

MODULE Module1

CONST

robtarg

Inicio:=[[2413.423266451,837.293560044,1968.533003711],[-
0.000000059,0.000349823,0.999999939,0.000000063],[-
2,0,0,0],[9E9,9E9,9E9,9E9,9E9,9E9]];

CONST

robtarg

CogerBlanco:=[[2632.475330137,837.292009774,710.67049024],[-
0.000000064,0.701159049,0.713004901,-0.000000233],[-
2,0,1,0],[9E9,9E9,9E9,9E9,9E9,9E9]];

CONST

robtarg

DentroNegro:=[[-328.152557553,-258.464273476,-
486.175109877],[-0.00000019,0.701159005,0.713004943,-
0.000000238],[-2,0,1,0],[9E9,9E9,9E9,9E9,9E9,9E9]];

CONST

robtarg

DentroBlanco:=[[-338.130668654,-258.464859674,-
486.175091037],[-0.000000346,-
0.706859102,0.707354374,0.000000148],[-2,0,-
1,0],[9E9,9E9,9E9,9E9,9E9,9E9]];

CONST

robtarg

CogerNegro:=[[2638.543173917,837.293978495,730.234444745],[0.0000
0026,0.713005208,-0.701158736,0.000000066],[-2,0,-
1,0],[9E9,9E9,9E9,9E9,9E9,9E9]];

CONST

robtarg

Transición1:=[[-328.153019247,-
710.691143201,298.098288989],[0.000000144,0.000350063,0.999999
39,0.000000305],[-2,0,0,0],[9E9,9E9,9E9,9E9,9E9,9E9]];

CONST

robtarg

Transicion2:=[[-1978.940750348,-
710.690837658,298.098139815],[-
0.000000349,0.000350132,0.999999939,-0.000000206],[-
1,0,0,0],[9E9,9E9,9E9,9E9,9E9,9E9]];

CONST

robtarg

Transicion3:=[[-3338.563495287,-
710.690503963,298.098165306],[-
0.000000395,0.00035019,0.999999939,-0.000000228],[-
1,0,1,0],[9E9,9E9,9E9,9E9,9E9,9E9]];

CONST

robtarg

NegroDentroAbajo:=[[1073.195343622,-
549.268126969,-382.534315151],[-
0.000000233,0.000349704,0.999999939,-0.000000261],[-
1,0,1,0],[9E9,9E9,9E9,9E9,9E9,9E9]];

CONST

robtarg

PreparadoNegro:=[[1817.933463099,-
437.022652307,716.747445648],[-
0.000000075,0.000350179,0.999999939,0.00000041],[-
1,0,0,0],[9E9,9E9,9E9,9E9,9E9,9E9]];

CONST

robtarg

PreparadoBlanco:=[[1817.933588651,-
437.022655532,716.747558454],[-0.000000334,0.999999939,-

0.000350182,0.000000231],[-1,0,-2,0],[9E9,9E9,9E9,9E9,9E9,9E9,9E9];

CONST **robtarget** BlancoDentroAbajo:=[[1102.053347853,-585.312426637,-401.43633231],[-0.000000148,0.999999939,-0.000349913,0.000000128],[-1,0,-1,0],[9E9,9E9,9E9,9E9,9E9,9E9,9E9];

CONST **robtarget** BlancoDentroArriba:=[[1088.044581585,177.080606933,351.164157297],[-0.000000269,0.999999939,-0.000350182,-0.000000349],[-1,0,-1,0],[9E9,9E9,9E9,9E9,9E9,9E9,9E9];

CONST **robtarget** NegroDentroArriba:=[[1091.57705618,172.77437332,360.057625916],[-0.000000116,0.000350305,0.999999939,0.000000153],[-1,0,1,0],[9E9,9E9,9E9,9E9,9E9,9E9,9E9];

CONST **robtarget** CogerMascara:=[[-245.276354028,75.158344767,111.70224143],[0.49885851,0.489549785,0.510495002,-0.500875283],[1,0,-1,1],[9E9,9E9,9E9,9E9,9E9,9E9,9E9];

