | 4720            | 1600            | 8.62             | 5.02  | 472.0           | 160.0           |
| 250 x 125      | 248 x 124             | 5   | 8  | 12 | 32.68           | 25.70  | 3540            | 255.0           | 10.40            | 2.79  | 285.0           | 41.1            |
|                | 250 x 125             | 6   | 9  | 12 | 37.66           | 29.60  | 4050            | 294.0           | 10.40            | 2.79  | 324.0           | 47.0            |
| 250 x 250      | 250 x 250             | 9   | 14 | 16 | 92.18           | 72.40  | 10800           | 3650            | 10.80            | 6.29  | 867.0           | 292.0           |
| 300 x 150      | 298 x 149             | 5.5 | 8  | 13 | 40.80           | 32.00  | 6320            | 442.0           | 12.40            | 3.29  | 424.0           | 59.3            |
|                | 300 x 150             | 6.5 | 9  | 13 | 46.78           | 36.70  | 7210            | 508.0           | 12.40            | 3.29  | 481.0           | 67.7            |
| 300 x 300      | 300 x 300             | 10  | 15 | 18 | 119.80          | 94.00  | 20400           | 6750            | 13.10            | 7.51  | 1360            | 450.0           |
| 350 x 175      | 346 x 174             | 6   | 9  | 14 | 52.68           | 41.40  | 11100           | 792.0           | 14.50            | 3.88  | 641.0           | 91.0            |
|                | 350 x 175             | 7   | 11 | 14 | 63.14           | 49.60  | 13600           | 964.0           | 14.70            | 3.95  | 775.0           | 112.0           |
| 350 x 350      | 350 x 350             | 12  | 19 | 20 | 173.90          | 137.00 | 40300           | 13600           | 15.20            | 8.84  | 2300            | 776.0           |
| 400 x 200      | 396 x 199             | 7   | 11 | 16 | 72.16           | 56.60  | 20000           | 1450            | 16.70            | 4.48  | 1010            | 145.0           |
| 400 x 200      | 400 x 200             | 8   | 13 | 16 | 84.10           | 66.00  | 23700           | 1740            | 16.8             | 4.54  | 1190            | 174.0           |
| *400 x 400     | 400 x 400             | 13  | 21 | 22 | 218.70          | 172.00 | 66600           | 22400           | 17.5             | 10.10 | 3330            | 1120            |
| 450 x 200      | 450 x 200             | 9   | 14 | 18 | 96.80           | 76.00  | 33500           | 1870            | 18.6             | 4.40  | 1490            | 187.0           |
| 500 x 200      | 500 x 200             | 10  | 16 | 20 | 114.20          | 89.60  | 47800           | 2140            | 20.5             | 4.33  | 1910            | 214.0           |
| 600 x 200      | 600 x 200             | 11  | 17 | 22 | 134.40          | 106.00 | 77600           | 2280            | 24.0             | 4.12  | 2590            | 228.0           |
| 600 x 300      | 588 x 300             | 12  | 20 | 26 | 192.50          | 151.00 | 118000          | 9020            | 24.8             | 6.85  | 4020            | 601.0           |

|            |           |    |    |    |        |        |         |        |      |      |       |       |
|------------|-----------|----|----|----|--------|--------|---------|--------|------|------|-------|-------|
| *700 x 300 | 700 x 300 | 13 | 24 | 28 | 235.50 | 185.00 | 201.000 | 10.800 | 29.3 | 6.78 | 5.760 | 722.0 |
| *800 x 300 | 800 x 300 | 14 | 26 | 28 | 267.40 | 210.00 | 292.000 | 11.700 | 33.0 | 6.62 | 7.290 | 782.0 |

