

## Tecnomatix Plant Simulation 2201 Statistics

Created on	domingo, 22 de octubre de 2023 10:43 p. m.
Model name	C:\Users\USER\Desktop\CAMILO\Tecnomatix\planta_Presente.spp
Simulation time	15:02:00:00.0000

### Resource Statistics - Resource Statistics

Object	Working	Set-up	Waiting	Blocked	Powering up/down	Failed	Stopped	Paused	Unplanned	Portion
Corte_Laser	66.06%	0.00%	0.05%	13.89%	0.00%	20.00%	0.00%	0.00%	0.00%	
Doblado_CNC	79.80%	0.00%	0.20%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	
Soldadura	49.76%	0.00%	29.89%	0.09%	0.00%	20.27%	0.00%	0.00%	0.00%	
Ensamblaje	45.03%	0.00%	35.26%	0.07%	0.00%	19.65%	0.00%	0.00%	0.00%	
Conveyor	95.04%	0.00%	0.00%	0.00%	0.00%	4.96%	0.00%	0.00%	0.00%	
Conveyor5	95.12%	0.00%	0.00%	0.00%	0.00%	4.88%	0.00%	0.00%	0.00%	
Drain	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Conveyor1	95.20%	0.00%	0.00%	0.00%	0.00%	4.80%	0.00%	0.00%	0.00%	
Conveyor2	95.01%	0.00%	0.00%	0.00%	0.00%	4.99%	0.00%	0.00%	0.00%	
Conveyor4	94.84%	0.00%	0.00%	0.00%	0.00%	5.16%	0.00%	0.00%	0.00%	
Pintura	64.98%	0.00%	15.18%	0.07%	0.00%	19.77%	0.00%	0.00%	0.00%	
Source1	0.00%	0.00%	5.90%	94.10%	0.00%	0.00%	0.00%	0.00%	0.00%	
Buffer	0.00%	0.00%	95.35%	0.00%	0.00%	4.65%	0.00%	0.00%	0.00%	
Conveyor8	94.92%	0.00%	0.00%	0.00%	0.00%	5.08%	0.00%	0.00%	0.00%	
Conveyor3	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	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
Corte_Laser	410	409	0	1	0.06%	-	99.94%	99.95%
Doblado_CNC	394	393	0	1	0.25%	-	99.75%	99.71%
Soldadura	393	393	0	1	37.49%	-	62.51%	62.49%
Ensamblaje	392	391	0	1	43.88%	-	56.12%	56.27%
Conveyor	0	0	0	0	100.00%	-	0.00%	0.00%
Conveyor5	417	410	0	7	0.46%	-	97.75%	97.75%
Drain	391	391	0	1	100.00%	-	0.00%	0.00%
Conveyor1	391	391	0	1	99.91%	-	0.01%	0.01%
Conveyor2	409	394	0	15	0.94%	-	92.66%	92.63%
Conveyor4	392	392	0	1	99.48%	-	0.04%	0.04%
Pintura	393	392	0	1	18.92%	-	81.08%	81.00%
Source1	418	417	0	1	5.90%	-	94.10%	94.10%
Buffer	393	393	0	1	99.74%	0.00%	0.01%	0.01%
Conveyor8	393	393	0	1	99.01%	-	0.07%	0.07%
Conveyor3	393	393	0	1	99.75%	-	0.02%	0.02%

#### Material Flow Properties

Object	Portion	Count	Sum	Mean Value	Standard Deviation
Corte_Laser	66.06%	410	9:23:08:49.8471	34:59.8289	3.4646
Doblado_CNC	79.80%	394	12:00:51:44.7220	43:59.3521	12.8607
Soldadura	49.76%	393	7:12:07:30.0000	27:30.0000	0.0000
Ensamblaje	45.03%	392	6:18:59:37.1716	24:56.8805	1:01.7622
Conveyor	95.04%	1	14:08:02:41.6898	14:08:02:41.6898	0.0000
Conveyor5	95.12%	1	14:08:19:06.1096	14:08:19:06.1096	0.0000
Drain	0.00%	391	0.0000	0.0000	0.0000
Conveyor1	95.20%	1	14:08:37:37.3614	14:08:37:37.3614	0.0000
Conveyor2	95.01%	1	14:07:57:13.1406	14:07:57:13.1406	0.0000
Conveyor4	94.84%	1	14:07:18:22.1065	14:07:18:22.1065	0.0000
Pintura	64.98%	393	9:19:14:43.6211	35:54.9202	1:40.7040
Source1	0.00%	0	0.0000	0.0000	0.0000
Buffer	0.00%	0	0.0000	0.0000	0.0000
Conveyor8	94.92%	1	14:07:36:32.0983	14:07:36:32.0983	0.0000
Conveyor3	100.00%	1	15:02:00:00.0000	15:02:00:00.0000	0.0000