CONST **robtarget** DejarMascara:=[[-267.306187311,256.691537105,21.856587746],[0.498858497,0.489549798,0.510495008,-0.500875276],[1,0,-1,1],[9E9,9E9,9E9,9E9,9E9,9E9,9E9];

CONST **robtarget** TransicionMascaras:=[[-1459.315918283,539.597312318,339.777343292],[-0.000000145,-0.706859143,0.707354333,-0.000000449],[0,0,2,0],[9E9,9E9,9E9,9E9,9E9,9E9,9E9];

CONST **robtarget** TransicionMascaras2:=[[-690.800817732,393.004602288,1008.972967775],[0.498858479,0.489549892,0.510495016,-0.500875193],[1,0,-1,1],[9E9,9E9,9E9,9E9,9E9,9E9,9E9];

CONST **robtarget** CogerSuciaLDS:=[[-118.440308831,641.142027774,277.621350135],[0.000000011,0.999999939,-0.000349683,-0.000000052],[1,-1,1,0],[9E9,9E9,9E9,9E9,9E9,9E9,9E9];

CONST **robtarget** DejarLimpiaLDS:=[[-220.01856279,641.14249737,277.621289995],[-0.000000031,0.999999939,-0.000349743,-0.000000078],[1,-1,1,0],[9E9,9E9,9E9,9E9,9E9,9E9,9E9];

CONST **robtarget** DentroBlancoLDS:=[[-778.150931383,-147.084766487,74.824197685],[-0.000000412,0.000349669,0.999999939,-0.000000216],[1,-1,-2,0],[9E9,9E9,9E9,9E9,9E9,9E9,9E9];

CONST **robtarget** DentroNegroLDS:=[[-760.929780793,-155.359879983,86.405471455],[0.000000112,0.999999939,-0.000349618,-0.000000013],[1,-1,0,0],[9E9,9E9,9E9,9E9,9E9,9E9,9E9];

CONST **robtarget** PrepaBlanco:=[[-
1066.851115031,450.488090359,1609.870201108],[-
0.0000002,0.000349526,0.999999939,0.000000432],[1,-1,-
2,0],[9E9,9E9,9E9,9E9,9E9,9E9]];

CONST **robtarget** PrepaNegro:=[[-
1066.851115031,450.488090359,1609.870201108],[0.0000002,0.99999
9939,-0.000349526,-0.000000432],[1,-1,0,0],[9E9,9E9,9E9,9E9,9E9]];

CONST **robtarget** DejarBlanco:=[[-
1393.89579284,1718.025581575,736.806201611],[0.000000417,0.7073
54307,0.706859168,0.000000263],[0,0,-2,0],[9E9,9E9,9E9,9E9,9E9]];

CONST **robtarget** DejarNegro:=[[-
1393.895733642,1718.025547203,736.806013086],[0.00000027,-
0.706859168,0.707354307,0.000000388],[0,0,0,0],[9E9,9E9,9E9,9E9,
9E9]];

CONST **robtarget** ControlBlanco:=[[98.607239335,-6.468512808,-
317.525212279],[-0.000000181,0.999999939,-0.000349646,-
0.000000001],[0,0,-1,0],[9E9,9E9,9E9,9E9,9E9]];

CONST **robtarget** ControlNegro:=[[97.580327501,-1.061330225,-
321.224655044],[0.000524298,-
0.002063784,0.999997727,0.000110326],[0,-
1,1,0],[9E9,9E9,9E9,9E9,9E9]];

CONST **robtarget** PCBlanco:=[[169.56600442,50.885276734,492.163626957],[0.000000148
,0.999999939,-0.000349635,0.000000009],[0,0,-
1,0],[9E9,9E9,9E9,9E9,9E9]];

CONST **robtarget** PCNegro:=[[56.378050849,30.98430534,646.930392086],[0.000524332,-
0.002063693,0.999997727,0.000110292],[0,-
1,1,0],[9E9,9E9,9E9,9E9,9E9]];

PROC main()
MoveJ Inicio,v1500,fine,Mi_mecanismo_1\WObj:=Centro;
WaitDI diPickInPos,1;
CogerPieza;

Maquina1;

TransicionIda;

