

CENÁRIO TRANSPORTADOR

Peças saem do almoxarifado, a uma taxa de EXPO(4) minutos, para ser processadas e inspecionadas na estação A, onde existe a máquina A. As peças de boa qualidade (60%) saem para o estoque e as com defeito (40%) seguem para uma área de reparo e, logo após, seguem para o estoque. Os tempos de processamento são os seguintes:

Máquina A: TRIA(2,3,4) minutos.

Reparo: TRIA(1,2,3) minutos.

Todas as peças são transportadas por meio de “carrinhos” e existem dois disponíveis neste sistema. As peças são transportadas pelo carrinho disponível mais próximo e o seu tempo de carregamento é de 10 segundos e o de descarregamento é de 15 segundos. AS empilhadeiras se movem com uma velocidade de 10 pés por segundo. A tabela abaixo define as distâncias entre as 4 áreas:

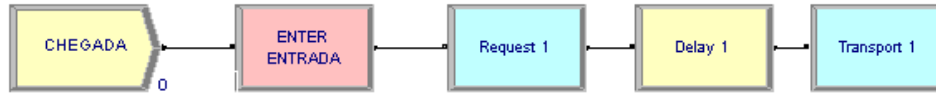
DE	PARA	DISTÂNCIA (pés)
Entrada (Almoxarifado)	Produção	100
	Estoque	200
	Reparo	100
Produção (Máq. A)	Estoque	100
	Reparo	75
Estoque	Reparo	75

Solução

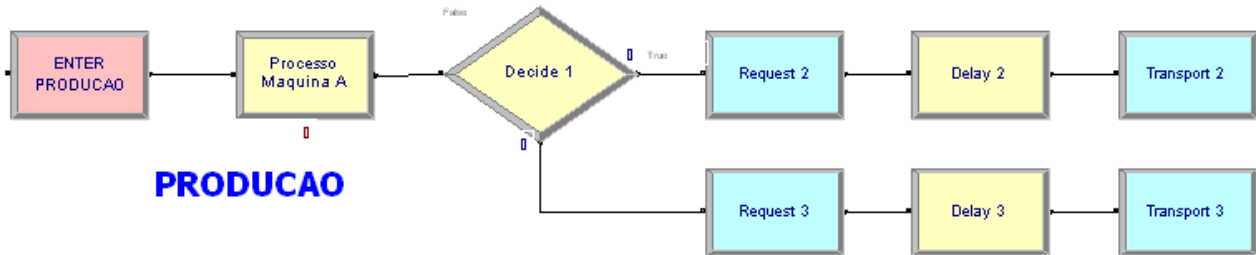
Os módulos do Arena para Transporte são os seguintes (veja template Advanced Transfer):

Módulo	Função
Módulos de Fluxograma.	
Activate	Ativa um transportador que foi “parado” anteriormente pelo módulo Halt
Allocate	Designa um determinado transportador para atender a um chamado
Free	Libera o transportador após sua chegada a uma estação
Halt	Interrompe a disponibilidade do transportador
Move	Move o transportador entre duas estações
Request	Solicita o serviço de um transportador
Transport	Efetua o transporte de entidade entre duas estações
Módulos de Dados	
Transporter	Define as características do transportador
Distance	Define os diversos componentes da malha de transporte

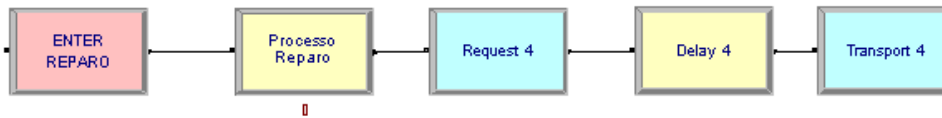
SAIDA DO ALMOXARIFADO



PRODUCAO



REPARO



ESTOQUE



TELAS SAÍDA DO ALMOXARIFADO

Create

Name: Entity Type:

Time Between Arrivals
Type: Value: Units:

Entities per Arrival: Max Arrivals: First Creation:

Enter

Name: Station Type:

Station Name: Parent Activity Area: Report Statistics

Logic
Delay: Allocation:

Units:

Transfer In:

Request [?] [X]

Name:

Transporter Name:

Selection Rule: Save Attribute:

Priority:

Velocity: Units:

Queue Type:

Queue Name:

OK Cancel Help

Delay [?] [X]

Name: Allocation:

Delay Time: Units:

OK Cancel Help

Transport [?] [X]

Name:

Transporter Name: Unit Number:

Destination Type: Station Name:

Velocity: Units:

OK Cancel Help

TELAS PRODUÇÃO

Enter [?] [X]

Name: Station Type:

Station Name: Parent Activity Area:

Report Statistics

Logic

Delay: Allocation:

Units:

Transfer In:

Transporter Name: Unit Number:

OK Cancel Help

Process [?] [X]

Name: Type:

Logic

Action: Priority:

Resources:

- Add...
- <End of list> Edit...
- Delete

Delay Type: Units: Allocation:

Minimum: Value (Most Likely): Maximum:

Report Statistics

OK Cancel Help

Decide [?] [X]

Name: Type:

Percent True (0-100): %

OK Cancel Help

Request [?] [X]

Name:

Transporter Name:

Selection Rule: Save Attribute:

Priority:

Velocity: Units:

Queue Type:

Queue Name:

OK Cancel Help

Delay [?] [X]

Name: Allocation:

Delay Time: Units:

OK Cancel Help

Transport [?] [X]

Name:

Transporter Name: Unit Number:

Destination Type: Station Name:

Velocity: Units:

OK Cancel Help

Request [?] [X]

Name:

Transporter Name:

Selection Rule: Save Attribute:

Priority:

Velocity: Units:

Queue Type:

Queue Name:

OK Cancel Help

Delay [?] [X]

Name: Delay 3 Allocation: Other

Delay Time: 10 Units: Seconds

OK Cancel Help

Transport [?] [X]

Name: Transport 3

Transporter Name: CARRINHO Unit Number:

Destination Type: Station Station Name: REPARO.Station

Velocity: 10 Units: Per Second

OK Cancel Help

TELAS DE REPARO

Enter [?] [X]

Name: ENTER.REPARO Station Type: Station

Station Name: REPARO.Station Parent Activity Area: Report Statistics

Logic

Delay: 15 Allocation: Wait

Units: Seconds

Transfer In: Free Transporter

Transporter Name: CARRINHO Unit Number:

OK Cancel Help

Process [?] [X]

Name: Processo Reparo Type: Standard

Logic

Action: Seize Delay Release Priority: Medium(2)

Resources: Resource_Reparador_1

Delay Type: Triangular Units: Minutes Allocation: Value Added

Minimum: 1 Value (Most Likely): 2 Maximum: 3

Report Statistics

OK Cancel Help

Request [?] [X]

Name: Request 4

Transporter Name: CARRINHO

Selection Rule: Smallest Distance Save Attribute:

Priority: High(1)

Velocity: 10 Units: Per Second

Queue Type: Queue

Queue Name: Request 4.Queue

OK Cancel Help

Delay [?] [X]

Name: Allocation:

Delay Time: Units:

OK Cancel Help

Transport [?] [X]

Name:

Transporter Name: Unit Number:

Destination Type: Station Name:

Velocity: Units:

OK Cancel Help

TELAS DO ESTOQUE

Enter [?] [X]

Name: Station Type:

Station Name: Parent Activity Area: Report Statistics

Logic

Delay: Allocation:

Units:

Transfer In:

Transporter Name: Unit Number:

OK Cancel Help

Dispose [?] [X]

Name:

Record Entity Statistics

OK Cancel Help