















Tecnomatix Plant Simulation 16 Statistics

Created on	domingo, 15 de octubre de 2023 06:36 p. m.
Model name	C:\Users\Andrago\Desktop\Trabajos y urgentes\APM\PlantaBase.spp
Simulation time	8:00:00.0000

Resource Statistics - Resource Statistics

Object	Working	Set-up	Waiting	Blocked	Powering up/down	Failed	Stopped	Paused	Unplanned	Portion
AlmacenTubos	0.00%	0.00%	95.74%	4.26%	0.00%	0.00%	0.00%	0.00%	0.00%	
Salida	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Cortadora_Tubos	4.17%	0.21%	59.39%	36.23%	0.00%	0.00%	0.00%	0.00%	0.00%	
Cortadora_Lamina	1.67%	1.04%	77.26%	20.03%	0.00%	0.00%	0.00%	0.00%	0.00%	
Dobladora_Lamina	16.67%	0.21%	54.53%	28.59%	0.00%	0.00%	0.00%	0.00%	0.00%	
Taladrado_Lamina	33.33%	0.21%	32.92%	33.53%	0.00%	0.00%	0.00%	0.00%	0.00%	
Dobladora_Tubos	33.33%	0.21%	35.09%	31.37%	0.00%	0.00%	0.00%	0.00%	0.00%	
Horno	61.72%	0.21%	38.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Pintura	33.14%	0.21%	50.97%	15.68%	0.00%	0.00%	0.00%	0.00%	0.00%	
Ensamble	8.23%	0.21%	91.56%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Buffer4	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
ConveyorFinal	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
AlmacenLamina	0.00%	0.00%	95.93%	4.07%	0.00%	0.00%	0.00%	0.00%	0.00%	
Soldadura	22.50%	0.21%	34.03%	12.88%	0.00%	30.39%	0.00%	0.00%	0.00%	

Portions of the States

Object	Number of Entries	Number of Exits	Minimum Contents	Maximum Contents	Relative Empty	Relative Full	Relative Occupation without Interruptions	Relative Occupation with Interruptions
AlmacenTubos	80	80	0	1	95.74%	-	4.26%	4.26%
Salida	79	79	0	1	100.00%	-	0.00%	0.00%
Cortadora_Tubos	80	80	0	1	59.39%	-	40.61%	40.61%
Cortadora_Lamina	80	80	0	1	77.26%	-	22.74%	22.74%
Dobladora_Lamina	80	80	0	1	52.24%	-	47.76%	47.76%
Taladrado_Lamina	80	80	0	1	31.91%	-	68.09%	68.09%
Dobladora_Tubos	80	80	0	1	31.49%	-	68.51%	68.51%
Horno	79	79	0	1	36.53%	-	63.47%	63.47%
Pintura	80	79	0	1	50.00%	-	50.00%	50.00%
Ensamble	79	79	0	1	89.83%	-	10.17%	10.17%
Buffer4	79	79	0	1	100.00%	0.00%	0.00%	0.00%
ConveyorFinal	79	79	0	1	99.31%	-	0.07%	0.07%
AlmacenLamina	80	80	0	1	95.93%	-	4.07%	4.07%
Soldadura	80	80	0	1	36.15%	-	63.85%	61.16%

Material Flow Properties

Object	Portion	Count	Sum	Mean Value	Standard Deviation
AlmacenTubos	0.00%	0	0.0000	0.0000	0.0000
Salida	0.00%	79	0.0000	0.0000	0.0000
Cortadora_Tubos	4.17%	80	20:00.0000	15.0000	0.0000
Cortadora_Lamina	1.67%	80	8:00.0000	6.0000	0.0000
Dobladora_Lamina	16.67%	80	1:20:00.0000	1:00.0000	0.0000
Taladrado_Lamina	33.33%	80	2:40:00.0000	2:00.0000	0.0000
Dobladora_Tubos	33.33%	80	2:40:00.0000	2:00.0000	0.0000
Horno	61.72%	79	4:56:15.0000	3:45.0000	0.0000
Pintura	33.14%	80	2:39:04.7528	1:59.3094	6.1768
Ensamble	8.23%	79	39:30.0000	30.0000	0.0000
Buffer4	0.00%	0	0.0000	0.0000	0.0000
ConveyorFinal	100.00%	1	8:00:00.0000	8:00:00.0000	0.0000
AlmacenLamina	0.00%	0	0.0000	0.0000	0.0000
Soldadura	22.50%	80	1:48:00.0000	1:21.0000	0.0000