MaquinaHorno;

IF diListoPiezaHorno = 1 **THEN**

```

MaquinaHornoArriba;

SetDO doSolicitarMascara,1;
Reset doSolicitarMascara;

MoveL Transicion3,v1000,z100,Mi_mecanismo_1\WObj:=Horkos;
MoveJ
TransicionMascaras,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;

WaitTime 1;
IF diSuciaOcupado=1 THEN

    DejadaMascaraSucia;

ENDIF
IF diLimpiaOcupado=0 and diNuevaMascDisponible=1 THEN

    CogidaMascaraLimpia;

    IF diPiezaLDS1=1 AND diPiezaLDS2=1 THEN

        CogerLDS;
        DejarLDS;
        IF diControlRealizado=1 THEN
            ControlCoger;
            DejarPieza;
            fase1;
        ENDIF

        IF diControlSolicitado =1 THEN
            ControlDejar;
            fase1;
        ELSE
            DejarPieza;
            fase1;
        ENDIF

        ELSE

            DejarLDS;

            MoveJ
            TransicionMascaras,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;

            fase1;
        ENDIF
    ENDIF
ELSE

    fase1;

ENDIF

```

ENDPROC

```
PROC fase1()
  TransicionVuelta;
  main;
ENDPROC
```

```
PROC Cogerpieza()
  IF diBlancoOcupado=0 THEN
    MoveJ
    Offs(CogerBlanco,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Centro;
    MoveL
    Offs(CogerBlanco,0,0,150),v1000,z100,Mi_mecanismo_1\WObj:=Centro;
    MoveL CogerBlanco,v100,fine,Mi_mecanismo_1\WObj:=Centro;
    WaitTime 3;
    SetDO doConectarBlanco,1;
    Reset doConectarBlanco;
    MoveL
    Offs(CogerBlanco,0,0,150),v100,z100,Mi_mecanismo_1\WObj:=Centro;
    MoveL
    Offs(CogerBlanco,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Centro;
  ELSE
    MoveJ
    Offs(CogerNegro,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Centro;
    MoveL
    Offs(CogerNegro,0,0,150),v1000,z100,Mi_mecanismo_1\WObj:=Centro;
    MoveL CogerNegro,v100,fine,Mi_mecanismo_1\WObj:=Centro;
    WaitTime 3;
    SetDO doConectarNegro,1;
    Reset doConectarNegro;
    MoveL
    Offs(CogerNegro,0,0,150),v100,z100,Mi_mecanismo_1\WObj:=Centro;
    MoveL
    Offs(CogerNegro,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Centro;
  ENDIF
```