Catatan : \* Ukuran untuk produk impor

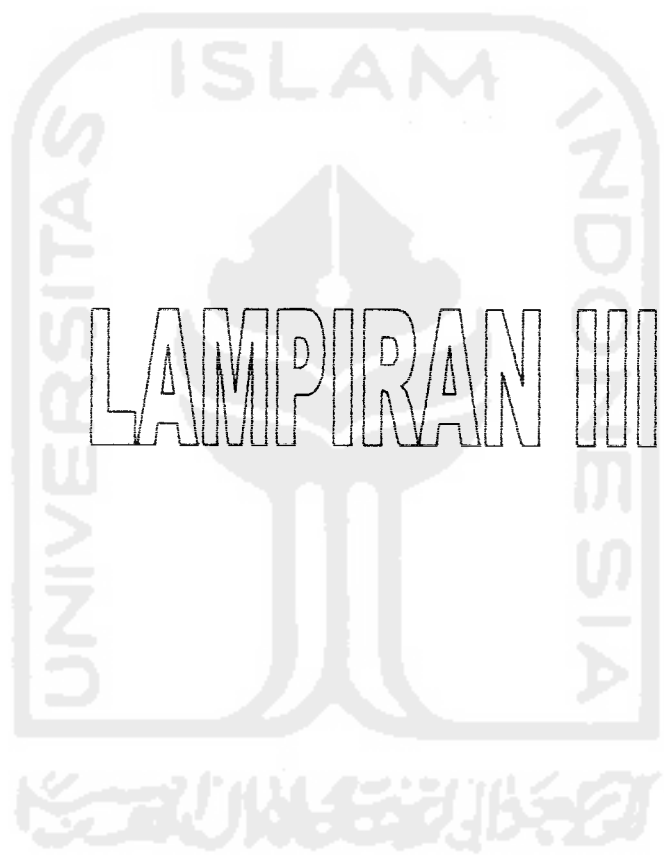
## Spesikasi



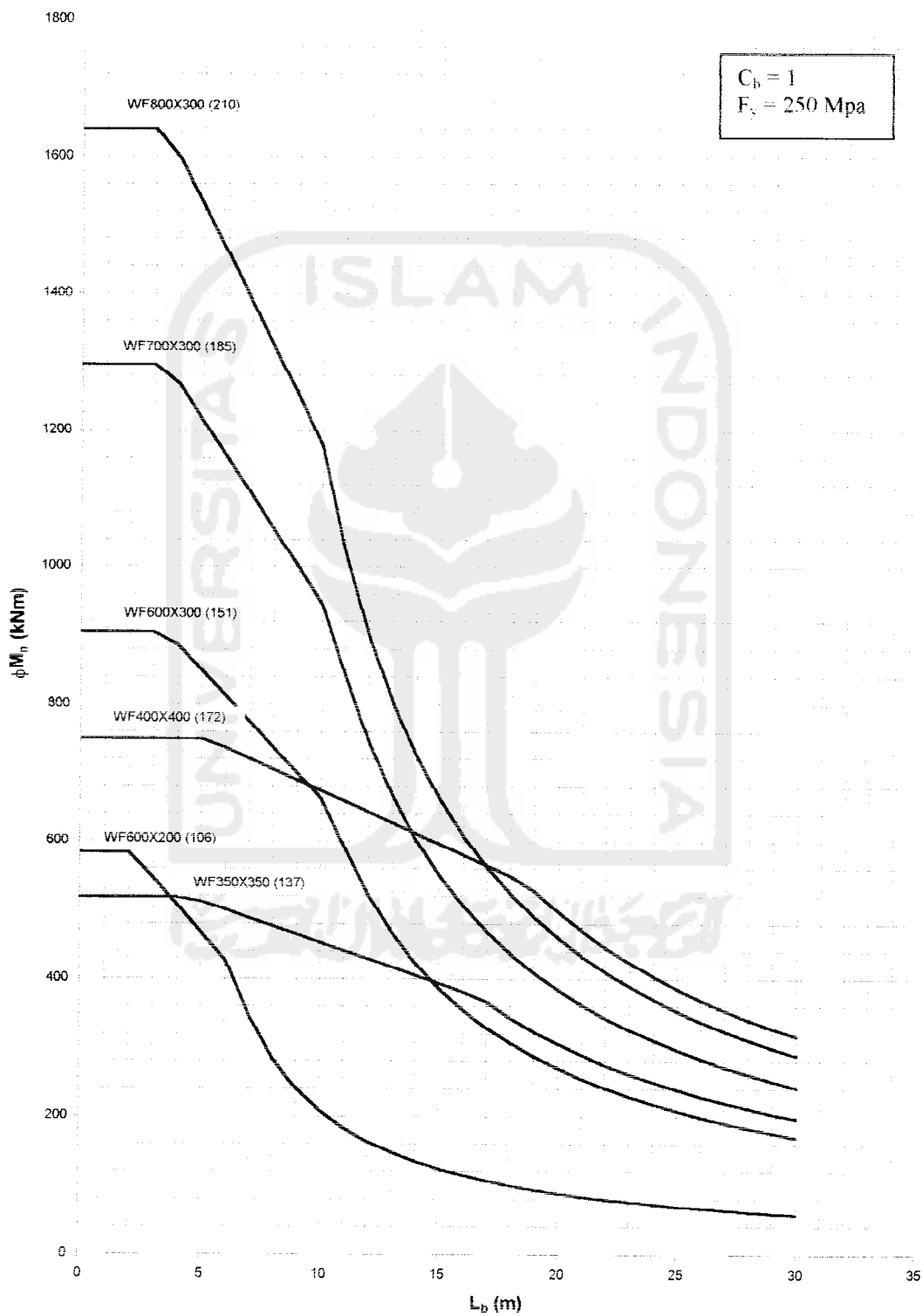
Untuk keterangan lebih lanjut hubungi e-mail : [sales@grdsteel.com](mailto:sales@grdsteel.com)