Working Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
AlmacenTubos	0.00%	0	0.0000	0.0000	0.0000
Salida	0.00%	0	0.0000	0.0000	0.0000
Cortadora_Tubos	0.21%	1	1:00.0000	1:00.0000	0.0000
Cortadora_Lamina	1.04%	1	5:00.0000	5:00.0000	0.0000
Dobladora_Lamina	0.21%	1	1:00.0000	1:00.0000	0.0000
Taladrado_Lamina	0.21%	1	1:00.0000	1:00.0000	0.0000
Dobladora_Tubos	0.21%	1	1:00.0000	1:00.0000	0.0000
Horno	0.21%	1	1:00.0000	1:00.0000	0.0000
Pintura	0.21%	1	1:00.0000	1:00.0000	0.0000
Ensamble	0.21%	1	1:00.0000	1:00.0000	0.0000
Buffer4	0.00%	0	0.0000	0.0000	0.0000
ConveyorFinal	0.00%	0	0.0000	0.0000	0.0000
AlmacenLamina	0.00%	0	0.0000	0.0000	0.0000
Soldadura	0.21%	1	1:00.0000	1:00.0000	0.0000

Set-up Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
AlmacenTubos	4.26%	80	20:28.0620	15.3508	19.9068
Salida	0.00%	0	0.0000	0.0000	0.0000
Cortadora_Tubos	36.23%	38	2:53:54.5954	4:34.5946	4:39.1346
Cortadora_Lamina	20.03%	25	1:36:09.6046	3:50.7842	4:00.7538
Dobladora_Lamina	28.59%	38	2:17:15.0188	3:36.7110	4:39.2694
Taladrado_Lamina	33.53%	41	2:40:57.9339	3:55.5594	5:20.9828
Dobladora_Tubos	31.37%	36	2:30:33.8015	4:10.9389	5:51.2106
Horno	0.00%	0	0.0000	0.0000	0.0000
Pintura	15.68%	44	1:15:14.4727	1:42.6017	22.0071
Ensamble	0.00%	0	0.0000	0.0000	0.0000
Buffer4	0.00%	0	0.0000	0.0000	0.0000
ConveyorFinal	0.00%	0	0.0000	0.0000	0.0000
AlmacenLamina	4.07%	80	19:32.6144	14.6577	15.4917
Soldadura	12.88%	43	1:01:49.2666	1:26.2620	55.9728

Blocked Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
AlmacenTubos	95.74%	80	7:39:31.9380	5:44.6492	19.9068
Salida	100.00%	80	8:00:00.0000	6:00.0000	5:23.0115
Cortadora_Tubos	59.39%	73	4:45:05.4046	3:54.3206	2:25.9851
Cortadora_Lamina	77.26%	78	6:10:50.3954	4:45.2615	2:04.1110
Dobladora_Lamina	54.53%	80	4:21:44.9812	3:16.3123	2:05.9173
Taladrado_Lamina	32.92%	62	2:38:02.0661	2:32.9366	1:52.2991
Dobladora_Tubos	35.09%	72	2:48:26.1985	2:20.3639	1:34.8743
Horno	38.07%	45	3:02:45.0000	4:03.6667	6:17.3440
Pintura	50.97%	53	4:04:40.7745	4:36.9957	6:00.9134
Ensamble	91.56%	80	7:19:30.0000	5:29.6250	5:20.3970
Buffer4	100.00%	80	8:00:00.0000	6:00.0000	5:22.8888
ConveyorFinal	0.00%	0	0.0000	0.0000	0.0000
AlmacenLamina	95.93%	80	7:40:27.3856	5:45.3423	15.4917
Soldadura	34.03%	75	2:43:19.8016	2:10.6640	1:51.6806