ENDPROC

```
PROC Maquina1()
  IF diBlancoOcupado=1 THEN
    MoveJ
    Offs(DentroNegro,0,-
700,400),v1000,z100,Mi_mecanismo_1\WObj:=Horkos;
    SetDO doAbrirM1,1;
    Reset doAbrirM1;
    WaitTime 3;
    MoveL
    Offs(DentroNegro,0,0,100),v1000,z100,Mi_mecanismo_1\WObj:=Horkos;
    MoveL DentroNegro,v100,fine,Mi_mecanismo_1\WObj:=Horkos;
```

```

WaitTime 3;
SetDO doConectarNegro,1;
Reset doConectarNegro;
MoveL
Offs(DentroNegro,0,0,100),v100,z100,Mi_mecanismo_1\WObj:=Horkos;
MoveL Offs(DentroNegro,0,-
700,400),v1000,z100,Mi_mecanismo_1\WObj:=Horkos;
MoveJ Offs(DentroBlanco,0,-
700,400),v1000,z100,Mi_mecanismo_1\WObj:=Horkos;
MoveL
Offs(DentroBlanco,0,0,100),v1000,z100,Mi_mecanismo_1\WObj:=Horkos;
MoveL DentroBlanco,v100,fine,Mi_mecanismo_1\WObj:=Horkos;
WaitTime 3;
SetDO doDesconectarBlanco,1;
Reset doDesconectarBlanco;
MoveL
Offs(DentroBlanco,0,0,100),v100,z100,Mi_mecanismo_1\WObj:=Horkos;
MoveJ Offs(DentroBlanco,0,-
700,400),v1000,z100,Mi_mecanismo_1\WObj:=Horkos;
SetDO doCerrarM1,1;
Reset doCerrarM1;
ELSEIF diNegroOcupado=1 THEN
MoveJ Offs(DentroBlanco,0,-
700,400),v1000,z100,Mi_mecanismo_1\WObj:=Horkos;
SetDO doAbrirM1,1;
Reset doAbrirM1;
WaitTime 3;
MoveL
Offs(DentroBlanco,0,0,100),v1000,z100,Mi_mecanismo_1\WObj:=Horkos;
MoveL DentroBlanco,v100,fine,Mi_mecanismo_1\WObj:=Horkos;
WaitTime 3;
SetDO doConectarBlanco,1;
Reset doConectarBlanco;
MoveL
Offs(DentroBlanco,0,0,100),v100,z100,Mi_mecanismo_1\WObj:=Horkos;
MoveL Offs(DentroBlanco,0,-
700,400),v1000,z100,Mi_mecanismo_1\WObj:=Horkos;
MoveJ Offs(DentroNegro,0,-
700,400),v1000,z100,Mi_mecanismo_1\WObj:=Horkos;
MoveL
Offs(DentroNegro,0,0,100),v1000,z100,Mi_mecanismo_1\WObj:=Horkos;
MoveL DentroNegro,v100,fine,Mi_mecanismo_1\WObj:=Horkos;
WaitTime 3;
SetDO doDesconectarNegro,1;
Reset doDesconectarNegro;
MoveL
Offs(DentroNegro,0,0,100),v100,z100,Mi_mecanismo_1\WObj:=Horkos;
MoveJ Offs(DentroNegro,0,-
700,400),v1000,z100,Mi_mecanismo_1\WObj:=Horkos;
SetDO doCerrarM1,1;
Reset doCerrarM1;

```

ENDIF

ENDPROC

PROC TransicionIda()

MoveJ Transición1,v1000,z100,Mi_mecanismo_1\WObj:=Horkos;

MoveL Transicion2,v1000,z100,Mi_mecanismo_1\WObj:=Horkos;

ENDPROC

PROC TransicionVuelta()

MoveJ Transicion3,v1000,z100,Mi_mecanismo_1\WObj:=Horkos;

MoveL Transicion2,v1000,z100,Mi_mecanismo_1\WObj:=Horkos;

MoveL Transición1,v1000,z100,Mi_mecanismo_1\WObj:=Horkos;

ENDPROC

PROC MaquinaHorno()

IF diNegroOcupado=1 THEN

SetDO GirarNegro,1;

Reset GirarNegro;

WaitTime 3;

MoveJ PreparadoNegro,v1000,z100,Mi_mecanismo_1\WObj:=Horno;

MoveL

Offs(NegroDentroAbajo,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=Horno;

MoveL

Offs(NegroDentroAbajo,0,0,100),v1000,fine,Mi_mecanismo_1\WObj:=Horno;

MoveL NegroDentroAbajo,v100,fine,Mi_mecanismo_1\WObj:=Horno;

WaitTime 3;

SetDO doDesconectarNegro,1;

Reset doDesconectarNegro;

MoveL

Offs(NegroDentroAbajo,0,0,100),v100,fine,Mi_mecanismo_1\WObj:=Horno;

MoveL

Offs(NegroDentroAbajo,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=Horno;

MoveL PreparadoNegro,v1000,z100,Mi_mecanismo_1\WObj:=Horno;

ELSEIF diBlancoOcupado=1 THEN

SetDO GirarBlanco,1;

Reset GirarBlanco;

WaitTime 3;

MoveJ PreparadoBlanco,v1000,z100,Mi_mecanismo_1\WObj:=Horno;

MoveL

Offs(BlancoDentroAbajo,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=Horn

O;

MoveL

Offs(BlancoDentroAbajo,0,0,100),v1000,fine,Mi_mecanismo_1\WObj:=Horno;

MoveL BlancoDentroAbajo,v100,fine,Mi_mecanismo_1\WObj:=Horno;

