

ภาคผนวก จ

Source Code ของโปรแกรมช่วยตัดสินใจ

Option Explicit

Type ProdType

Item As Single
 Name As String
 Code As String
 BatchSz As Single
 ProcT As Integer
 SetupT As Integer
 Machine As String
 SafeSk As Single
 QtyReq As Single
 OnHand As Single
 Stock As Single
 QtyProd As Single
 BatchNo As Single
 DueDate As Variant
 DueDateHR As Single
 Plan As Single
 BatchMk As Single

End Type

Type RData

Item As Integer
 Product As String
 Qty As Single
 DueDate As Variant
 PVDate As Variant
 DueHR As Single
 Seq As Integer
 Deliver As Variant

End Type

Type CriteriaData

Item As Integer
 PName As String
 Policy As Integer
 EDRP As Single
 Demand As Single
 IUR As Single
 Profit As Double
 Stock As Single
 CSum As Double

End Type

Type ProcessWk

PName As String
 Machine As String
 Seq1 As Integer

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        Setup1 As Single
        Process1 As Single
        SEQ2 As Integer
        Setup2 As Single
        Process2 As Single
        Seq3 As Integer
        Setup3 As Single
        Process3 As Single
    End Type

    Type ProcessWk1
        PName As String
        Batch As Integer
        Machine As String
        Seq As Integer
        SetupT As Single
        ProcessT As Double
        dueT As Single
        DueDate As Single
        Request As Double
        FinishT As Double
    End Type

    Type ProcessWk2
        PName As String
        PCode As String
        Machine As String
        Seq As Integer
        Setup As Single
        Process As Single
        dueT As Variant
        Batch As Integer
    End Type

    Type ProcessWk3
        PName As String
        Batch As Integer
        DueDate As Single
        CRFinishT As Double
        EDDFinishT As Double
    End Type

    Type MCWk
        JobN As Variant
        JOBStart As Single
        JOBStop As Single
        BtNo As Single
    End Type

    Dim ProductRec() As ProDType

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Dim RecData() As RData
Dim ProducCri() As CriteriaData
Dim ProcessWorkEDD() As ProcessWk
Dim ProcessWorkCR() As ProcessWk
Dim ProcessEDD() As ProcessWk2
Dim ProcessCR() As ProcessWk2
Dim ProcessStk() As ProcessWk2
Dim Machine() As MCWk
Dim ProductWk() As MCWk
Dim ProductWk1() As ProcessWk1
Dim ProductWk2() As ProcessWk3
Dim McCnt() As Integer
Dim ProCnt() As Single
Dim ProductCt() As Integer
Dim BatchCt() As Integer
Dim SumProduct() As Double
Dim MkeProduct() As Double
Dim ProductNo() As Integer
Dim JobName As String
Dim JobProcessT As Single
Dim JobSetUpT As Single
Dim JobBatchT As Single
Dim JobStBatch As Single
Dim ProNo As Integer
Dim ProNoC As Integer
Dim JobNo As Integer
Dim StDue As Variant
Dim ProductMxCt As Integer
Dim PVTime As Single
Dim DTime As Single
Dim CR, MinCR As Single
Dim NDate As Variant
Dim CriSum As CriteriaData
Dim NSum As CriteriaData
Dim a, b, c As Integer
Dim i, j, k As Integer
Dim M, N As Integer
Dim M1, M2, M3, M4, M5, M6 As Double
Dim MaxMC As Double
Dim M1_Index, M2_Index, M3_Index As Variant
Dim M4_Index, M5_Index, M6_Index As Variant
Dim Job_Index As Variant
Dim MinMC As Double
Dim TEMP, TEMP1, EndTEMP As Variant
Dim StartTEMP As Variant
Dim OldJob1, OldJob2, OldJob3 As String

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Dim OldJob4, OldJob5, OldJob6 As String

Dim stamp As Variant

Sub ClsData()

' clear Data

Cells.Select

Selection.ClearContents

Selection.Borders(xlDiagonalDown).LineStyle = xlNone

Selection.Borders(xlDiagonalUp).LineStyle = xlNone

Selection.Borders(xlEdgeLeft).LineStyle = xlNone

Selection.Borders(xlEdgeTop).LineStyle = xlNone

Selection.Borders(xlEdgeBottom).LineStyle = xlNone

Selection.Borders(xlEdgeRight).LineStyle = xlNone

Selection.Borders(xlInsideVertical).LineStyle = xlNone

Selection.Borders(xlInsideHorizontal).LineStyle = xlNone

Selection.UnMerge

With Selection.Interior

.Pattern = xlNone

.TintAndShade = 0

.PatternTintAndShade = 0

End With

End Sub

Sub RecordProduct()

Dim ProductRec As ProductType

ProductRec = ActiveCell.Value

ProNo = [A2].End(xlDown).Row - 1

ReDim ProductRec(ProNo) As ProductType

ReDim ProcessWorkEDD(ProNo) As ProcessWk

ReDim ProcessWorkCR(ProNo) As ProcessWk

[A2].Select: i = 1

Do While ActiveCell.Value <> ""

ProductRec(i).Item = ActiveCell.Value

ProductRec(i).Name = ActiveCell.Offset(0, 1).Value

ProductRec(i).Code = ActiveCell.Offset(0, 2).Value

ProductRec(i).BatchSz = ActiveCell.Offset(0, 3).Value

ProductRec(i).ProcT = ActiveCell.Offset(0, 4).Value

ProductRec(i).SetupT = ActiveCell.Offset(0, 5).Value

ProductRec(i).Machine = ActiveCell.Offset(0, 6).Value

ProductRec(i).SafeSk = ActiveCell.Offset(0, 7).Value

ProductRec(i).QtyReq = 0 'ActiveCell.Offset(0, 8).Value

ProductRec(i).OnHand = ActiveCell.Offset(0, 9).Value

ProductRec(i).Stock = ActiveCell.Offset(0, 9).Value

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ProductRec(i).QtyProd = 0 'ActiveCell.Offset(0, 10).Value
ProductRec(i).BatchNo = ActiveCell.Offset(0, 11).Value
ProductRec(i).Plan = ActiveCell.Offset(0, 12).Value
ProductRec(i).DueDate = 75000
ProductRec(i).DueDateHR = ProductRec(i).DueDate * 20
ActiveCell.Offset(1, 0).Select: i = i + 1
Loop

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End Sub
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Sub RecordCriteria()
    "N1:Ö1çéÁÜÄCriteria
    Sheets("Criteria").Activate
    ProNoC = [B8].End(xlDown).Row - 7
    [B8].Select
    ReDim ProducCri(2, ProNoC) As CriteriaData
    For i = 1 To ProNo        '1 for due date :2 for Stock
        ProducCri(1, i).Item = ActiveCell.Value
        ProducCri(2, i).Item = ActiveCell.Value
        ProducCri(1, i).PName = ActiveCell.Offset(0, 1).Value
        ProducCri(2, i).PName = ActiveCell.Offset(0, 1).Value
        ProducCri(1, i).Policy = ActiveCell.Offset(0, 6).Value
        ProducCri(2, i).Policy = ActiveCell.Offset(0, 7).Value
        ProducCri(1, i).EDRP = ActiveCell.Offset(0, 12).Value
        ProducCri(2, i).EDRP = ActiveCell.Offset(0, 13).Value
        ProducCri(1, i).Demand = ActiveCell.Offset(0, 18).Value
        ProducCri(2, i).Demand = ActiveCell.Offset(0, 19).Value
        ProducCri(1, i).IUR = ActiveCell.Offset(0, 24).Value
        ProducCri(2, i).IUR = ActiveCell.Offset(0, 25).Value
        ProducCri(1, i).Profit = ActiveCell.Offset(0, 30).Value
        ProducCri(2, i).Profit = ActiveCell.Offset(0, 31).Value
        ProducCri(1, i).Stock = ActiveCell.Offset(0, 36).Value
        ProducCri(2, i).Stock = ActiveCell.Offset(0, 37).Value
        ProducCri(1, i).CSum = ActiveCell.Offset(0, 38).Value
        ProducCri(2, i).CSum = ActiveCell.Offset(0, 39).Value
        ActiveCell.Offset(1, 0).Select
    Next i
End Sub

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Sub RecordOrder()
    "N1:Ö1çéÁÜÄOrder
    ReDim ProductCt(ProNo) As Integer
    ReDim ProductNo(ProNo) As Integer
    For j = 1 To ProNo
        ProductCt(j) = 0
        ProductNo(j) = 1
    Next j
End Sub