Waiting Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
AlmacenTubos	0.00%	0	0.0000	0.0000	0.0000
Salida	0.00%	0	0.0000	0.0000	0.0000
Cortadora_Tubos	0.00%	0	0.0000	0.0000	0.0000
Cortadora_Lamina	0.00%	0	0.0000	0.0000	0.0000
Dobladora_Lamina	0.00%	0	0.0000	0.0000	0.0000
Taladrado_Lamina	0.00%	0	0.0000	0.0000	0.0000
Dobladora_Tubos	0.00%	0	0.0000	0.0000	0.0000
Horno	0.00%	0	0.0000	0.0000	0.0000
Pintura	0.00%	0	0.0000	0.0000	0.0000
Ensamble	0.00%	0	0.0000	0.0000	0.0000
Buffer4	0.00%	0	0.0000	0.0000	0.0000
ConveyorFinal	0.00%	0	0.0000	0.0000	0.0000
AlmacenLamina	0.00%	0	0.0000	0.0000	0.0000
Soldadura	0.00%	0	0.0000	0.0000	0.0000

Powering up/down Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
AlmacenTubos	0.00%	0	0.0000	0.0000	0.0000
Salida	0.00%	0	0.0000	0.0000	0.0000
Cortadora_Tubos	0.00%	0	0.0000	0.0000	0.0000
Cortadora_Lamina	0.00%	0	0.0000	0.0000	0.0000
Dobladora_Lamina	0.00%	0	0.0000	0.0000	0.0000
Taladrado_Lamina	0.00%	0	0.0000	0.0000	0.0000
Dobladora_Tubos	0.00%	0	0.0000	0.0000	0.0000
Horno	0.00%	0	0.0000	0.0000	0.0000
Pintura	0.00%	0	0.0000	0.0000	0.0000
Ensamble	0.00%	0	0.0000	0.0000	0.0000
Buffer4	0.00%	0	0.0000	0.0000	0.0000
ConveyorFinal	0.00%	0	0.0000	0.0000	0.0000
AlmacenLamina	0.00%	0	0.0000	0.0000	0.0000
Soldadura	0.00%	0	0.0000	0.0000	0.0000

Stopped Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
AlmacenTubos	0.00%	0	0.0000	0.0000	0.0000
Salida	0.00%	0	0.0000	0.0000	0.0000
Cortadora_Tubos	0.00%	0	0.0000	0.0000	0.0000
Cortadora_Lamina	0.00%	0	0.0000	0.0000	0.0000
Dobladora_Lamina	0.00%	0	0.0000	0.0000	0.0000
Taladrado_Lamina	0.00%	0	0.0000	0.0000	0.0000
Dobladora_Tubos	0.00%	0	0.0000	0.0000	0.0000
Horno	0.00%	0	0.0000	0.0000	0.0000
Pintura	0.00%	0	0.0000	0.0000	0.0000
Ensamble	0.00%	0	0.0000	0.0000	0.0000
Buffer4	0.00%	0	0.0000	0.0000	0.0000
ConveyorFinal	0.00%	0	0.0000	0.0000	0.0000
AlmacenLamina	0.00%	0	0.0000	0.0000	0.0000
Soldadura	30.39%	15	2:25:50.9318	9:43.3955	6:38.5659

Failed Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
AlmacenTubos	0.00%	0	0.0000	0.0000	0.0000
Salida	0.00%	0	0.0000	0.0000	0.0000
Cortadora_Tubos	0.00%	0	0.0000	0.0000	0.0000
Cortadora_Lamina	0.00%	0	0.0000	0.0000	0.0000
Dobladora_Lamina	0.00%	0	0.0000	0.0000	0.0000
Taladrado_Lamina	0.00%	0	0.0000	0.0000	0.0000
Dobladora_Tubos	0.00%	0	0.0000	0.0000	0.0000
Horno	0.00%	0	0.0000	0.0000	0.0000
Pintura	0.00%	0	0.0000	0.0000	0.0000
Ensamble	0.00%	0	0.0000	0.0000	0.0000
Buffer4	0.00%	0	0.0000	0.0000	0.0000
ConveyorFinal	0.00%	0	0.0000	0.0000	0.0000
AlmacenLamina	0.00%	0	0.0000	0.0000	0.0000
Soldadura	0.00%	0	0.0000	0.0000	0.0000

