**product.m**

begin P\_in arriving

move into Q\_in

use R\_worker for e 1 min

send to oneof (95:P\_match,5:die)

end

begin P\_match arriving

move into conv.sta1

if load type = L\_a then

begin

travel to conv.sta2

move into Q\_a

use R\_a for e 4 min

move into conv.sta4

travel to conv.sta6

move into Q\_ass\_a

wait to be ordered on OL\_ass\_a

end

if load type = L\_b then

begin

travel to conv.sta3

move into Q\_b

use R\_b for u 5,2 min

move into conv.sta5

travel to conv.sta7

move into Q\_ass\_b

wait to be ordered on OL\_ass\_b

end

end

begin P\_assfit arriving

if OL\_ass\_a current loads > 1 and OL\_ass\_b current loads > 1 then

create 1 load of L\_fitdummy to P\_fit

end

begin P\_fit arriving

order 1 load from OL\_ass\_a to die

order 1 load from OL\_ass\_b to die

wait for n 5,1 min

create 1 load of load type L\_product to P\_pack

send to die

end

begin P\_pack arriving

move into conv.sta8

travel to conv.sta9

move into Q\_pack

if OL\_pack current loads > 8 then

begin

create 1 load of load type L\_packdummy to P\_move

end

wait to be ordered on OL\_pack

end

begin P\_move arriving

order 10 loads from OL\_pack to die

wait for n 4,0.5 min

create 1 load of load type L\_pack to P\_store

send to die

end

begin P\_store arriving

move into pm.cpin

travel to pm.cpout

move into Q\_store

wait to be ordered on OL\_store

end

**sale.m**

begin model initialization function

set V\_buy=150

set V\_cost=6

set V\_price=11.99

set V\_salvage=3

open "CSresult.txt" for writing save result as V\_CSoutputfile

return true

end

begin P\_buy arriving

order V\_buy loads from OL\_store to P\_bag

send to P\_demgen

end

begin P\_bag arriving

move into Q\_bag

wait to be ordered on OL\_bag

end

begin P\_demgen arriving

set V\_dem = normal 150,10

wait for 11 hr

send to P\_sale

end

begin P\_sale arriving

if V\_buy >= V\_dem then

begin

order V\_dem loads from OL\_bag to P\_out

set V\_profit=V\_dem\*V\_price-V\_buy\*V\_cost+(V\_buy-V\_dem)\*V\_salvage

set V\_left=V\_buy-V\_dem

order V\_left loads from OL\_bag to P\_return

print V\_profit to V\_CSoutputfile

end

if V\_buy < V\_dem then

begin

order V\_buy loads from OL\_bag to P\_out

set V\_profit=V\_buy\*V\_price-V\_buy\*V\_cost

set V\_oos=V\_dem-V\_buy

print V\_profit to V\_CSoutputfile

end

end

begin P\_out arriving

move into Q\_customer

wait for 5 days

send to die

end

begin P\_return arriving

move into Q\_return

wait for 5 days

move into Q\_store

end