WaitTime 3;

```

SetDO doDesconectarBlanco,1;
Reset doDesconectarBlanco;
MoveL
Offs(BlancoDentroAbajo,0,0,100),v100,fine,Mi_mecanismo_1\WObj:=Horno;
MoveL
Offs(BlancoDentroAbajo,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=Horn
o;
MoveL PreparadoBlanco,v1000,z100,Mi_mecanismo_1\WObj:=Horno;

ENDIF
ENDPROC

```

```

PROC MaquinaHornoArriba()
IF diNegroOcupado=0 THEN
MoveJ PreparadoNegro,v1000,z100,Mi_mecanismo_1\WObj:=Horno;
MoveL
Offs(NegroDentroArriba,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=Horno
;
MoveL
Offs(NegroDentroArriba,0,0,100),v1000,fine,Mi_mecanismo_1\WObj:=Horno;
MoveL NegroDentroArriba,v100,fine,Mi_mecanismo_1\WObj:=Horno;
WaitTime 3;
SetDO doConectarNegro,1;
Reset doConectarNegro;
MoveL
Offs(NegroDentroArriba,0,0,100),v100,fine,Mi_mecanismo_1\WObj:=Horno;
MoveL
Offs(NegroDentroArriba,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=Horno
;
MoveL PreparadoNegro,v1000,z100,Mi_mecanismo_1\WObj:=Horno;
SetDO doPiezaCogidaHorno,1;
Reset doPiezaCogidaHorno;
SetDO GirarNegro,1;
Reset GirarNegro;
ELSEIF diBlancoOcupado=0 THEN
MoveJ PreparadoBlanco,v1000,z100,Mi_mecanismo_1\WObj:=Horno;
MoveL
Offs(BlancoDentroArriba,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=Horn
o;
MoveL
Offs(BlancoDentroArriba,0,0,100),v1000,fine,Mi_mecanismo_1\WObj:=Horno;
MoveL BlancoDentroArriba,v100,fine,Mi_mecanismo_1\WObj:=Horno;
WaitTime 3;
SetDO doConectarBlanco,1;
Reset doConectarBlanco;
MoveL
Offs(BlancoDentroArriba,0,0,100),v100,fine,Mi_mecanismo_1\WObj:=Horno;
MoveL
Offs(BlancoDentroArriba,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=Horn
o;

```



```

    MoveL PreparadoBlanco,v1000,z100,Mi_mecanismo_1\WObj:=Horno;
    SetDO doPiezaCogidaHorno,1;
    Reset doPiezaCogidaHorno;
    SetDO GirarBlanco,1;
    Reset GirarBlanco;
    ENDIF

```

ENDPROC

PROC CogidaMascaraLimpia()

```

    MoveJ
    TransicionMascaras2,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
    MoveL Offs(CogerMascara,-
    100,0,300),v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
    MoveL Offs(CogerMascara,-
    100,0,0),v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
    MoveL CogerMascara,v100,fine,Mi_mecanismo_1\WObj:=Mascaras;
    WaitTime 3;
    SetDO doCogerMascLimpia,1;
    Reset doCogerMascLimpia;
    MoveL Offs(CogerMascara,-
    100,0,0),v100,fine,Mi_mecanismo_1\WObj:=Mascaras;
    MoveL Offs(CogerMascara,-
    100,0,300),v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
    MoveL
    TransicionMascaras2,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;

```

ENDPROC

PROC DejadaMascaraSucia()

```

    MoveJ
    TransicionMascaras2,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
    MoveL Offs(DejarMascara,-
    100,0,300),v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
    MoveL Offs(DejarMascara,-
    100,0,0),v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
    MoveL DejarMascara,v100,fine,Mi_mecanismo_1\WObj:=Mascaras;
    WaitTime 3;
    SetDO doDejarMascSucia,1;
    MoveL Offs(DejarMascara,-
    100,0,0),v100,fine,Mi_mecanismo_1\WObj:=Mascaras;
    MoveL Offs(DejarMascara,-
    100,0,300),v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
    Reset doDejarMascSucia;
    MoveL
    TransicionMascaras2,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;

```

ENDPROC

PROC MaqLDS()