Copyright © 1997-2000 ADVMRK. All rights Reserved

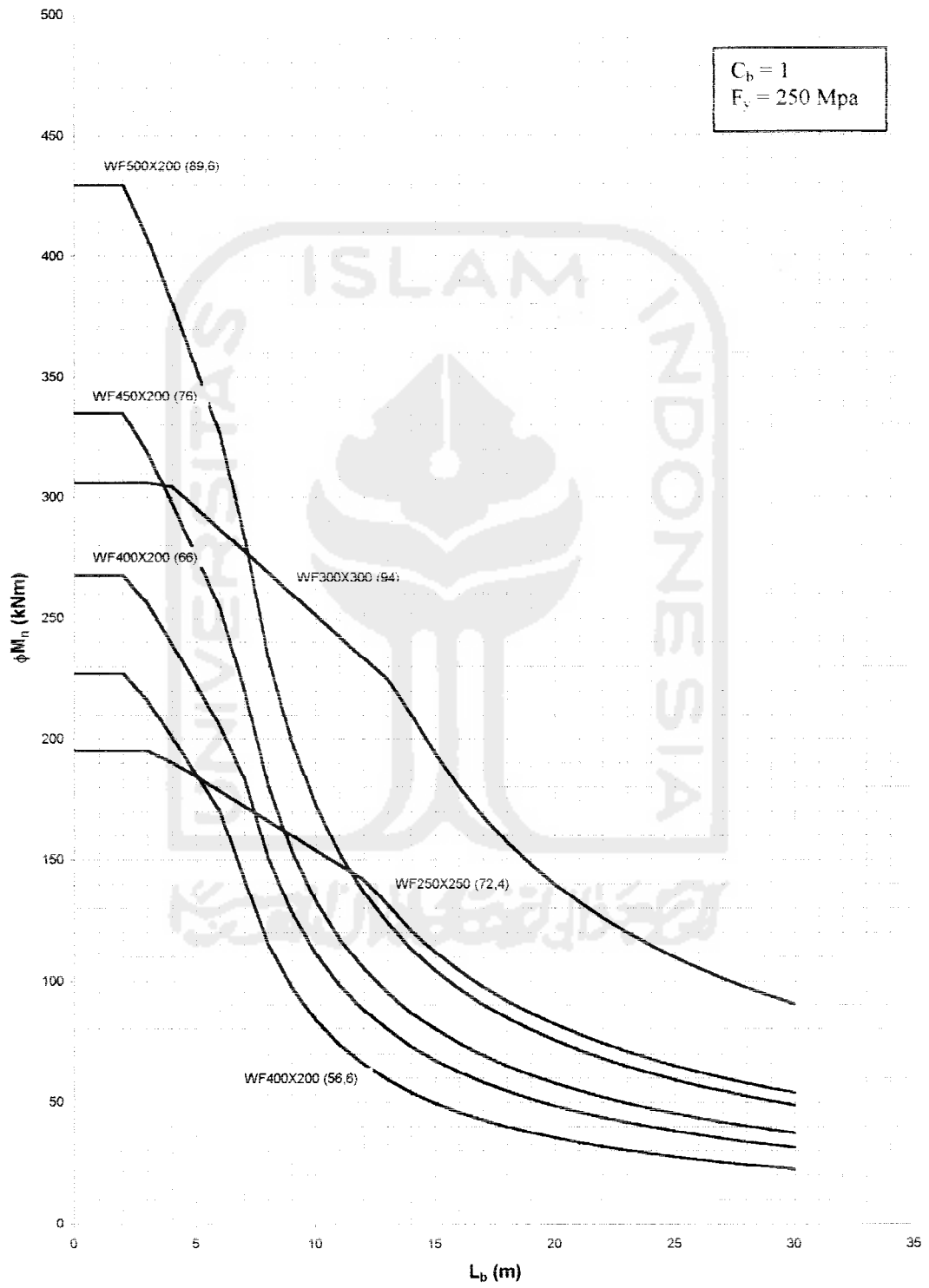