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Next j

Sheets("iÁiçéÁÀÛ").Activate
[A5].Select
'ProNo = 17
Do While ActiveCell.Value <> ""
    For i = 1 To ProNo
        If ActiveCell.Offset(0, 1).Value = ProductRec(i).Name Then
            ProductCt(i) = ProductCt(i) + 1
            ProductRec(i).QtyReq = ProductRec(i).QtyReq + ActiveCell.Offset(0, 2).Value
        End If
    Next i
ActiveCell.Offset(1, 0).Select
Loop
ProductMxCt = 0
For j = 1 To ProNo
    If ProductCt(j) > ProductMxCt Then
        ProductMxCt = ProductCt(j)
    End If
Next j
'Set RecData-----
ReDim RecData(ProNo, ProductMxCt) As RData
[B5].Select
Do While ActiveCell.Value <> ""
    For i = 1 To ProNo
        If ActiveCell.Value = ProductRec(i).Name Then
            RecData(i, ProductNo(i)).Product = ActiveCell.Value
            RecData(i, ProductNo(i)).Item = ActiveCell.Offset(0, -1).Value
            RecData(i, ProductNo(i)).Qty = ActiveCell.Offset(0, 1).Value
            RecData(i, ProductNo(i)).DueDate = ActiveCell.Offset(0, 2).Value
            RecData(i, ProductNo(i)).PVDate = ActiveCell.Offset(0, 3).Value
            RecData(i, ProductNo(i)).DueHR = ActiveCell.Offset(0, 4).Value
            RecData(i, ProductNo(i)).Seq = 0
            ProductNo(i) = ProductNo(i) + 1
        End If
    Next i
ActiveCell.Offset(1, 0).Select
Loop
[A5].Select
'/Set RecData-----
'Sequent RecData-----
For N = 1 To ProNo
    For i = 1 To ProductCt(N)
        M = 75000
        For j = 1 To ProductCt(N)
            If RecData(N, j).Seq = 0 Then

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    If RecData(N, j).DueDate < M Then
        M = RecData(N, j).DueDate
        RecData(N, j).Seq = i
        k = j - 1
        Do While k >= 1
            If RecData(N, k).Seq = i Then
                RecData(N, k).Seq = 0
            End If
            k = k - 1
        Loop
    End If
End If
Next j
Next i
Next N
'/Sequent RecData-----

End Sub

Sub DataDisplay2()

'Application.ScreenUpdating = False
ReDim ProductWk1(ProNo, 20) As ProcessWk1
ReDim BatchCt(ProNo) As Integer
ReDim SumProduct(ProNo) As Double
ReDim MkeProduct(ProNo) As Double
For i = 1 To ProNo
    For j = 1 To 20
        ProductWk1(i, j).SetupT = 0
        ProductWk1(i, j).ProcessT = 0
        ProductWk1(i, j).Seq = 0
        ProductWk1(i, j).dueT = 0
        ProductWk1(i, j).FinishT = 0
    Next j
    BatchCt(i) = 1
    SumProduct(i) = 0
    MkeProduct(i) = 0
Next i

Sheets("μÖÄÖ§ÊÄØ»ÄÖÄ;ÖÄÄÖ·Öèμé§¼ÄÖμ").Activate
Call ClsData
[A5] = "ÄÖ`N°": [B5] = "ÄÖÄ;ÖÄÄÖ·Öèμé§¼ÄÖμ": [C5] = "°Ö'Ç¹·Öèμé§¼ÄÖμ"
[D5] = "Due date (Hr)": [E5] = "Delivery"
[A6].Select
For N = 1 To ProNo
    For i = 1 To ProductCt(N)

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For j = 1 To ProductCt(N)
    If RecData(N, j).Seq = i Then
        If ProductRec(N).Stock >= RecData(N, j).Qty Then
            'ActiveCell.Offset(0, 7).Value = ProductRec(N).Stock           '=====
            ProductRec(N).Stock = ProductRec(N).Stock - RecData(N, j).Qty
            'ActiveCell.Offset(0, 8).Value = ProductRec(N).Stock           '=====
            'ActiveCell.Offset(0, 9).Value = SumProduct(N)                 '=====
            ActiveCell.Value = RecData(N, j).Item
            ActiveCell.Offset(0, 1).Value = RecData(N, j).Product
            ActiveCell.Offset(0, 2).Value = RecData(N, j).Qty
            ActiveCell.Offset(0, 3).Value = RecData(N, j).DueHR
            RecData(N, j).Deliver = 0
            'ActiveCell.Offset(0, 4).Value = RecData(N, j).Deliver
            ActiveCell.Offset(0, 4).Value = BatchCt(N) - 1
            ProductWk1(N, BatchCt(N) - 1).Request = ProductWk1(N, BatchCt(N) - 1).Request + RecData(N, j).Qty
        Else
            SumProduct(N) = SumProduct(N) + RecData(N, j).Qty
            If (SumProduct(N) > ProductRec(N).BatchSz) Or (i = ProductCt(N)) Then
                SumProduct(N) = SumProduct(N) - RecData(N, j).Qty
                'j = j - 1
                ProductWk1(N, BatchCt(N)).Batch = WorksheetFunction.RoundUp((SumProduct(N) / ProductRec(N).BatchSz), 0)
                ProductWk1(N, BatchCt(N)).ProcessT = ProductWk1(N, BatchCt(N)).Batch * ProductRec(N).ProcT
                ProductWk1(N, BatchCt(N)).SetupT = ProductRec(N).SetupT
                ProductWk1(N, BatchCt(N)).dueT = ProductRec(N).DueDateHR
                ProductWk1(N, BatchCt(N)).DueDate = ProductRec(N).DueDate
                ProductWk1(N, BatchCt(N)).PName = ProductRec(N).Code
                ProductWk1(N, BatchCt(N)).Machine = ProductRec(N).Machine
                MkeProduct(N) = ProductWk1(N, BatchCt(N)).Batch * ProductRec(N).BatchSz
                k = j - 1
                Do While k >= 1
                    If ActiveCell.Offset(-k, 4).Value = "" Then
                        ActiveCell.Offset(-k, 4).Value = BatchCt(N)
                    End If
                    k = k - 1
                Loop
                ProductWk1(N, BatchCt(N)).Request = SumProduct(N)
                ProductRec(N).Stock = ProductRec(N).Stock + MkeProduct(N) - SumProduct(N)
                MkeProduct(N) = 0
                SumProduct(N) = 0
                ProductRec(N).DueDateHR = 1000
                ProductRec(N).DueDate = 100000
                ActiveCell.Value = RecData(N, j).Item
                ActiveCell.Offset(0, 1).Value = RecData(N, j).Product
                ActiveCell.Offset(0, 2).Value = RecData(N, j).Qty
                ActiveCell.Offset(0, 3).Value = RecData(N, j).DueHR
                RecData(N, j).Deliver = ""
            End If
        End If
    End If
Next j

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SumProduct(N) = SumProduct(N) + RecData(N, j).Qty
If ProductRec(N).DueDate > RecData(N, j).DueDate Then
    ProductRec(N).DueDate = RecData(N, j).DueDate
End If

If ProductRec(N).DueDateHR > RecData(N, j).DueHR Then
    ProductRec(N).DueDateHR = RecData(N, j).DueHR
End If

ActiveCell.Offset(0, 5).Value = ProductWk1(N, BatchCt(N)).ProcessT
ActiveCell.Offset(0, 6).Value = ProductWk1(N, BatchCt(N)).dueT

BatchCt(N) = BatchCt(N) + 1

'ActiveCell.Offset(0, 4).Value = ""
Else
    'ActiveCell.Offset(0, 9).Value = SumProduct(N)
    ActiveCell.Value = RecData(N, j).Item
    ActiveCell.Offset(0, 1).Value = RecData(N, j).Product
    ActiveCell.Offset(0, 2).Value = RecData(N, j).Qty
    ActiveCell.Offset(0, 3).Value = RecData(N, j).DueHR
    ActiveCell.Offset(0, 4).Value = ""
    If ProductRec(N).DueDate > RecData(N, j).DueDate Then
        ProductRec(N).DueDate = RecData(N, j).DueDate
    End If

    If ProductRec(N).DueDateHR > RecData(N, j).DueHR Then
        ProductRec(N).DueDateHR = RecData(N, j).DueHR
    End If
End If

ActiveCell.Value = RecData(N, j).Item
ActiveCell.Offset(0, 1).Value = RecData(N, j).Product
ActiveCell.Offset(0, 2).Value = RecData(N, j).Qty
ActiveCell.Offset(0, 3).Value = RecData(N, j).DueHR
RecData(N, j).Deliver = ""
SumProduct(N) = SumProduct(N) + RecData(N, j).Qty
If ProductRec(N).DueDate > RecData(N, j).DueDate Then
    ProductRec(N).DueDate = RecData(N, j).DueDate
End If

If ProductRec(N).DueDateHR > RecData(N, j).DueHR Then
    ProductRec(N).DueDateHR = RecData(N, j).DueHR
End If

If (SumProduct(N) > ProductRec(N).BatchSz) Or (i = ProductCt(N)) Then
    ProductWk1(N, BatchCt(N)).Batch = WorksheetFunction.RoundUp((SumProduct(N) / ProductRec(N).BatchSz), 0)