MoveL CogerSuciaLDS,v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 MoveL DejarLimpiaLDS,v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 MoveL DentroBlancoLDS,v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 MoveL DentroNegroLDS,v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 MoveL PrepaBlanco,v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 MoveL PrepaNegro,v1000,z100,Mi_mecanismo_1\WObj:=LDS;

ENDPROC

PROC DejarLDS()

 Reset doLDS;
 IF diNegroOcupado=1 **THEN**
 MoveJ PrepaNegro,v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 MoveL
 Offs(DentroNegroLDS,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 MoveL
 Offs(DentroNegroLDS,0,0,100),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 MoveL DentroNegroLDS,v100,fine,Mi_mecanismo_1\WObj:=LDS;
 SetDO doDesConectarNegro,1;
 WaitTime 3;
 Reset doDesconectarNegro;
 MoveL
 Offs(DentroNegroLDS,0,0,100),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 MoveL
 Offs(DentroNegroLDS,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 MoveL PrepaNegro,v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 ELSEIF diBlancoOcupado=1 **THEN**
 MoveJ PrepaBlanco,v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 MoveL
 Offs(DentroBlancoLDS,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 MoveL
 Offs(DentroBlancoLDS,0,0,100),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 MoveL DentroBlancoLDS,v100,fine,Mi_mecanismo_1\WObj:=LDS;
 WaitTime 3;
 SetDO doDesConectarBlanco,1;
 Reset doDesconectarBlanco;
 MoveL
 Offs(DentroBlancoLDS,0,0,100),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 MoveL
 Offs(DentroBlancoLDS,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 MoveL PrepaBlanco,v1000,z100,Mi_mecanismo_1\WObj:=LDS;
 ENDIF
 ProcesoMascaras;
 IF diPiezaLDS1=1 **OR** diPiezaLDS2=1 **THEN**
 SetDO doLDS,1;

 ENDIF

```

    IF diControlSolicitado =0 AND diControlRealizado=0 THEN
    MoveJ TransicionMascaras,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
    ENDIF

```

```

ENDPROC

```

```

PROC CoggerLDS()

```

```

    IF diBlancoOcupado=0 THEN
        MoveJ PrepaBlanco,v1000,z100,Mi_mecanismo_1\WObj:=LDS;
        MoveL
        Offs(DentroBlancoLDS,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
        MoveL
        Offs(DentroBlancoLDS,0,0,100),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
        MoveL DentroBlancoLDS,v100,fine,Mi_mecanismo_1\WObj:=LDS;
        WaitTime 3;
        SetDO doConectarBlanco,1;
        MoveL
        Offs(DentroBlancoLDS,0,0,100),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
        MoveL
        Offs(DentroBlancoLDS,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
        Reset doconectarBlanco;
        MoveL PrepaBlanco,v1000,z100,Mi_mecanismo_1\WObj:=LDS;
    ELSE
        MoveJ PrepaNegro,v1000,z100,Mi_mecanismo_1\WObj:=LDS;
        MoveL
        Offs(DentroNegroLDS,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
        MoveL
        Offs(DentroNegroLDS,0,0,100),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
        MoveL DentroNegroLDS,v100,fine,Mi_mecanismo_1\WObj:=LDS;
        WaitTime 3;
        SetDO doConectarNegro,1;
        MoveL
        Offs(DentroNegroLDS,0,0,100),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
        MoveL
        Offs(DentroNegroLDS,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
        Reset doconectarNegro;
        MoveL PrepaNegro,v1000,z100,Mi_mecanismo_1\WObj:=LDS;
    ENDIF

```

```

ENDPROC

```

```

PROC ProcesoMascaras()

```

```

    IF diSuciaOcupado=0 AND (diNegroOcupado=1 OR diBlancoOcupado=1)
    THEN
        MoveJ PrepaNegro,v1000,z100,Mi_mecanismo_1\WObj:=LDS;
        MoveL
        Offs(CoggerSuciaLDS,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
        MoveL