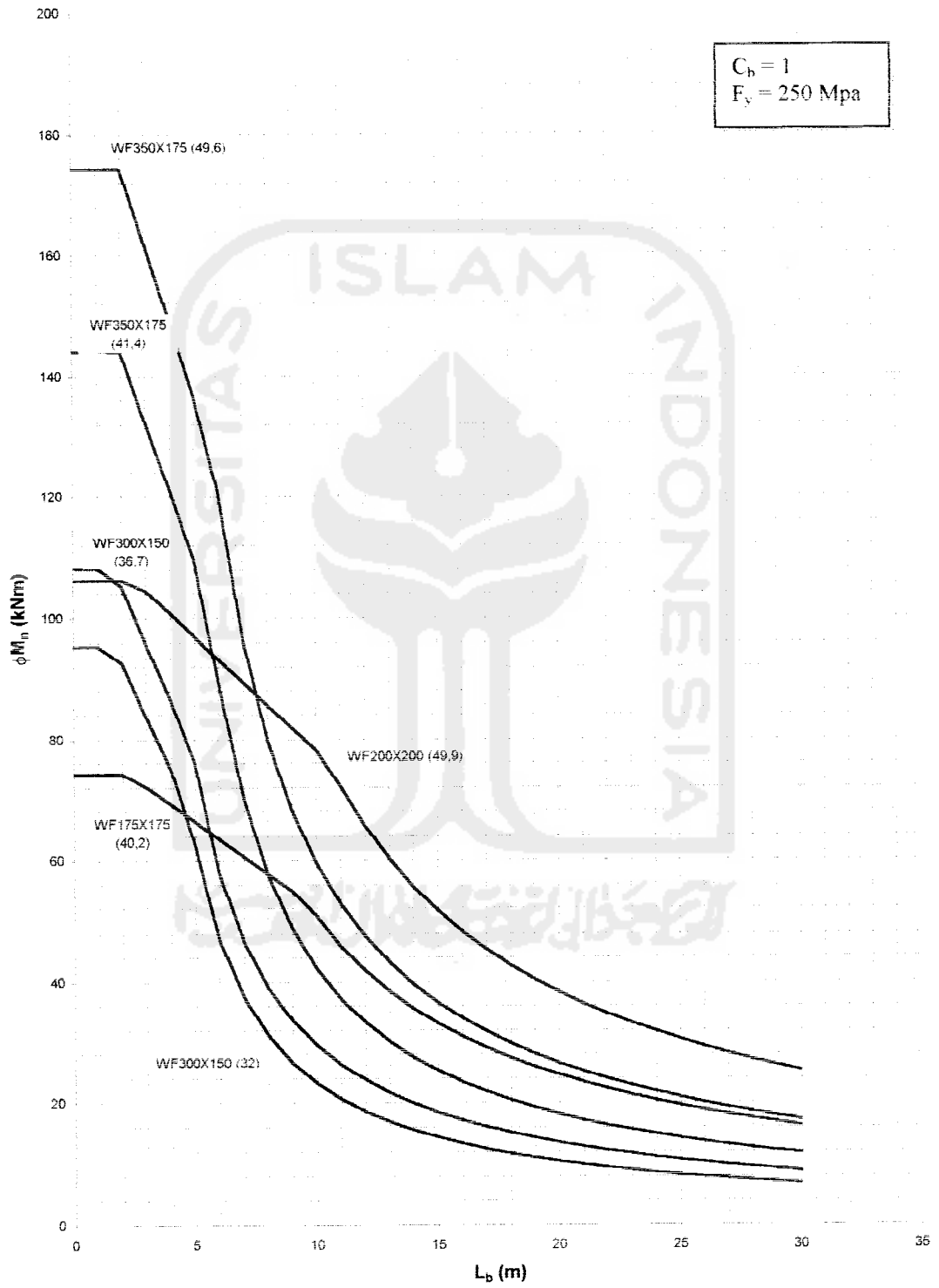
Grafik Kuat Momen Nominal ( $\phi M_n$ )-Panjang Tak Berpenopang Lateral ( $L_b$ )