Paused Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
AlmacenTubos	95.74%	80	7:39:31.9380	5:44.6492	19.9068
Salida	100.00%	80	8:00:00.0000	6:00.0000	5:23.0115
Cortadora_Tubos	59.39%	73	4:45:05.4046	3:54.3206	2:25.9851
Cortadora_Lamina	77.26%	78	6:10:50.3954	4:45.2615	2:04.1110
Dobladora_Lamina	52.24%	58	4:10:43.8061	4:19.3760	1:18.1314
Taladrado_Lamina	31.91%	43	2:33:10.1187	3:33.7237	1:09.2100
Dobladora_Tubos	31.49%	56	2:31:08.2745	2:41.9335	1:34.2402
Horno	36.53%	36	2:55:20.8089	4:52.2447	6:34.7409
Pintura	50.00%	42	4:00:00.4632	5:42.8682	6:15.2892
Ensamble	89.83%	80	7:11:11.2335	5:23.3904	5:13.6952
Buffer4	100.00%	80	8:00:00.0000	6:00.0000	5:22.8888
ConveyorFinal	99.31%	80	7:56:42.5000	5:57.5313	5:22.9806
AlmacenLamina	95.93%	80	7:40:27.3856	5:45.3423	15.4917
Soldadura	25.17%	64	2:00:47.6031	1:53.2438	1:28.7102

Empty Time

Resource Statistics - Drain Statistics

Object	Working	Set-up	Waiting	Stopped	Failed	Paused	Mean Life Time	Mean Exit Time	Total Throughput	Throughput per Hour	Throughput per Day
Salida	68.07%	0.45%	22.44%	0.00%	9.04%	0.00%	11:13.5765	5:52.0395	79	9.875	237

Cumulated Statistics of the Parts which the Drain Deleted

Object	All Types	Part
Salida	79	79

Part Types which the Drain Deleted

Salida	Production							Transport							Storage						
	Working	Set-up	Waiting	Stopped	Failed	Paused	Sum	Working	Set-up	Waiting	Stopped	Failed	Paused	Sum	Working	Set-up	Waiting	Stopped	Failed	Paused	Sum
Part	67.70%	0.45%	22.44%	0.00%	9.04%	0.00%	99.63%	0.37%	0.00%	0.00%	0.00%	0.00%	0.00%	0.37%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Detailed Statistics of the Part Types which the Drain Deleted

Salida	Life Time				Exit Time				Throughput		
	Mean Value	Standard Deviation	Minimum	Maximum	Mean Value	Standard Deviation	Minimum	Maximum	Total	Per Hour	Per Day
Part	11:13.5765	3:14.0662	7:38.5000	29:04.3871	5:52.0395	5:07.0056	2:52.1870	33:55.9350	79	9.875	237

Service Statistics - Importer Statistics

Object	Total Delay	Reason for the Delay		
		Waiting for Services and Parts	Waiting for Parts	Waiting for Set-up Exporters
AlmacenTubos	0.00%	0.00%	0.00%	0.00%
Cortadora_Tubos	0.00%	0.00%	0.00%	0.00%
Cortadora_Lamina	0.00%	0.00%	0.00%	0.00%
Dobladora_Lamina	2.30%	2.28%	0.00%	0.02%
Taladrado_Lamina	1.02%	0.99%	0.00%	0.03%
Dobladora_Tubos	3.60%	3.57%	0.00%	0.03%
Horno	1.54%	1.49%	0.00%	0.05%
Pintura	0.98%	0.93%	0.00%	0.05%
Ensamble	1.73%	1.72%	0.00%	0.01%
Buffer4	0.00%	0.00%	0.00%	0.00%
AlmacenLamina	0.00%	0.00%	0.00%	0.00%
Soldadura	8.86%	8.82%	6.80%	0.04%