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ProductWk1(N, BatchCt(N)).ProcessT = ProductWk1(N, BatchCt(N)).Batch * ProductRec(N).ProcT
ProductWk1(N, BatchCt(N)).SetupT = ProductRec(N).SetupT
ProductWk1(N, BatchCt(N)).DueT = ProductRec(N).DueDateHR
ProductWk1(N, BatchCt(N)).DueDate = ProductRec(N).DueDate
ProductWk1(N, BatchCt(N)).PName = ProductRec(N).Code
ProductWk1(N, BatchCt(N)).Machine = ProductRec(N).Machine
MkeProduct(N) = ProductWk1(N, BatchCt(N)).Batch * ProductRec(N).BatchSz
ActiveCell.Offset(0, 5).Value = ProductWk1(N, BatchCt(N)).ProcessT
ActiveCell.Offset(0, 6).Value = ProductWk1(N, BatchCt(N)).DueT
ProductRec(N).DueDateHR = 1000
ProductRec(N).DueDate = 100000
BatchCt(N) = BatchCt(N) + 1
ProductRec(N).Stock = ProductRec(N).Stock + MkeProduct(N) - SumProduct(N)
ActiveCell.Offset(0, 4).Value = BatchCt(N) - 1
ProductWk1(N, BatchCt(N) - 1).Request = SumProduct(N)
MkeProduct(N) = 0
SumProduct(N) = 0
k = -1
Do While ActiveCell.Offset(k, 4).Value = ""
    ActiveCell.Offset(k, 4).Value = BatchCt(N) - 1
    k = k - 1
Loop

End If

'//////////////////////////////////////////////////////////////////////////////////////////////////////////////////
End If

'ActiveCell.Value = ProductRec(N).Code '55555555555555555555555555555555
If (i = ProductCt(N)) And (SumProduct(N) > 0) Then
    ActiveCell.Offset(0, 4).Value = BatchCt(N) - 1
End If

ActiveCell.Offset(1, 0).Select
End If
Next j
Next i
BatchCt(N) = BatchCt(N) - 1
Next N
'ActiveCell.Offset(5, 0).Select
[K5] = "ÃÖÄÏÖÃÃÖ": [L5] = "Code": Range("M5") = "On Hand": [N5] = "á¼¼ÃÖµ"
[O5] = "Due Date": [P5] = "'Ó¹·Öëµéİ§ÿÖÃ": [Q5] = "'Ó¹Ç¹ Batch ·Öëµéİ§¼ÃÖµ"
[R5] = "'Ó¹Ç¹·ÖèÀÈÃ×Íµéİ§¼ÃÖµµÖÁá¼¼'"
[K6].Select

For i = 1 To ProNo
    ProductRec(i).BatchMk = 0
    For j = 1 To BatchCt(i)
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If ProductWk1(i, j).ProcessT > 0 Then
    ActiveCell.Value = ProductRec(i).Name
    ActiveCell.Offset(0, 1).Value = ProductWk1(i, j).PName
    ActiveCell.Offset(0, 2).Value = ProductRec(i).OnHand
    ActiveCell.Offset(0, 3).Value = ProductRec(i).Plan
    ActiveCell.Offset(0, 4).Value = ProductWk1(i, j).DueDate
    ActiveCell.Offset(0, 5).Value = ProductWk1(i, j).Request
    ActiveCell.Offset(0, 6).Value = ProductWk1(i, j).Batch
    ProductRec(i).BatchMk = ProductRec(i).BatchMk + ProductWk1(i, j).Batch
    If (j = BatchCt(i)) And (ProductRec(i).Plan >= 0) Then
        If ProductRec(i).Plan - ProductRec(i).BatchMk >= 0 Then
            ActiveCell.Offset(0, 7).Value = ProductRec(i).Plan - ProductRec(i).BatchMk
        Else
            ActiveCell.Offset(0, 7).Value = 0
        End If
    End If
    ActiveCell.Offset(1, 0).Select
End If
Next j
Next i
For i = 1 To ProNo
    If (ProductRec(i).Plan - ProductRec(i).BatchMk > 0) Then
        ActiveCell.Value = ProductRec(i).Name
        ActiveCell.Offset(0, 1).Value = ProductRec(i).Code
        ActiveCell.Offset(0, 2).Value = ProductRec(i).OnHand
        ActiveCell.Offset(0, 3).Value = ProductRec(i).Plan
        ActiveCell.Offset(0, 4).Value = ""
        ActiveCell.Offset(0, 5).Value = "á¼¼ÄÖµ"
        ActiveCell.Offset(0, 6).Value = ProductRec(i).Plan - ProductRec(i).BatchMk
        ActiveCell.Offset(1, 0).Select
    End If
Next i

'Application.ScreenUpdating = True

End Sub
Sub Sequent2()

Call RecordProduct
Call RecordOrder
Call RecordCriteria
Call DataDisplay2

[K6].Select

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JobNo = [K6].End(xlDown).Row - 5

ReDim ProcessEDD(JobNo) As ProcessWk2

ReDim ProcessCR(JobNo) As ProcessWk2

ReDim ProcessStk(JobNo) As ProcessWk2

i = 1: j = 1

StDue = Sheets("iÃĪġĕĪÁŮÁ").Range("E5").Value

Do While ActiveCell.Value <> ""

    If ActiveCell.Offset(0, 4).Value <> "" Then 'check due date

        For k = 1 To ProNo

            If ProductRec(k).Name = ActiveCell.Value Then

                ProcessEDD(i).PName = ProductRec(k).Name

                ProcessEDD(i).PCode = ProductRec(k).Code

                ProcessEDD(i).Machine = ProductRec(k).Machine

                ProcessEDD(i).Seq = 0

                ProcessEDD(i).Setup = ProductRec(k).SetupT

                ProcessEDD(i).Process = ProductRec(k).ProcT * ActiveCell.Offset(0, 6).Value 'Process*Batch

                ProcessEDD(i).dueT = ActiveCell.Offset(0, 4).Value

                ProcessEDD(i).Batch = ActiveCell.Offset(0, 6).Value

                ProcessCR(i).PName = ProductRec(k).Name

                ProcessCR(i).PCode = ProductRec(k).Code

                ProcessCR(i).Machine = ProductRec(k).Machine

                ProcessCR(i).Seq = 0

                ProcessCR(i).Setup = ProductRec(k).SetupT

                ProcessCR(i).Process = ProductRec(k).ProcT * ActiveCell.Offset(0, 6).Value 'Process*Batch

                ProcessCR(i).dueT = (ActiveCell.Offset(0, 4).Value - StDue) * 20

                ProcessCR(i).Batch = ActiveCell.Offset(0, 6).Value

                ActiveCell.Offset(1, 0).Select

                i = i + 1

            End If

        Next k

    Else

        For k = 1 To ProNo

            If ProductRec(k).Name = ActiveCell.Value Then

                ProcessStk(j).PName = ProductRec(k).Name

                ProcessStk(j).PCode = ProductRec(k).Code

                ProcessStk(j).Machine = ProductRec(k).Machine

                ProcessStk(j).Seq = 0

                ProcessStk(j).Setup = ProductRec(k).SetupT

                ProcessStk(j).Process = ProductRec(k).ProcT * ActiveCell.Offset(0, 6).Value 'Process*Batch

                ProcessStk(j).dueT = ActiveCell.Offset(0, 4).Value

                ProcessStk(j).Batch = ActiveCell.Offset(0, 6).Value

                ActiveCell.Offset(1, 0).Select

                j = j + 1

            End If

        Next k

    End If

End While

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Loop
a = i - 1: b = j - 1
'EDD set
For i = 1 To a
NDate = 75000
NSum.CSum = 0
  For j = 1 To a
    If ProcessEDD(j).Seq = 0 Then
      If ProcessEDD(j).dueT <= NDate Then
        If ProcessEDD(j).dueT < NDate Then
          ProcessEDD(j).Seq = i
          NDate = ProcessEDD(j).dueT
          k = j - 1
          Do While k >= 1
            If ProcessEDD(k).Seq = i Then
              ProcessEDD(k).Seq = 0
            End If
            k = k - 1
          Loop
        Else
          For c = 1 To ProNo
            If (ProcessEDD(j).PName = ProducCri(1, c).PName) And (ProducCri(1, c).CSum > NSum.CSum) Then
              NSum = ProducCri(1, c)
              ProcessEDD(j).Seq = i
              NDate = ProcessEDD(j).dueT
              k = j - 1
              Do While k >= 1
                If ProcessEDD(k).Seq = i Then
                  ProcessEDD(k).Seq = 0
                End If
                k = k - 1
              Loop
            End If
          Next c
        End If
      End If
    End If
  Next j
Next i
'Stock Set
'NSum.CSum = 0
For i = 1 To b
  NSum.CSum = 0
  For j = 1 To b
    If ProcessStk(j).Seq = 0 Then
      For c = 1 To ProNo