```

```

Offs(CogerSuciaLDS,0,0,100),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
  MoveL CogerSuciaLDS,v100,fine,Mi_mecanismo_1\WObj:=LDS;
  WaitTime 3;
  SetDO doCogerMascSucia,1;
  MoveL
Offs(CogerSuciaLDS,0,0,100),v100,fine,Mi_mecanismo_1\WObj:=LDS;
  MoveL
Offs(CogerSuciaLDS,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
  Reset doCogerMascSucia;
ENDIF
IF diLimpiaOcupado=1 THEN
  MoveJ
Offs(DejarLimpiaLDS,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
  MoveL
Offs(DejarLimpiaLDS,0,0,100),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
  MoveL DejarLimpiaLDS,v100,fine,Mi_mecanismo_1\WObj:=LDS;
  WaitTime 3;
  SetDO doDejarMascLimpia,1;
  MoveL
Offs(DejarLimpiaLDS,0,0,100),v100,fine,Mi_mecanismo_1\WObj:=LDS;
  MoveL
Offs(DejarLimpiaLDS,0,0,300),v1000,z100,Mi_mecanismo_1\WObj:=LDS;
  Reset doDejarMascLimpia;
ENDIF

ENDPROC

```

```

PROC DejarPieza()
  IF diBlancoOcupado=1 THEN
    MoveJ TransicionMascaras,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
    MoveJ
Offs(DejarBlanco,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Centro;
    MoveL
Offs(DejarBlanco,0,0,150),v1000,z100,Mi_mecanismo_1\WObj:=Centro;
    MoveL DejarBlanco,v100,fine,Mi_mecanismo_1\WObj:=Centro;
    WaitTime 3;
    SetDO doDesConectarBlanco,1;
    Reset doDesConectarBlanco;
    MoveL
Offs(DejarBlanco,0,0,150),v100,z100,Mi_mecanismo_1\WObj:=Centro;
    MoveL
Offs(DejarBlanco,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Centro;
  ENDIF
  IF diNegroOcupado=1 THEN
    MoveJ TransicionMascaras,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
    MoveJ
Offs(DejarNegro,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Centro;
    MoveL
Offs(DejarNegro,0,0,150),v1000,z100,Mi_mecanismo_1\WObj:=Centro;
    MoveL DejarNegro,v100,fine,Mi_mecanismo_1\WObj:=Centro;
  ENDIF
ENDPROC

```

```

WaitTime 3;
SetDO doDesConectarNegro,1;
Reset doDesConectarNegro;
MoveL
Offs(DejarNegro,0,0,150),v100,z100,Mi_mecanismo_1\WObj:=Centro;
MoveL
Offs(DejarNegro,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Centro;
ENDIF

ENDPROC

```

```

PROC CyDMascaras()
MoveL CogerMascara,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
MoveL DejarMascara,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
MoveL
TransicionMascaras,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
MoveL
TransicionMascaras2,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;

ENDPROC

```

```

PROC DejadaMascaras()
MoveJ
TransicionMascaras2,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
MoveL Offs(DejarMascara,0,-
100,300),v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
MoveL Offs(DejarMascara,0,-
100,0),v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
MoveL DejarMascara,v100,fine,Mi_mecanismo_1\WObj:=Mascaras;
WaitTime 3;
MoveL Offs(DejarMascara,0,-
100,0),v100,fine,Mi_mecanismo_1\WObj:=Mascaras;
MoveL Offs(DejarMascara,0,-
100,300),v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
MoveL
TransicionMascaras2,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;

ENDPROC

```

```

PROC CogidaMascaras()
MoveJ
TransicionMascaras2,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
MoveL Offs(CogerMascara,0,-
100,300),v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
MoveL Offs(CogerMascara,0,-
100,0),v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
MoveL CogerMascara,v100,fine,Mi_mecanismo_1\WObj:=Mascaras;
WaitTime 3;

```

```

    MoveL                                     Offs(CogerMascara,0,-
100,0),v100,fine,Mi_mecanismo_1\WObj:=Mascaras;
    MoveL                                     Offs(CogerMascara,0,-
100,300),v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;
    MoveL
TransicionMascaras2,v1000,z100,Mi_mecanismo_1\WObj:=Mascaras;