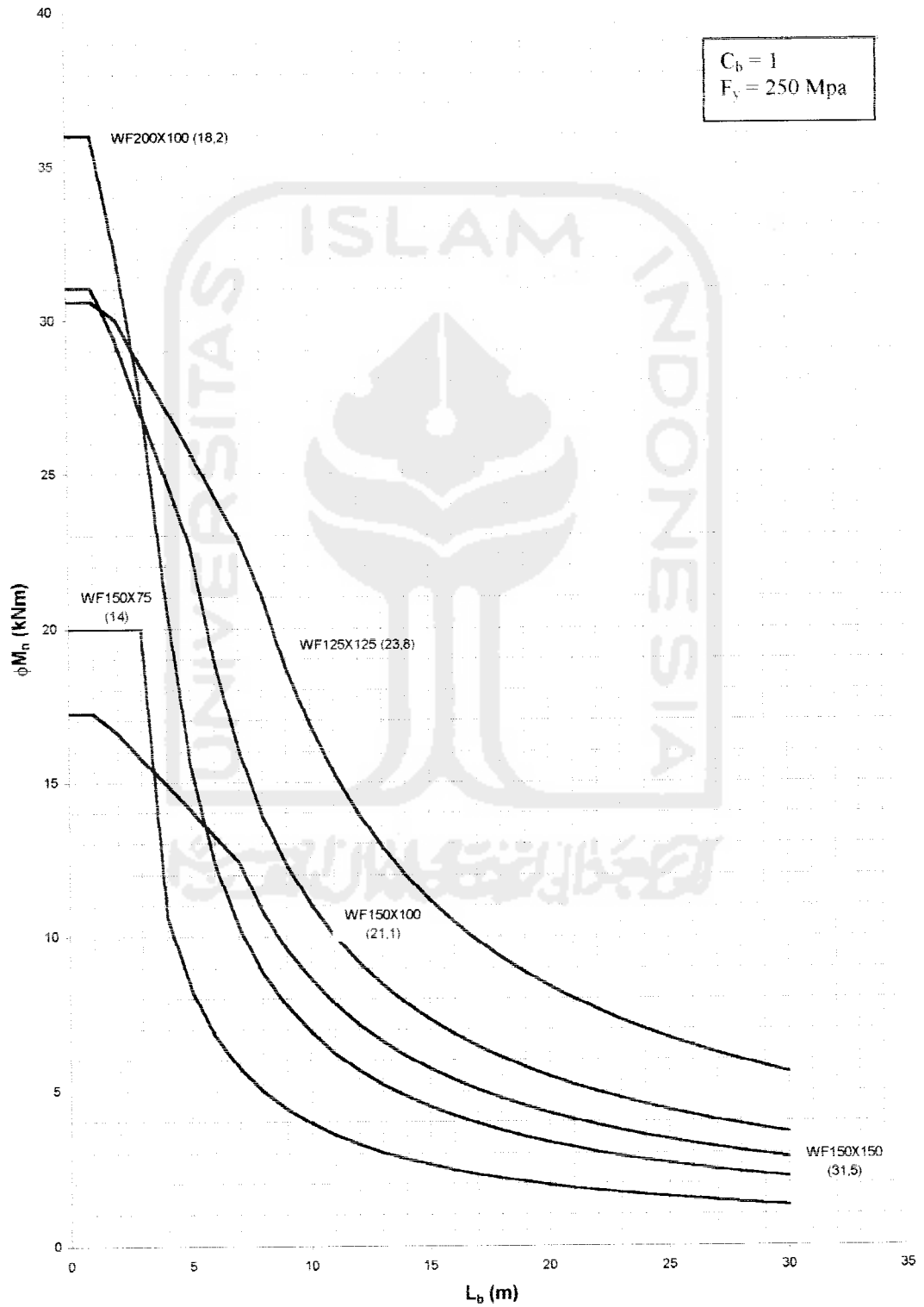
Grafik Kuat Momen Nominal ( $\phi M_n$ )-Panjang Tak Berpenopang Lateral ( $L_b$ )



Grafik Kuat Momen Nominal ( $\phi M_n$ )-Panjang Tak Berpenopang Lateral ( $L_b$ )