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If (ProcessStk(j).PName = ProducCri(2, c).PName) And (ProducCri(2, c).CSum > NSum.CSum) Then
    NSum = ProducCri(2, c)
    ProcessStk(j).Seq = i
    ProcessStk(j).dueT = NSum.CSum
    k = j - 1
    Do While k >= 1
        If ProcessStk(k).Seq = i Then
            ProcessStk(k).Seq = 0
        End If
        k = k - 1
    Loop
End If
Next c
End If
Next j
Next i
'CR Set
PVTime = 0
DTime = 0
For i = 1 To a
    PVTime = PVTime + DTime
    MinCR = 1000
    DTime = 0
    NSum.CSum = 0
    For j = 1 To a
        If ProcessCR(j).Seq = 0 Then
            CR = (ProcessCR(j).dueT - PVTime) / ProcessCR(j).Process
            If CR <= MinCR Then
                If CR < MinCR Then
                    MinCR = CR
                    ProcessCR(j).Seq = i
                    DTime = ProcessCR(j).dueT
                    k = j - 1
                    Do While k >= 1
                        If ProcessCR(k).Seq = i Then
                            ProcessCR(k).Seq = 0
                        End If
                        k = k - 1
                    Loop
                Else
                    For c = 1 To ProNo
                        If (ProcessCR(j).PName = ProducCri(1, c).PName) And (ProducCri(1, c).CSum > NSum.CSum) Then
                            NSum = ProducCri(1, c)
                            ProcessCR(j).Seq = i
                            NDate = ProcessCR(j).dueT
                            k = j - 1

```

```

        Do While k >= 1
            If ProcessCR(k).Seq = i Then
                ProcessCR(k).Seq = 0
            End If
            k = k - 1
        Loop
    End If
Next c
End If
End If
Next j
Next i

'Display=====
Range("K6").Offset(JobNo + 10, 0).Select
ActiveCell.Offset(-2, 0).Value = "EDD"
ActiveCell.Offset(-1, 0).Value = "Name"
ActiveCell.Offset(-1, 1).Value = "Code"
ActiveCell.Offset(-1, 2).Value = "ProcessT"
ActiveCell.Offset(-1, 3).Value = "SetupT"
ActiveCell.Offset(-1, 4).Value = "Machine"
ActiveCell.Offset(-1, 5).Value = "Batch"
ActiveCell.Offset(-1, 6).Value = "Flow"

For i = 1 To a
    For j = 1 To a
        If ProcessEDD(j).Seq = i Then
            ActiveCell.Value = ProcessEDD(j).PName
            ActiveCell.Offset(0, 1).Value = ProcessEDD(j).PCode
            ActiveCell.Offset(0, 2).Value = ProcessEDD(j).Process
            ActiveCell.Offset(0, 3).Value = ProcessEDD(j).Setup
            ActiveCell.Offset(0, 4).Value = ProcessEDD(j).Machine
            ActiveCell.Offset(0, 5).Value = ProcessEDD(j).Batch
            ActiveCell.Offset(1, 0).Select
        End If
    Next j
Next i

For i = 1 To b
    For j = 1 To b
        If ProcessStk(j).Seq = i Then
            ActiveCell.Value = ProcessStk(j).PName
            ActiveCell.Offset(0, 1).Value = ProcessStk(j).PCode
            ActiveCell.Offset(0, 2).Value = ProcessStk(j).Process
            ActiveCell.Offset(0, 3).Value = ProcessStk(j).Setup
            ActiveCell.Offset(0, 4).Value = ProcessStk(j).Machine

```

```

        ActiveCell.Offset(0, 5).Value = ProcessStk(j).Batch
        ActiveCell.Offset(1, 0).Select
    End If
Next j
Next i
Range("K6").Offset(2 * JobNo + 20, 0).Select
ActiveCell.Offset(-2, 0).Value = "CR"
ActiveCell.Offset(-1, 0).Value = "Name"
ActiveCell.Offset(-1, 1).Value = "Code"
ActiveCell.Offset(-1, 2).Value = "ProcessT"
ActiveCell.Offset(-1, 3).Value = "SetupT"
ActiveCell.Offset(-1, 4).Value = "Machine"
ActiveCell.Offset(-1, 5).Value = "Batch"
ActiveCell.Offset(-1, 6).Value = "Flow"
For i = 1 To a
    For j = 1 To a
        If ProcessCR(j).Seq = i Then
            ActiveCell.Value = ProcessCR(j).PName
            ActiveCell.Offset(0, 1).Value = ProcessCR(j).PCode
            ActiveCell.Offset(0, 2).Value = ProcessCR(j).Process
            ActiveCell.Offset(0, 3).Value = ProcessCR(j).Setup
            ActiveCell.Offset(0, 4).Value = ProcessCR(j).Machine
            ActiveCell.Offset(0, 5).Value = ProcessCR(j).Batch
            ActiveCell.Offset(1, 0).Select
        End If
    Next j
Next i
For i = 1 To b
    For j = 1 To b
        If ProcessStk(j).Seq = i Then
            ActiveCell.Value = ProcessStk(j).PName
            ActiveCell.Offset(0, 1).Value = ProcessStk(j).PCode
            ActiveCell.Offset(0, 2).Value = ProcessStk(j).Process
            ActiveCell.Offset(0, 3).Value = ProcessStk(j).Setup
            ActiveCell.Offset(0, 4).Value = ProcessStk(j).Machine
            ActiveCell.Offset(0, 5).Value = ProcessStk(j).Batch
            ActiveCell.Offset(1, 0).Select
        End If
    Next j
Next i
Range("K6").Offset(JobNo + 10, 0).Select
Call MC_Set2("EDD")
Range("K6").Offset(2 * JobNo + 20, 0).Select
Call MC_Set2("CR")

End Sub

```

```

Sub MC_Set2(ByVal SeqType As String)
'Application.ScreenUpdating = False
'Call EDD
ReDim Machine(6, 20) As MCWk
ReDim ProductWk(ProNo, 6) As MCWk
ReDim McCnt(6) As Integer
ReDim ProCnt(ProNo) As Single
For k = 1 To ProNo
For i = 1 To 6
    For j = 1 To 20
        Machine(i, j).JobN = ""
        Machine(i, j).JobStart = 0
        Machine(i, j).JobStop = 0
        Machine(i, j).BtNo = 0
    Next j
    McCnt(i) = 1
    ProductWk(k, i).JobN = ""
    ProductWk(k, i).JobStart = 0
    ProductWk(k, i).JobStop = 0
Next i
ProCnt(k) = 1
Next k

'[K37].Select
'[H6].Select
'ProNo = [A2].End(xlDown).Row - 1
'EndTEMP = [H6].End(xlDown).Address
StartTEMP = ActiveCell.Address
EndTEMP = Range(StartTEMP).End(xlDown).Address
EndTEMP = Range(EndTEMP).Offset(1, 0).Address
MaxMC = (20 * 20) + (7 * 8)
M1 = 0: M2 = 0: M3 = 0: M4 = 0: M5 = 0: M6 = 0
OldJob1 = "Old_Job": OldJob2 = "Old_Job": OldJob3 = "Old_Job"
OldJob4 = "Old_Job": OldJob5 = "Old_Job": OldJob6 = "Old_Job"
Job_Index = ActiveCell.Address
M1_Index = Range(Job_Index).Offset(0, 14).Address
M2_Index = Range(Job_Index).Offset(3, 14).Address
M3_Index = Range(Job_Index).Offset(6, 14).Address
M4_Index = Range(Job_Index).Offset(10, 14).Address
M5_Index = Range(Job_Index).Offset(13, 14).Address
M6_Index = Range(Job_Index).Offset(16, 14).Address
Range(M1_Index).Offset(-1, -2).Value = SeqType
Range(M1_Index).Offset(-1, -1).Value = "Alu-Alu"
Range(M1_Index).Offset(0, -1).Value = "ALU-1"
Range(M1_Index).Offset(1, -1).Value = "@Flow"

```

```

Range(M1_Index).Offset(2, -1).Value = "T_Flow"
Range(M2_Index).Offset(0, -1).Value = "ALU-2"
Range(M2_Index).Offset(1, -1).Value = "@Flow"
Range(M2_Index).Offset(2, -1).Value = "T_Flow"
'Range(M3_Index).Offset(0, -1).Value = "ALU-3"
'Range(M3_Index).Offset(1, -1).Value = "@Flow"
'Range(M3_Index).Offset(2, -1).Value = "T_Flow"
Range(M4_Index).Offset(-1, -1).Value = "Alu-PVC"
Range(M4_Index).Offset(0, -1).Value = "PVC-1"
Range(M4_Index).Offset(1, -1).Value = "@Flow"
Range(M4_Index).Offset(2, -1).Value = "T_Flow"
Range(M5_Index).Offset(0, -1).Value = "PVC-2"
Range(M5_Index).Offset(1, -1).Value = "@Flow"
Range(M5_Index).Offset(2, -1).Value = "T_Flow"
'Range(M6_Index).Offset(0, -1).Value = "PVC-3"
'Range(M6_Index).Offset(1, -1).Value = "@Flow"
'Range(M6_Index).Offset(2, -1).Value = "T_Flow"

k = 1

'START1:

Do While ((Range(Job_Index).Value <> "") And (k < 10))

If Range(Job_Index).Offset(0, 4).Value = "Alu-Alu" Then                                'Alu-Alu Machine Product
    MinMC = WorksheetFunction.Min(M1, M2)
    JobName = Range(Job_Index).Offset(0, 1).Value
    JobProcessT = Range(Job_Index).Offset(0, 2).Value
    JobSetUpT = Range(Job_Index).Offset(0, 3).Value
    JobBatchT = Range(Job_Index).Offset(0, 2).Value / Range(Job_Index).Offset(0, 5).Value
    If M1 = MinMC Then                                                                'Min = M1
        If (M1 + JobProcessT + JobSetUpT) <= MaxMC Then                            'Job work <=456
            'Setup time procedure
            If (JobName <> OldJob1) Then                                              'Check not same job
                If OldJob1 <> "Old_Job" Then                                        'Check not first job
                    Range(M1_Index).Value = "Setup"
                    M1 = M1 + JobSetUpT
                    Range(M1_Index).Offset(1, 0).Value = JobSetUpT
                    Range(M1_Index).Offset(2, 0).Value = M1
                    M1_Index = Range(M1_Index).Offset(0, 1).AddressLocal
                End If
            End If
            'Process time procedure
            Range(M1_Index).Value = JobName
            OldJob1 = Range(M1_Index).Value
            M1 = M1 + JobProcessT
            Range(M1_Index).Offset(1, 0).Value = JobProcessT
            Range(M1_Index).Offset(2, 0).Value = M1
            Range(Job_Index).Offset(0, 6).Value = M1

```

```

Range(Job_Index).Offset(0, 7).Value = "Process OK"

Machine(1, McCnt(1)).JobN = Range(M1_Index).Value
Machine(1, McCnt(1)).JobStop = M1
Machine(1, McCnt(1)).JobStart = M1 - Range(M1_Index).Offset(1, 0).Value
Machine(1, McCnt(1)).BtNo = Range(Job_Index).Offset(0, 5).Value
McCnt(1) = McCnt(1) + 1

M1_Index = Range(M1_Index).Offset(0, 1).AddressLocal
Else
    '/+Job work >456
If (Range(Job_Index).Offset(0, 5).Value > 1) Then
    JobStBatch = Range(Job_Index).Offset(0, 5).Value
    j = 0
    Do While ((M1 + Range(Job_Index).Offset(0, 2).Value + JobSetUpT) > MaxMC) And (Range(Job_Index).Offset(0,
5).Value >= 0)
        Range(Job_Index).Offset(0, 5).Value = Range(Job_Index).Offset(0, 5).Value - 1
        Range(Job_Index).Offset(0, 2).Value = Range(Job_Index).Offset(0, 2).Value - JobBatchT
        j = j + 1
    Loop
If (Range(Job_Index).Offset(0, 5).Value >= 1) Then
    'Setup time procedure
    If (JobName <> OldJob1) Then
        'Check not same job
        If OldJob1 <> "Old_Job" Then
            'Check not first job
            Range(M1_Index).Value = "Setup"
            M1 = M1 + JobSetUpT
            Range(M1_Index).Offset(1, 0).Value = JobSetUpT
            Range(M1_Index).Offset(2, 0).Value = M1
            M1_Index = Range(M1_Index).Offset(0, 1).AddressLocal
        End If
    End If
    'Process time procedure
    Range(M1_Index).Value = JobName
    OldJob1 = Range(M1_Index).Value
    M1 = M1 + Range(Job_Index).Offset(0, 2).Value
    Range(M1_Index).Offset(1, 0).Value = Range(Job_Index).Offset(0, 2).Value
    Range(M1_Index).Offset(2, 0).Value = M1
    Range(Job_Index).Offset(0, 6).Value = M1
    Range(Job_Index).Offset(0, 7).Value = "Process Some"
    Machine(1, McCnt(1)).JobN = Range(M1_Index).Value
    Machine(1, McCnt(1)).JobStop = M1
    Machine(1, McCnt(1)).JobStart = M1 - Range(M1_Index).Offset(1, 0).Value
    Machine(1, McCnt(1)).BtNo = Range(Job_Index).Offset(0, 5).Value
    McCnt(1) = McCnt(1) + 1
    M1_Index = Range(M1_Index).Offset(0, 1).AddressLocal
'Add new job
Range(EndTEMP).Offset(0, -1).Value = "A " & k
Range(EndTEMP).Value = Range(Job_Index).Value
Range(EndTEMP).Offset(0, 1).Value = Range(Job_Index).Offset(0, 1).Value

```

'Name

'Code

```

Range(EndTEMP).Offset(0, 2).Value = JobProcessT - Range(Job_Index).Offset(0, 2).Value 'ProcessT
Range(EndTEMP).Offset(0, 3).Value = Range(Job_Index).Offset(0, 3).Value
Range(EndTEMP).Offset(0, 4).Value = Range(Job_Index).Offset(0, 4).Value
Range(EndTEMP).Offset(0, 5).Value = j
EndTEMP = Range(EndTEMP).Offset(1, 0).Address
k = k + 1
Range(Job_Index).Select
Else
    Range(Job_Index).Offset(0, 7).Value = "Not Process"
    Range(Job_Index).Offset(0, 2).Value = JobProcessT
    Range(Job_Index).Offset(0, 5).Value = JobStBatch          'Batch number
End If
Else
    Range(Job_Index).Offset(0, 7).Value = "Not Process"
End If
End If          '/Job work <=456
Else
    If M2 = MinMC Then          'Min = M2

        If (M2 + JobProcessT + JobSetUpT) <= MaxMC Then          'Job work <=456
            'Setup time procedure
            If (JobName <> OldJob2) Then          'Check not same job
                If OldJob2 <> "Old_Job" Then          'Check not first job
                    Range(M2_Index).Value = "Setup"
                    M2 = M2 + JobSetUpT
                    Range(M2_Index).Offset(1, 0).Value = JobSetUpT
                    Range(M2_Index).Offset(2, 0).Value = M2
                    M2_Index = Range(M2_Index).Offset(0, 1).AddressLocal
                End If
            End If
            'Process time procedure
            Range(M2_Index).Value = JobName
            OldJob2 = Range(M2_Index).Value
            M2 = M2 + JobProcessT
            Range(M2_Index).Offset(1, 0).Value = JobProcessT
            Range(M2_Index).Offset(2, 0).Value = M2
            Range(Job_Index).Offset(0, 6).Value = M2
            Range(Job_Index).Offset(0, 7).Value = "Process OK"
            Machine(2, McCnt(2)).JobN = Range(M2_Index).Value
            Machine(2, McCnt(2)).JobStop = M2
            Machine(2, McCnt(2)).JobStart = M2 - Range(M2_Index).Offset(1, 0).Value
            Machine(2, McCnt(2)).BtNo = Range(Job_Index).Offset(0, 5).Value
            McCnt(2) = McCnt(2) + 1
            M2_Index = Range(M2_Index).Offset(0, 1).AddressLocal
        End If
    Else          '/+Job work >456
        If (Range(Job_Index).Offset(0, 5).Value > 1) Then

```

```

JobStBatch = Range(Job_Index).Offset(0, 5).Value
j = 0
Do While ((M2 + Range(Job_Index).Offset(0, 2).Value + JobSetUpT) > MaxMC) And (Range(Job_Index).Offset(0,
5).Value >= 0)

    Range(Job_Index).Offset(0, 5).Value = Range(Job_Index).Offset(0, 5).Value - 1
    Range(Job_Index).Offset(0, 2).Value = Range(Job_Index).Offset(0, 2).Value - JobBatchT
    j = j + 1
Loop
If (Range(Job_Index).Offset(0, 5).Value >= 1) Then
    'Setup time procedure
    If (JobName <> OldJob2) Then                                'Check not same job
        If OldJob2 <> "Old_Job" Then                            'Check not first job
            Range(M2_Index).Value = "Setup"
            M2 = M2 + JobSetUpT
            Range(M2_Index).Offset(1, 0).Value = JobSetUpT
            Range(M2_Index).Offset(2, 0).Value = M2
            M2_Index = Range(M2_Index).Offset(0, 1).AddressLocal
        End If
    End If
    'Process time procedure
    Range(M2_Index).Value = JobName
    OldJob2 = Range(M2_Index).Value
    M2 = M2 + Range(Job_Index).Offset(0, 2).Value
    Range(M2_Index).Offset(1, 0).Value = Range(Job_Index).Offset(0, 2).Value
    Range(M2_Index).Offset(2, 0).Value = M2
    Range(Job_Index).Offset(0, 6).Value = M2
    Range(Job_Index).Offset(0, 7).Value = "Process Some"
    Machine(2, McCnt(2)).JobN = Range(M2_Index).Value
    Machine(2, McCnt(2)).JOBStop = M2
    Machine(2, McCnt(2)).JOBStart = M2 - Range(M2_Index).Offset(1, 0).Value
    Machine(2, McCnt(2)).BtNo = Range(Job_Index).Offset(0, 5).Value
    McCnt(2) = McCnt(2) + 1
    M2_Index = Range(M2_Index).Offset(0, 1).AddressLocal
    'Add new job
    Range(EndTEMP).Offset(0, -1).Value = "A " & k
    Range(EndTEMP).Value = Range(Job_Index).Value                'Name
    Range(EndTEMP).Offset(0, 1).Value = Range(Job_Index).Offset(0, 1).Value    'Code
    Range(EndTEMP).Offset(0, 2).Value = JobProcessT - Range(Job_Index).Offset(0, 2).Value 'ProcessT
    Range(EndTEMP).Offset(0, 3).Value = Range(Job_Index).Offset(0, 3).Value
    Range(EndTEMP).Offset(0, 4).Value = Range(Job_Index).Offset(0, 4).Value
    Range(EndTEMP).Offset(0, 5).Value = j
    EndTEMP = Range(EndTEMP).Offset(1, 0).Address
    k = k + 1
    Range(Job_Index).Select
Else
    Range(Job_Index).Offset(0, 7).Value = "Not Process"

```