## Working Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
Corte_Laser	0.05%	19	10:14.7116	32.3532	28.4239
Doblado_CNC	0.20%	21	44:08.4261	2:06.1155	6:00.6465
Soldadura	29.89%	394	4:12:11:43.4483	16:28.5874	5:43.7563
Ensamblaje	35.26%	392	5:07:38:37.7047	19:32.2390	9:44.6824
Conveyor	0.00%	0	0.0000	0.0000	0.0000
Conveyor5	0.00%	0	0.0000	0.0000	0.0000
Drain	100.00%	392	15:02:00:00.0000	55:24.4898	12:13.1041
Conveyor1	0.00%	0	0.0000	0.0000	0.0000
Conveyor2	0.00%	0	0.0000	0.0000	0.0000
Conveyor4	0.00%	0	0.0000	0.0000	0.0000
Pintura	15.18%	356	2:06:57:11.7843	9:15.7073	7:39.0435
Source1	5.90%	39	21:21:55.5855	32:52.1945	6:29.0460
Buffer	95.35%	394	14:09:10:15.9754	52:33.8477	4:51.8114
Conveyor8	0.00%	0	0.0000	0.0000	0.0000
Conveyor3	0.00%	0	0.0000	0.0000	0.0000

## Waiting Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
Corte_Laser	0.00%	0	0.0000	0.0000	0.0000
Doblado_CNC	0.00%	0	0.0000	0.0000	0.0000
Soldadura	0.00%	0	0.0000	0.0000	0.0000
Ensamblaje	0.00%	0	0.0000	0.0000	0.0000
Conveyor	0.00%	0	0.0000	0.0000	0.0000
Conveyor5	0.00%	0	0.0000	0.0000	0.0000
Drain	0.00%	0	0.0000	0.0000	0.0000
Conveyor1	0.00%	0	0.0000	0.0000	0.0000
Conveyor2	0.00%	0	0.0000	0.0000	0.0000
Conveyor4	0.00%	0	0.0000	0.0000	0.0000
Pintura	0.00%	0	0.0000	0.0000	0.0000
Source1	0.00%	0	0.0000	0.0000	0.0000
Buffer	0.00%	0	0.0000	0.0000	0.0000
Conveyor8	0.00%	0	0.0000	0.0000	0.0000
Conveyor3	0.00%	0	0.0000	0.0000	0.0000

## Powering up/down Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
Corte_Laser	0.00%	0	0.0000	0.0000	0.0000
Doblado_CNC	0.00%	0	0.0000	0.0000	0.0000
Soldadura	0.00%	0	0.0000	0.0000	0.0000
Ensamblaje	0.00%	0	0.0000	0.0000	0.0000
Conveyor	0.00%	0	0.0000	0.0000	0.0000
Conveyor5	0.00%	0	0.0000	0.0000	0.0000
Drain	0.00%	0	0.0000	0.0000	0.0000
Conveyor1	0.00%	0	0.0000	0.0000	0.0000
Conveyor2	0.00%	0	0.0000	0.0000	0.0000
Conveyor4	0.00%	0	0.0000	0.0000	0.0000
Pintura	0.00%	0	0.0000	0.0000	0.0000
Source1	0.00%	0	0.0000	0.0000	0.0000
Buffer	0.00%	0	0.0000	0.0000	0.0000
Conveyor8	0.00%	0	0.0000	0.0000	0.0000
Conveyor3	0.00%	0	0.0000	0.0000	0.0000

## Set-up Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
Corte_Laser	13.89%	330	2:02:16:05.8961	9:08.3815	4:24.2418
Doblado_CNC	0.00%	0	0.0000	0.0000	0.0000
Soldadura	0.09%	23	18:56.8581	49.4286	39.9864
Ensamblaje	0.07%	16	14:13.7813	53.3613	45.6031
Conveyor	0.00%	0	0.0000	0.0000	0.0000
Conveyor5	0.00%	0	0.0000	0.0000	0.0000
Drain	0.00%	0	0.0000	0.0000	0.0000
Conveyor1	0.00%	0	0.0000	0.0000	0.0000
Conveyor2	0.00%	0	0.0000	0.0000	0.0000
Conveyor4	0.00%	0	0.0000	0.0000	0.0000
Pintura	0.07%	23	14:53.5278	38.8490	33.8625
Source1	94.10%	385	14:04:38:04.4145	53:05.1543	7:33.9695
Buffer	0.00%	0	0.0000	0.0000	0.0000
Conveyor8	0.00%	0	0.0000	0.0000	0.0000
Conveyor3	0.00%	0	0.0000	0.0000	0.0000

