```
[\operatorname{stock}[1] >= 1]
                                                                                                                                                                                           Máquinas:
                                                  {carrito[i][1] += 1}
                                                                                                                                                                                           Máquina cliente_i for i in 1..#clientes
                                               agregar_i_1_MAXU
                                                                                                                                                                                           Máquina depósito
                                               [stock[1] >= MAXU]
                                                                                                                                                                                           Variables globales:
                                               {carrito[i][1] += MAXU}
                                                                                                                                                                                           J = #productos
                                               agregar_i_J_1
                                                                                         cliente_i
                                                                                                                                                                                           stock = [0, ..., 0]
                                               [stock[J] >= 1]
                                                                                                                                                                                           carrito = [[0, ..., 0], ..., [0, ..., 0]]
                                                  \{carrito[i][J] += 1\}
                                                                                                                                                                                           MAXU = cant. max. de unidades
                                               agregar_i_J_MAXU
                                                                                  reservar_i
                                                                                                                                                                                           timer_i = Timer() for i in 1..#clientes
                                               [stock[J] >= MAXU]
                                                                                  stock[1] >= carrito[i][1]
                                               {carrito[i][J] += MAXU}
                                                                                  stock[J] >= carrito[i][J]
quitar_i_1_1
[carrito[i][1] >= 1]
   {carrito[i][1] -= 1}
                                                                                  stock[1] -= carrito[i][1]
agregar_i_1_MAXU
                                                                                  stock[J] -= carrito[i][J]
[carrito[i][1] >= MAXU]
                                                                                  timer_i->start()
{carrito[i][1] -= MAXU}
                                                      armando carrito
                                                                                                                     carrito reservado
                                                                                                                                                                       carrito confirmado
agregar_i_J_1
[carrito[i][J] >= 1]
                                                                                                                                                confirmar_i
   {carrito[i][J] -= 1}
                                                                                                                                             {timer_i->stop()}
agregar_i_J_MAXU
                                                                                  timeout i
[carrito[i][J] >= MAXU]
                                                                                  [timer_i == 0]
{carrito[i][J] -= MAXU}
                                                                                  stock[1] += carrito[i][1]
                                                                                  stock[2] += carrito[i][2]
                                                                                  stock[j] += carrito[i][j]
                                                                                                                                                                       depósito
                                                                                cancelar_i
                                                                                stock[1] += carrito[i][1]
                                                                                                                                                                                                      ingresar_1_1
                                                                                                                                                                                                      \{ stock[1] += 1 \}
                                                                                stock[J] += carrito[i][J]
                                                                                carrito[i][1] = 0
                                                                                                                                                                                                       ingresar_1_MAXU
                                                                                                                                                 ingresando unidades
                                                                                                                                                                                                      \{stock[1] += MAXU\}
                                                                                carrito[i][J] = 0
                                                                                                                                                                                                       ingresar_J_1
                                                                                                                                                                                                      {\operatorname{stock}[J] += 1}
                                                                                                                                                                                                      ingresar_J_MAXU
                                                                                                                                                                                                       \{\operatorname{stock}[J] += \operatorname{MAXU}\}
```

agregar\_i\_1\_1