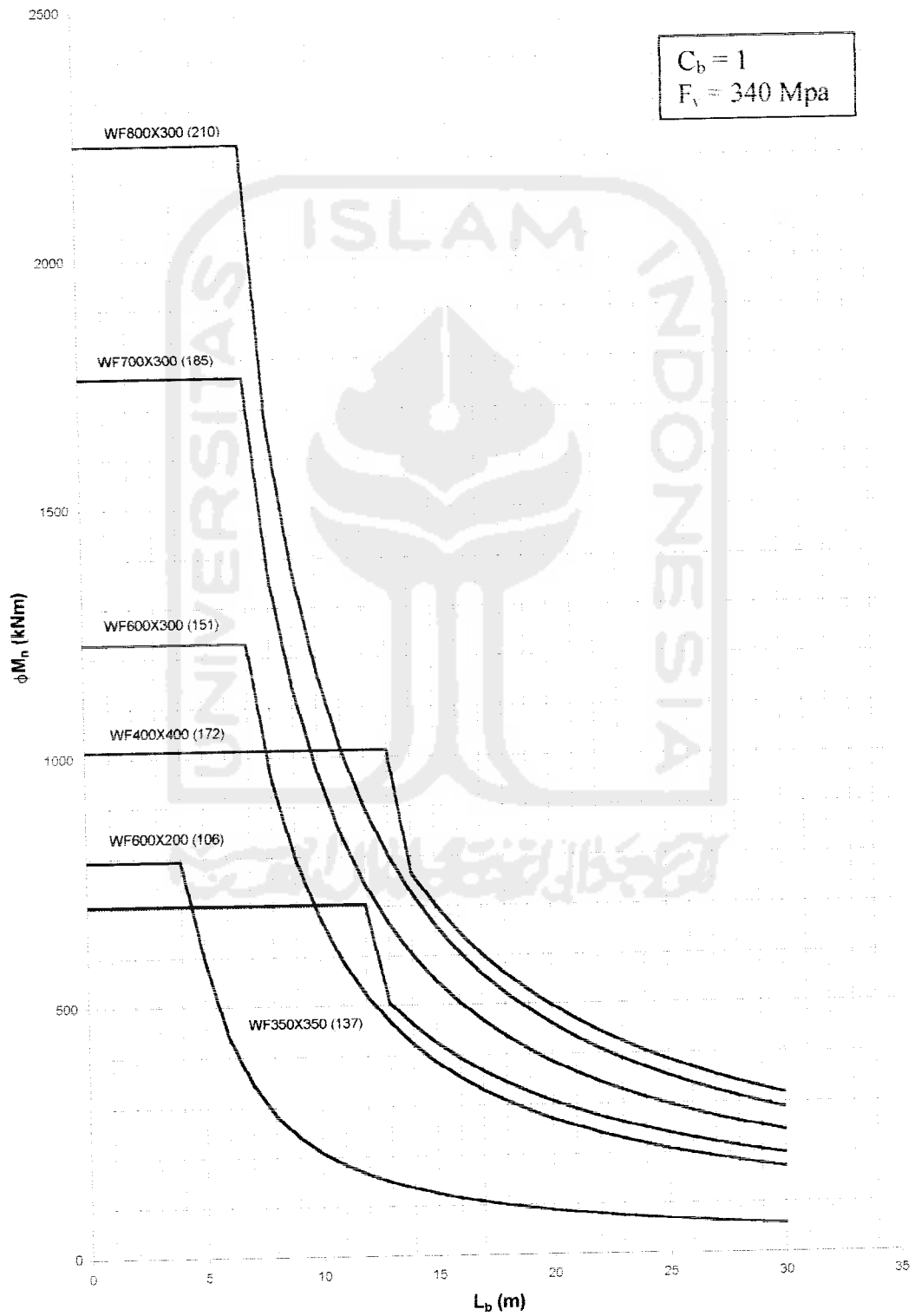


Grafik Kuat Momen Nominal ( $\phi M_n$ )-Panjang Tak Berpenopang Lateral ( $L_b$ )