```

        Range(Job_Index).Offset(0, 2).Value = JobProcessT
        Range(Job_Index).Offset(0, 5).Value = JobStBatch           'Batch number
    End If
Else
    Range(Job_Index).Offset(0, 7).Value = "Not Process"
End If
End If
Else
    If M3 = MinMC Then                                           'Min = M3

        If (M3 + JobProcessT + JobSetUpT) <= MaxMC Then        'Job work <=456
            'Setup time procedure
            If (JobName <> OldJob3) Then                          'Check not same job
                If OldJob3 <> "Old_Job" Then                      'Check not first job
                    Range(M3_Index).Value = "Setup"
                    M3 = M3 + JobSetUpT
                    Range(M3_Index).Offset(1, 0).Value = JobSetUpT
                    Range(M3_Index).Offset(2, 0).Value = M3
                    M3_Index = Range(M3_Index).Offset(0, 1).AddressLocal
                End If
            End If
            'Process time procedure
            Range(M3_Index).Value = JobName
            OldJob3 = Range(M3_Index).Value
            M3 = M3 + JobProcessT
            Range(M3_Index).Offset(1, 0).Value = JobProcessT
            Range(M3_Index).Offset(2, 0).Value = M3
            Range(Job_Index).Offset(0, 6).Value = M3
            Range(Job_Index).Offset(0, 7).Value = "Process OK"
            Machine(3, McCnt(3)).JobN = Range(M3_Index).Value
            Machine(3, McCnt(3)).JobStop = M3
            Machine(3, McCnt(3)).JobStart = M3 - Range(M3_Index).Offset(1, 0).Value
            Machine(3, McCnt(3)).BtNo = Range(Job_Index).Offset(0, 5).Value
            McCnt(3) = McCnt(3) + 1
            M3_Index = Range(M3_Index).Offset(0, 1).AddressLocal
        Else                                                     'Job work >456
            If (Range(Job_Index).Offset(0, 5).Value > 1) Then
                JobStBatch = Range(Job_Index).Offset(0, 5).Value
                j = 0
                Do While ((M3 + Range(Job_Index).Offset(0, 2).Value + JobSetUpT) > MaxMC) And (Range(Job_Index).Offset(0,
5).Value >= 0)
                    Range(Job_Index).Offset(0, 5).Value = Range(Job_Index).Offset(0, 5).Value - 1
                    Range(Job_Index).Offset(0, 2).Value = Range(Job_Index).Offset(0, 2).Value - JobBatchT
                    j = j + 1
                Loop
                If (Range(Job_Index).Offset(0, 5).Value >= 1) Then

```

```

'Setup time procedure
  If (JobName <> OldJob3) Then                                'Check not same job
    If OldJob3 <> "Old_Job" Then                                'Check not first job
      Range(M3_Index).Value = "Setup"
      M3 = M3 + JobSetUpT
      Range(M3_Index).Offset(1, 0).Value = JobSetUpT
      Range(M3_Index).Offset(2, 0).Value = M3
      M3_Index = Range(M3_Index).Offset(0, 1).AddressLocal
    End If
  End If
'Process time procedure
  Range(M3_Index).Value = JobName
  OldJob3 = Range(M3_Index).Value
  M3 = M3 + Range(Job_Index).Offset(0, 2).Value
  Range(M3_Index).Offset(1, 0).Value = Range(Job_Index).Offset(0, 2).Value
  Range(M3_Index).Offset(2, 0).Value = M3
  Range(Job_Index).Offset(0, 6).Value = M3
  Range(Job_Index).Offset(0, 7).Value = "Process Some"
  Machine(3, McCnt(3)).JobN = Range(M3_Index).Value
  Machine(3, McCnt(3)).JobStop = M3
  Machine(3, McCnt(3)).JobStart = M3 - Range(M3_Index).Offset(1, 0).Value
  Machine(3, McCnt(3)).BtNo = Range(Job_Index).Offset(0, 5).Value
  McCnt(3) = McCnt(3) + 1
  M3_Index = Range(M3_Index).Offset(0, 1).AddressLocal
'Add new job
  Range(EndTEMP).Offset(0, -1).Value = "A " & k
  Range(EndTEMP).Value = Range(Job_Index).Value              'Name
  Range(EndTEMP).Offset(0, 1).Value = Range(Job_Index).Offset(0, 1).Value      'Code
  Range(EndTEMP).Offset(0, 2).Value = JobProcessT - Range(Job_Index).Offset(0, 2).Value 'ProcessT
  Range(EndTEMP).Offset(0, 3).Value = Range(Job_Index).Offset(0, 3).Value
  Range(EndTEMP).Offset(0, 4).Value = Range(Job_Index).Offset(0, 4).Value
  Range(EndTEMP).Offset(0, 5).Value = j
  EndTEMP = Range(EndTEMP).Offset(1, 0).Address
  k = k + 1
  Range(Job_Index).Select
Else
  Range(Job_Index).Offset(0, 7).Value = "Not Process"
  Range(Job_Index).Offset(0, 2).Value = JobProcessT
  Range(Job_Index).Offset(0, 5).Value = JobStBatch            'Batch number
End If
Else
  Range(Job_Index).Offset(0, 7).Value = "Not Process"
End If
End If
End If
End If

```

```

End If
End If
'/Alu-Alu Machine Product
If Range(Job_Index).Offset(0, 4).Value = "Alu-PVC" Then
    'Alu-PVC Machine Product
    MinMC = WorksheetFunction.Min(M4, M5)
    JobName = Range(Job_Index).Offset(0, 1).Value
    JobProcessT = Range(Job_Index).Offset(0, 2).Value
    JobSetUpT = Range(Job_Index).Offset(0, 3).Value
    JobBatchT = Range(Job_Index).Offset(0, 2).Value / Range(Job_Index).Offset(0, 5).Value
    If M4 = MinMC Then
        'Min = M4
        If (M4 + JobProcessT + JobSetUpT) <= MaxMC Then
            'Job work <=456
            'Setup time procedure
            If (JobName <> OldJob4) Then
                'Check not same job
                If OldJob4 <> "Old_Job" Then
                    'Check not first job
                    Range(M4_Index).Value = "Setup"
                    M4 = M4 + JobSetUpT
                    Range(M4_Index).Offset(1, 0).Value = JobSetUpT
                    Range(M4_Index).Offset(2, 0).Value = M4
                    M4_Index = Range(M4_Index).Offset(0, 1).AddressLocal
                End If
            End If
            'Process time procedure
            Range(M4_Index).Value = JobName
            OldJob4 = Range(M4_Index).Value
            M4 = M4 + JobProcessT
            Range(M4_Index).Offset(1, 0).Value = JobProcessT
            Range(M4_Index).Offset(2, 0).Value = M4
            Range(Job_Index).Offset(0, 6).Value = M4
            Range(Job_Index).Offset(0, 7).Value = "Process OK"
            Machine(4, McCnt(4)).JobN = Range(M4_Index).Value
            Machine(4, McCnt(4)).JobStop = M4
            Machine(4, McCnt(4)).JobStart = M4 - Range(M4_Index).Offset(1, 0).Value
            Machine(4, McCnt(4)).BtNo = Range(Job_Index).Offset(0, 5).Value
            McCnt(4) = McCnt(4) + 1
            M4_Index = Range(M4_Index).Offset(0, 1).AddressLocal
        Else
            '/+Job work >456
            If (Range(Job_Index).Offset(0, 5).Value > 1) Then
                JobStBatch = Range(Job_Index).Offset(0, 5).Value
                j = 0
                Do While ((M4 + Range(Job_Index).Offset(0, 2).Value + JobSetUpT) > MaxMC) And (Range(Job_Index).Offset(0,
5).Value >= 0)
                    Range(Job_Index).Offset(0, 5).Value = Range(Job_Index).Offset(0, 5).Value - 1
                    Range(Job_Index).Offset(0, 2).Value = Range(Job_Index).Offset(0, 2).Value - JobBatchT
                    j = j + 1
                Loop
                If (Range(Job_Index).Offset(0, 5).Value >= 1) Then
                    'Setup time procedure

```