```

ENDPROC

PROC ControlCoger()

```

    IF diBlancoOcupado=0 THEN
        MoveJ PCBlanco,v1000,z100,Mi_mecanismo_1\WObj:=Control;
        MoveJ
Offs(ControlBlanco,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Control;
        MoveL
Offs(ControlBlanco,0,0,150),v1000,z100,Mi_mecanismo_1\WObj:=Control;
        MoveL ControlBlanco,v100,fine,Mi_mecanismo_1\WObj:=Control;
        WaitTime 3;
        SetDO doConectarBlanco,1;
        Reset doConectarBlanco;
        MoveL
Offs(ControlBlanco,0,0,150),v100,z100,Mi_mecanismo_1\WObj:=Control;
        MoveL
Offs(ControlBlanco,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Control;
        MoveJ
Offs(PCBlanco,0,0,500),v1000,z100,Mi_mecanismo_1\WObj:=Control;
    ELSE
        MoveJ PCNegro,v1000,z100,Mi_mecanismo_1\WObj:=Control;
        MoveJ
Offs(ControlNegro,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Control;
        MoveL
Offs(ControlNegro,0,0,150),v1000,z100,Mi_mecanismo_1\WObj:=Control;
        MoveL ControlNegro,v100,fine,Mi_mecanismo_1\WObj:=Control;
        WaitTime 3;
        SetDO doConectarNegro,1;
        Reset doConectarNegro;
        MoveL
Offs(ControlNegro,0,0,150),v100,z100,Mi_mecanismo_1\WObj:=Control;
        MoveL
Offs(ControlNegro,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Control;
        MoveJ
Offs(PCNegro,0,0,500),v1000,z100,Mi_mecanismo_1\WObj:=Control;
    ENDIF

```

ENDPROC

PROC ControlDejar()

```

    IF diBlancoOcupado=1 THEN
        MoveJ PCBlanco,v1000,z100,Mi_mecanismo_1\WObj:=Control;

```

```

    MoveJ
Offs(ControlBlanco,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Control;
    MoveL
Offs(ControlBlanco,0,0,150),v1000,z100,Mi_mecanismo_1\WObj:=Control;
    MoveL ControlBlanco,v100,fine,Mi_mecanismo_1\WObj:=Control;
    WaitTime 3;
    SetDO doDesConectarBlanco,1;
    Reset doDesConectarBlanco;
    MoveL
Offs(ControlBlanco,0,0,150),v100,z100,Mi_mecanismo_1\WObj:=Control;
    MoveL
Offs(ControlBlanco,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Control;
    MoveJ
Offs(PCBlanco,0,0,500),v1000,z100,Mi_mecanismo_1\WObj:=Control;
    ELSEIF diNegroOcupado=1 THEN
    MoveJ PCNegro,v1000,z100,Mi_mecanismo_1\WObj:=Control;

    MoveJ
Offs(ControlNegro,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Control;
    MoveL
Offs(ControlNegro,0,0,150),v1000,z100,Mi_mecanismo_1\WObj:=Centro;
    MoveL ControlNegro,v100,fine,Mi_mecanismo_1\WObj:=Control;
    WaitTime 3;
    SetDO doDesConectarNegro,1;
    Reset doDesConectarNegro;
    MoveL
Offs(ControlNegro,0,0,150),v100,z100,Mi_mecanismo_1\WObj:=Control;
    MoveL
Offs(ControlNegro,0,0,400),v1000,z100,Mi_mecanismo_1\WObj:=Control;
    MoveJ
Offs(PCNegro,0,0,500),v1000,z100,Mi_mecanismo_1\WObj:=Control;
    ENDIF

ENDPROC

```

```

PROC Path_10()
    MoveL ControlBlanco,v1000,z100,Mi_mecanismo_1\WObj:=Control;
    MoveL ControlNegro,v1000,z100,Mi_mecanismo_1\WObj:=Control;
    MoveL PCBlanco,v1000,z100,Mi_mecanismo_1\WObj:=Control;
    MoveL PCNegro,v1000,z100,Mi_mecanismo_1\WObj:=Control;

```

```

ENDPROC

```

```

ENDMODULE

```