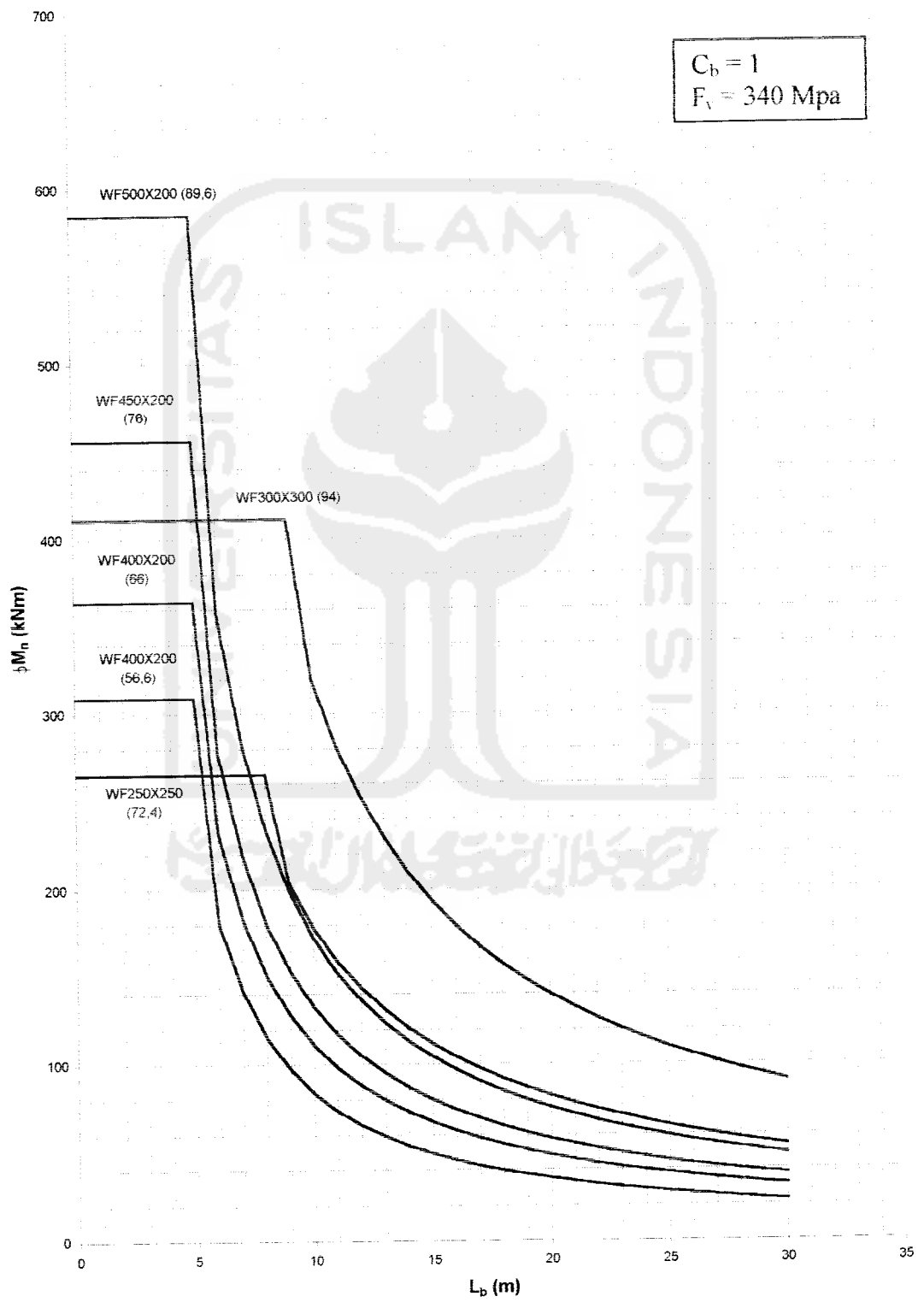




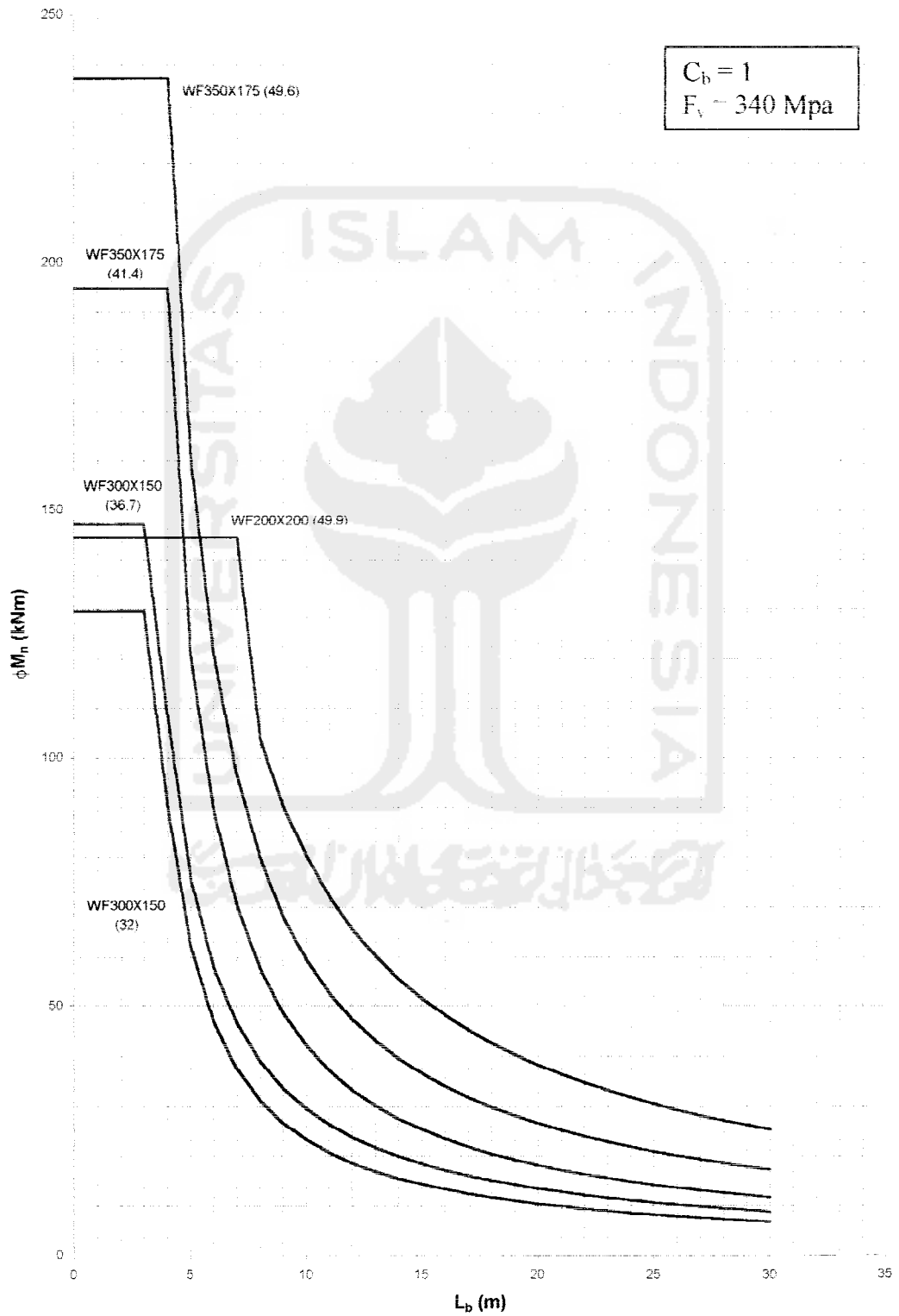
Grafik Kuat Momen Nominal ( $\phi M_n$ )-Panjang Tak Berpenopang Lateral ( $L_b$ )