```

If (JobName <> OldJob4) Then                                'Check not same job
  If OldJob4 <> "Old_Job" Then                                'Check not first job
    Range(M4_Index).Value = "Setup"
    M4 = M4 + JobSetUpT
    Range(M4_Index).Offset(1, 0).Value = JobSetUpT
    Range(M4_Index).Offset(2, 0).Value = M4
    M4_Index = Range(M4_Index).Offset(0, 1).AddressLocal
  End If
End If

'Process time procedure
Range(M4_Index).Value = JobName
OldJob4 = Range(M4_Index).Value
M4 = M4 + Range(Job_Index).Offset(0, 2).Value
Range(M4_Index).Offset(1, 0).Value = Range(Job_Index).Offset(0, 2).Value
Range(M4_Index).Offset(2, 0).Value = M4
Range(Job_Index).Offset(0, 6).Value = M4
Range(Job_Index).Offset(0, 7).Value = "Process Some"
  Machine(4, McCnt(4)).JobN = Range(M4_Index).Value
  Machine(4, McCnt(4)).JobStop = M4
  Machine(4, McCnt(4)).JobStart = M4 - Range(M4_Index).Offset(1, 0).Value
  Machine(4, McCnt(4)).BtNo = Range(Job_Index).Offset(0, 5).Value
  McCnt(4) = McCnt(4) + 1
M4_Index = Range(M4_Index).Offset(0, 1).AddressLocal

'Add new job
Range(EndTEMP).Offset(0, -1).Value = "A " & k
Range(EndTEMP).Value = Range(Job_Index).Value                                'Name
Range(EndTEMP).Offset(0, 1).Value = Range(Job_Index).Offset(0, 1).Value      'Code
Range(EndTEMP).Offset(0, 2).Value = JobProcessT - Range(Job_Index).Offset(0, 2).Value 'ProcessT
Range(EndTEMP).Offset(0, 3).Value = Range(Job_Index).Offset(0, 3).Value
Range(EndTEMP).Offset(0, 4).Value = Range(Job_Index).Offset(0, 4).Value
Range(EndTEMP).Offset(0, 5).Value = j
EndTEMP = Range(EndTEMP).Offset(1, 0).Address
k = k + 1
Range(Job_Index).Select

Else
  Range(Job_Index).Offset(0, 7).Value = "Not Process"
  Range(Job_Index).Offset(0, 2).Value = JobProcessT
  Range(Job_Index).Offset(0, 5).Value = JobStBatch                            'Batch number
End If

Else
  Range(Job_Index).Offset(0, 7).Value = "Not Process"
End If

End If                                '/Job work <=456

Else
  If M5 = MinMC Then                    'Min = M5

```

```

If (M5 + JobProcessT + JobSetUpT) <= MaxMC Then                                'Job work <=456
'Setup time procedure
  If (JobName <> OldJob5) Then                                                  'Check not same job
    If OldJob5 <> "Old_Job" Then                                              'Check not first job
      Range(M5_Index).Value = "Setup"
      M5 = M5 + JobSetUpT
      Range(M5_Index).Offset(1, 0).Value = JobSetUpT
      Range(M5_Index).Offset(2, 0).Value = M5
      M5_Index = Range(M5_Index).Offset(0, 1).AddressLocal
    End If
  End If
'Process time procedure
  Range(M5_Index).Value = JobName
  OldJob5 = Range(M5_Index).Value
  M5 = M5 + JobProcessT
  Range(M5_Index).Offset(1, 0).Value = JobProcessT
  Range(M5_Index).Offset(2, 0).Value = M5
  Range(Job_Index).Offset(0, 6).Value = M5
  Range(Job_Index).Offset(0, 7).Value = "Process OK"
  Machine(5, McCnt(5)).JobN = Range(M5_Index).Value
  Machine(5, McCnt(5)).JobStop = M5
  Machine(5, McCnt(5)).JobStart = M5 - Range(M5_Index).Offset(1, 0).Value
  Machine(5, McCnt(5)).BitNo = Range(Job_Index).Offset(0, 5).Value
  McCnt(5) = McCnt(5) + 1
  M5_Index = Range(M5_Index).Offset(0, 1).AddressLocal
Else                                                                            '/+Job work >456
  If (Range(Job_Index).Offset(0, 5).Value > 1) Then
    JobStBatch = Range(Job_Index).Offset(0, 5).Value
    j = 0
    Do While ((M5 + Range(Job_Index).Offset(0, 2).Value + JobSetUpT) > MaxMC) And (Range(Job_Index).Offset(0,
5).Value >= 0)
      Range(Job_Index).Offset(0, 5).Value = Range(Job_Index).Offset(0, 5).Value - 1
      Range(Job_Index).Offset(0, 2).Value = Range(Job_Index).Offset(0, 2).Value - JobBatchT
      j = j + 1
    Loop
    If (Range(Job_Index).Offset(0, 5).Value >= 1) Then
      'Setup time procedure
      If (JobName <> OldJob5) Then                                                  'Check not same job
        If OldJob5 <> "Old_Job" Then                                              'Check not first job
          Range(M5_Index).Value = "Setup"
          M5 = M5 + JobSetUpT
          Range(M5_Index).Offset(1, 0).Value = JobSetUpT
          Range(M5_Index).Offset(2, 0).Value = M5
          M5_Index = Range(M5_Index).Offset(0, 1).AddressLocal
        End If
      End If
    End If
  End If

```

```

'Process time procedure
    Range(M5_Index).Value = JobName
    OldJob5 = Range(M5_Index).Value
    M5 = M5 + Range(Job_Index).Offset(0, 2).Value
    Range(M5_Index).Offset(1, 0).Value = Range(Job_Index).Offset(0, 2).Value
    Range(M5_Index).Offset(2, 0).Value = M5
    Range(Job_Index).Offset(0, 6).Value = M5
    Range(Job_Index).Offset(0, 7).Value = "Process Some"
        Machine(5, McCnt(5)).JobN = Range(M5_Index).Value
        Machine(5, McCnt(5)).JOBStop = M5
        Machine(5, McCnt(5)).JOBStart = M5 - Range(M5_Index).Offset(1, 0).Value
        Machine(5, McCnt(5)).BtNo = Range(Job_Index).Offset(0, 5).Value
        McCnt(5) = McCnt(5) + 1
    M5_Index = Range(M5_Index).Offset(0, 1).AddressLocal
'Add new job
    Range(EndTEMP).Offset(0, -1).Value = "A " & k
    Range(EndTEMP).Value = Range(Job_Index).Value                                'Name
    Range(EndTEMP).Offset(0, 1).Value = Range(Job_Index).Offset(0, 1).Value      'Code
    Range(EndTEMP).Offset(0, 2).Value = JobProcessT - Range(Job_Index).Offset(0, 2).Value 'ProcessT
    Range(EndTEMP).Offset(0, 3).Value = Range(Job_Index).Offset(0, 3).Value
    Range(EndTEMP).Offset(0, 4).Value = Range(Job_Index).Offset(0, 4).Value
    Range(EndTEMP).Offset(0, 5).Value = j
    EndTEMP = Range(EndTEMP).Offset(1, 0).Address
    k = k + 1
    Range(Job_Index).Select
Else
    Range(Job_Index).Offset(0, 7).Value = "Not Process"
    Range(Job_Index).Offset(0, 2).Value = JobProcessT
    Range(Job_Index).Offset(0, 5).Value = JobStBatch                            'Batch number
End If
Else
    Range(Job_Index).Offset(0, 7).Value = "Not Process"
End If
End If
Else
    If M6 = MinMC Then                                                            'Min = M6

        If (M6 + JobProcessT + JobSetUpT) <= MaxMC Then                        'Job work <=456
            'Setup time procedure
            If (JobName <> OldJob6) Then                                          'Check not same job
                If OldJob6 <> "Old_Job" Then                                     'Check not first job
                    Range(M6_Index).Value = "Setup"
                    M6 = M6 + JobSetUpT
                    Range(M6_Index).Offset(1, 0).Value = JobSetUpT
                    Range(M6_Index).Offset(2, 0).Value = M6
                    M6_Index = Range(M6_Index).Offset(0, 1).AddressLocal
                