Importers Waiting for Services and Parts

Object	Waiting for Services and Parts	Count	Sum	Mean Value	Standard Deviation
AlmacenTubos	0.00%	0	0.0000	0.0000	0.0000
Cortadora_Tubos	0.00%	0	0.0000	0.0000	0.0000
Cortadora_Lamina	0.00%	0	0.0000	0.0000	0.0000
Dobladora_Lamina	2.28%	72	10:55.3322	9.1018	12.2789
Taladrado_Lamina	0.99%	42	4:43.9909	6.7617	4.6591
Dobladora_Tubos	3.57%	41	17:08.1178	25.0760	28.4711
Horno	1.49%	28	7:08.4021	15.3001	10.3332
Pintura	0.93%	20	4:27.1893	13.3595	14.5767
Ensamble	1.72%	47	8:15.7814	10.5485	15.9883
Buffer4	0.00%	0	0.0000	0.0000	0.0000
AlmacenLamina	0.00%	0	0.0000	0.0000	0.0000
Soldadura	8.82%	59	42:21.0523	43.0687	46.2867

Waiting Times for Services and Parts

Object	Waiting for Parts	Count	Sum	Mean Value	Standard Deviation
AlmacenTubos	0.00%	0	0.0000	0.0000	0.0000
Cortadora_Tubos	0.00%	0	0.0000	0.0000	0.0000
Cortadora_Lamina	0.00%	0	0.0000	0.0000	0.0000
Dobladora_Lamina	0.00%	0	0.0000	0.0000	0.0000
Taladrado_Lamina	0.00%	0	0.0000	0.0000	0.0000
Dobladora_Tubos	0.00%	0	0.0000	0.0000	0.0000
Horno	0.00%	0	0.0000	0.0000	0.0000
Pintura	0.00%	0	0.0000	0.0000	0.0000
Ensamble	0.00%	0	0.0000	0.0000	0.0000
Buffer4	0.00%	0	0.0000	0.0000	0.0000
AlmacenLamina	0.00%	0	0.0000	0.0000	0.0000
Soldadura	6.80%	37	32:38.8251	52.9412	41.1468

Waiting Times for Parts

Object	Waiting for Set-up Exporters	Count	Sum	Mean Value	Standard Deviation	Waiting Time while the Resource Waited	Waiting Time while the Resource Worked	Waiting Time while the Resource was Blocked
AlmacenTubos	0.00%	0	0.0000	0.0000	0.0000	0.00%	0.00%	0.00%
Cortadora_Tubos	0.00%	0	0.0000	0.0000	0.0000	0.00%	0.00%	0.00%
Cortadora_Lamina	0.00%	0	0.0000	0.0000	0.0000	0.00%	0.00%	0.00%
Dobladora_Lamina	0.02%	1	5.8429	5.8429	0.0000	0.02%	0.00%	0.00%
Taladrado_Lamina	0.03%	1	7.9565	7.9565	0.0000	0.03%	0.00%	0.00%
Dobladora_Tubos	0.03%	1	9.8062	9.8062	0.0000	0.03%	0.00%	0.00%
Horno	0.05%	1	15.7890	15.7890	0.0000	0.05%	0.00%	0.00%
Pintura	0.05%	1	13.1220	13.1220	0.0000	0.05%	0.00%	0.00%
Ensamble	0.01%	1	2.9852	2.9852	0.0000	0.01%	0.00%	0.00%
Buffer4	0.00%	0	0.0000	0.0000	0.0000	0.00%	0.00%	0.00%
AlmacenLamina	0.00%	0	0.0000	0.0000	0.0000	0.00%	0.00%	0.00%
Soldadura	0.04%	1	11.1462	11.1462	0.0000	0.04%	0.00%	0.00%

Waiting Times for Set-up Exporters

Service Statistics - Broker Statistics

Object	Sum				Mediation Time			Dwelling Time		
	Open Requests	Satisfied Requests	Open Capacity	Mediated Capacity	Sum	Mean Value	Standard Deviation	Sum	Mean Value	Standard Deviation
Broker	80	878	80	878	49:00.1456	36.7518	33.0379	18:50:04.7244	1:17.2406	1:16.3245

Broker Statistics

Services	Count	Sum	Mean Value	Standard Deviation	Minimum	Maximum
StandardService	878	18:50:04.7244	1:17.2406	1:16.3245	3.6994	13:30.2029

Dwelling Time

Services	Count	Sum	Mean Value	Standard Deviation	Minimum	Maximum
StandardService	80	49:00.1456	36.7518	33.0379	0.0477	2:51.5317

Mediation Time