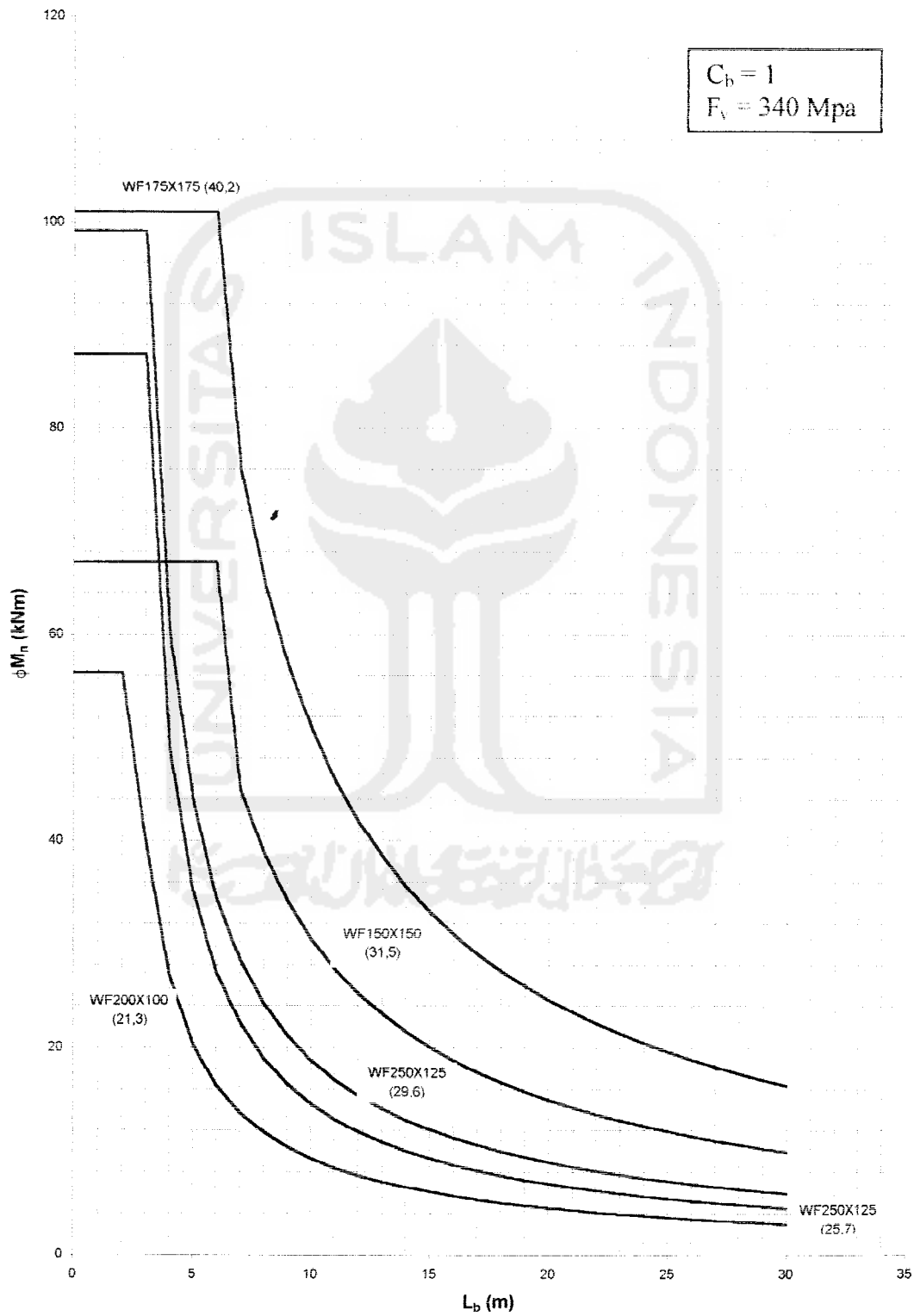
Grafik Kuat Momen Nominal ( $\phi M_n$ )-Panjang Tak Berpenopang Lateral ( $L_b$ )



Grafik Kuat Momen Nominal ( $\phi M_n$ )-Panjang Tak Berpenopang Lateral ( $L_b$ )



Grafik Kuat Momen Nominal ( $\phi M_n$ )-Panjang Tak Berpenopang Lateral ( $L_b$ )



Grafik Kuat Momen Nominal ( $\phi M_n$ )-Panjang Tak Berpenopang Lateral ( $L_b$ )