```

```

        End If
    End If
'Process time procedure
    Range(M6_Index).Value = JobName
    OldJob6 = Range(M6_Index).Value
    M6 = M6 + JobProcessT
    Range(M6_Index).Offset(1, 0).Value = JobProcessT
    Range(M6_Index).Offset(2, 0).Value = M6
    Range(Job_Index).Offset(0, 6).Value = M6
    Range(Job_Index).Offset(0, 7).Value = "Process OK"
    Machine(6, McCnt(6)).JobN = Range(M6_Index).Value
    Machine(6, McCnt(6)).JobStop = M6
    Machine(6, McCnt(6)).JobStart = M6 - Range(M6_Index).Offset(1, 0).Value
    Machine(6, McCnt(6)).BtNo = Range(Job_Index).Offset(0, 5).Value
    McCnt(6) = McCnt(6) + 1
    M6_Index = Range(M6_Index).Offset(0, 1).AddressLocal
Else
    '++Job work >456
    If (Range(Job_Index).Offset(0, 5).Value > 1) Then
        JobStBatch = Range(Job_Index).Offset(0, 5).Value
        j = 0
        Do While ((M6 + Range(Job_Index).Offset(0, 2).Value + JobSetUpT) > MaxMC) And (Range(Job_Index).Offset(0,
5).Value >= 0)
            Range(Job_Index).Offset(0, 5).Value = Range(Job_Index).Offset(0, 5).Value - 1
            Range(Job_Index).Offset(0, 2).Value = Range(Job_Index).Offset(0, 2).Value - JobBatchT
            j = j + 1
        Loop
        If (Range(Job_Index).Offset(0, 5).Value >= 1) Then
            'Setup time procedure
            If (JobName <> OldJob6) Then
                'Check not same job
                If OldJob6 <> "Old_Job" Then
                    'Check not first job
                    Range(M6_Index).Value = "Setup"
                    M6 = M6 + JobSetUpT
                    Range(M6_Index).Offset(1, 0).Value = JobSetUpT
                    Range(M6_Index).Offset(2, 0).Value = M6
                    M6_Index = Range(M6_Index).Offset(0, 1).AddressLocal
                End If
            End If
            'Process time procedure
            Range(M6_Index).Value = JobName
            OldJob6 = Range(M6_Index).Value
            M6 = M6 + Range(Job_Index).Offset(0, 2).Value
            Range(M6_Index).Offset(1, 0).Value = Range(Job_Index).Offset(0, 2).Value
            Range(M6_Index).Offset(2, 0).Value = M6
            Range(Job_Index).Offset(0, 6).Value = M6
            Range(Job_Index).Offset(0, 7).Value = "Process Some"
            Machine(6, McCnt(6)).JobN = Range(M6_Index).Value

```



```

        .LineStyle = xlContinuous
        .ColorIndex = 0
        .TintAndShade = 0
        .Weight = xlThin
    End With
    With Selection.Borders(xlEdgeTop)
        .LineStyle = xlContinuous
        .ColorIndex = 0
        .TintAndShade = 0
        .Weight = xlThin
    End With
    With Selection.Borders(xlEdgeBottom)
        .LineStyle = xlContinuous
        .ColorIndex = 0
        .TintAndShade = 0
        .Weight = xlThin
    End With
    With Selection.Borders(xlEdgeRight)
        .LineStyle = xlContinuous
        .ColorIndex = 0
        .TintAndShade = 0
        .Weight = xlThin
    End With
    With Selection.Borders(xlInsideVertical)
        .LineStyle = xlContinuous
        .ColorIndex = 0
        .TintAndShade = 0
        .Weight = xlThin
    End With
    With Selection.Borders(xlInsideHorizontal)
        .LineStyle = xlContinuous
        .ColorIndex = 0
        .TintAndShade = 0
        .Weight = xlThin
    End With

[C9].Select
For i = 1 To 6
    For j = 1 To McCnt(i)
        If Machine(i, j).BtNo > 1 Then
            For k = 1 To Machine(i, j).BtNo
                For a = 1 To ProNo
                    If Machine(i, j).JobN = ProductRec(a).Code Then
                        ActiveCell.Value = ProductRec(a).Name
                    End If
                Next a
            Next k
        End If
    Next j
Next i

```

```

        Next a
        'ActiveCell.Offset(0, 1).Value = Machine(i, j).BtNo
        ActiveCell.Offset(1, 0).Select
    Next k
Else
    For a = 1 To ProNo
        If Machine(i, j).JobN = ProductRec(a).Code Then
            ActiveCell.Value = ProductRec(a).Name
        End If
    Next a
    ActiveCell.Offset(1, 0).Select
End If
Next j
Range("C9").Offset(0, i * 7).Select
Next i
[B9].Select
For i = 1 To 6
    b = 1
    Do While ActiveCell.Offset(0, 1).Value <> ""
        ActiveCell.Value = b
        ActiveCell.Offset(1, 0).Select
        b = b + 1
    Loop
    Range("B9").Offset(0, i * 7).Select
Next i
[B9].Select
Sheets("μÒÃÒ§ÊÃØ»ÃÔÂ;ÒÃÃÒ·Õèμéí§¼ÃÔμ").Activate
'Application.ScreenUpdating = True
End Sub
Sub FillDelivery2()
    Application.ScreenUpdating = False
    Call Sequent2
    ReDim ProductCt(ProNo) As Integer
    ReDim ProductWk2(ProNo, 10) As ProcessWk3
    For i = 1 To ProNo
        For j = 1 To 10
            ProductWk2(i, j).PName = ProductRec(i).Name
            ProductWk2(i, j).CRFinishT = 0
            ProductWk2(i, j).EDDFinishT = 0
        Next j
        ProductCt(i) = 1
    Next i
    [K6].Select
    Do While ActiveCell.Value <> ""
        For i = 1 To ProNo
            If ActiveCell.Value = ProductWk2(i, ProductCt(i)).PName Then

```

```

        ProductWk2(i, ProductCt(i)).DueDate = ActiveCell.Offset(0, 4).Value
        ProductWk2(i, ProductCt(i)).Batch = ActiveCell.Offset(0, 6).Value
        ProductCt(i) = ProductCt(i) + 1
    End If
Next i
ActiveCell.Offset(1, 0).Select
Loop

Range("K6").Offset(JobNo + 10, 0).Select
Do While ActiveCell.Value <> ""
    For i = 1 To ProNo
        For j = 1 To ProductCt(i)
            If ActiveCell.Value = ProductWk2(i, j).PName Then
                If ProductWk2(i, j).EDDFinishT = 0 Then
                    If ProductWk2(i, j).Batch = ActiveCell.Offset(0, 5).Value Then
                        ProductWk2(i, j).EDDFinishT = ActiveCell.Offset(0, 6).Value
                        GoTo EDDSetT:
                    End If
                End If
            End If
        Next j
    Next i
    EDDSetT:
    ActiveCell.Offset(1, 0).Select
    Loop
    Range("K6").Offset(2 * JobNo + 20, 0).Select
    Do While ActiveCell.Value <> ""
        For i = 1 To ProNo
            For j = 1 To ProductCt(i)
                If ActiveCell.Value = ProductWk2(i, j).PName Then
                    If ProductWk2(i, j).CRFinishT = 0 Then
                        If ProductWk2(i, j).Batch = ActiveCell.Offset(0, 5).Value Then
                            ProductWk2(i, j).CRFinishT = ActiveCell.Offset(0, 6).Value
                            GoTo CRSetT:
                        End If
                    End If
                End If
            Next j
        Next i
        CRSetT:
        ActiveCell.Offset(1, 0).Select
        Loop
        [F5] = "EDD_F": [G5] = "EDD_T": [H5] = "CR_F": [I5] = "CR_T"
        M = 0: N = 0
        [B6].Select
        Do While ActiveCell.Value <> ""

```

```

If ActiveCell.Offset(0, 3).Value <> 0 Then
    For i = 1 To ProNo
        For j = 1 To ProductCt(i)
            If ActiveCell.Value = ProductWk2(i, j).PName Then
                If ActiveCell.Offset(0, 3).Value = j Then
                    ActiveCell.Offset(0, 4).Value = ProductWk2(i, j).EDDFinishT
                    ActiveCell.Offset(0, 6).Value = ProductWk2(i, j).CRFinishT
                    If (ActiveCell.Offset(0, 4).Value - ActiveCell.Offset(0, 2).Value) > 0 Then
                        ActiveCell.Offset(0, 5).Value = ActiveCell.Offset(0, 4).Value - ActiveCell.Offset(0, 2).Value
                        M = M + 1
                    Else
                        ActiveCell.Offset(0, 5).Value = 0
                    End If
                    If (ActiveCell.Offset(0, 6).Value - ActiveCell.Offset(0, 2).Value) > 0 Then
                        ActiveCell.Offset(0, 7).Value = ActiveCell.Offset(0, 6).Value - ActiveCell.Offset(0, 2).Value
                        N = N + 1
                    Else
                        ActiveCell.Offset(0, 7).Value = 0
                    End If
                    GoTo WorkSet:
                End If
            End If
        Next j
    Next i
Else
    ActiveCell.Offset(0, 4).Value = 0
    ActiveCell.Offset(0, 5).Value = 0
    ActiveCell.Offset(0, 6).Value = 0
    ActiveCell.Offset(0, 7).Value = 0
End If
WorkSet:
ActiveCell.Offset(1, 0).Select
Loop
[G4] = M & " Job"
[I4] = N & " Job"
Application.ScreenUpdating = True
End Sub

```