## Blocked Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
Corte_Laser	0.00%	0	0.0000	0.0000	0.0000
Doblado_CNC	0.00%	0	0.0000	0.0000	0.0000
Soldadura	0.00%	0	0.0000	0.0000	0.0000
Ensamblaje	0.00%	0	0.0000	0.0000	0.0000
Conveyor	0.00%	0	0.0000	0.0000	0.0000
Conveyor5	0.00%	0	0.0000	0.0000	0.0000
Drain	0.00%	0	0.0000	0.0000	0.0000
Conveyor1	0.00%	0	0.0000	0.0000	0.0000
Conveyor2	0.00%	0	0.0000	0.0000	0.0000
Conveyor4	0.00%	0	0.0000	0.0000	0.0000
Pintura	0.00%	0	0.0000	0.0000	0.0000
Source1	0.00%	0	0.0000	0.0000	0.0000
Buffer	0.00%	0	0.0000	0.0000	0.0000
Conveyor8	0.00%	0	0.0000	0.0000	0.0000
Conveyor3	0.00%	0	0.0000	0.0000	0.0000

## Stopped Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
Corte_Laser	20.00%	4315	3:00:24:49.5452	1:00.4147	42.7602
Doblado_CNC	20.00%	4315	3:00:24:06.8519	1:00.4048	42.5834
Soldadura	20.27%	4370	3:01:21:49.6936	1:00.4370	43.2279
Ensamblaje	19.65%	4257	2:23:07:31.3423	1:00.1483	41.9044
Conveyor	4.96%	1041	17:57:18.3102	1:02.0925	42.3026
Conveyor5	4.88%	1060	17:40:53.8904	1:00.0508	43.5778
Drain	0.00%	0	0.0000	0.0000	0.0000
Conveyor1	4.80%	1081	17:22:22.6386	57.8563	41.0916
Conveyor2	4.99%	1085	18:02:46.8594	59.8773	42.8474
Conveyor4	5.16%	1095	18:41:37.8935	1:01.4593	43.3355
Pintura	19.77%	4310	2:23:33:11.0668	59.7659	42.2888
Source1	0.00%	0	0.0000	0.0000	0.0000
Buffer	4.65%	1069	16:49:44.0246	56.6735	40.5442
Conveyor8	5.08%	1095	18:23:27.9017	1:00.4638	42.4464
Conveyor3	0.00%	0	0.0000	0.0000	0.0000

Failed Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
Corte_Laser	0.00%	0	0.0000	0.0000	0.0000
Doblado_CNC	0.00%	0	0.0000	0.0000	0.0000
Soldadura	0.00%	0	0.0000	0.0000	0.0000
Ensamblaje	0.00%	0	0.0000	0.0000	0.0000
Conveyor	0.00%	0	0.0000	0.0000	0.0000
Conveyor5	0.00%	0	0.0000	0.0000	0.0000
Drain	0.00%	0	0.0000	0.0000	0.0000
Conveyor1	0.00%	0	0.0000	0.0000	0.0000
Conveyor2	0.00%	0	0.0000	0.0000	0.0000
Conveyor4	0.00%	0	0.0000	0.0000	0.0000
Pintura	0.00%	0	0.0000	0.0000	0.0000
Source1	0.00%	0	0.0000	0.0000	0.0000
Buffer	0.00%	0	0.0000	0.0000	0.0000
Conveyor8	0.00%	0	0.0000	0.0000	0.0000
Conveyor3	0.00%	0	0.0000	0.0000	0.0000

Paused Time

Object	Portion	Count	Sum	Mean Value	Standard Deviation
Corte_Laser	0.05%	19	10:14.7116	32.3532	28.4239
Doblado_CNC	0.20%	21	44:08.4261	2:06.1155	6:00.6465
Soldadura	29.89%	394	4:12:11:43.4483	16:28.5874	5:43.7563
Ensamblaje	35.26%	392	5:07:38:37.7047	19:32.2390	9:44.6824
Conveyor	95.04%	1	14:08:02:41.6898	14:08:02:41.6898	0.0000
Conveyor5	0.44%	5	1:35:55.2629	19:11.0526	10:51.6282
Drain	100.00%	392	15:02:00:00.0000	55:24.4898	12:13.1041
Conveyor1	95.11%	392	14:08:18:04.3614	52:41.9499	11:40.3880
Conveyor2	0.89%	8	3:14:00.5777	24:15.0722	10:34.3119
Conveyor4	94.34%	393	14:05:30:47.1204	52:08.3642	9:55.5557
Pintura	15.18%	356	2:06:57:11.7843	9:15.7073	7:39.0435
Source1	5.90%	39	21:21:55.5855	32:52.1945	6:29.0460
Buffer	95.10%	394	14:08:16:31.5405	52:25.6638	4:53.7624
Conveyor8	93.98%	394	14:04:12:52.9870	51:48.5609	7:53.5406
Conveyor3	99.75%	394	15:01:04:53.9202	54:59.2231	4:44.7483

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
Drain	12.25%	0.00%	80.59%	0.00%	7.15%	0.00%	22:51:30.7193	55:03.6069	391	1.0801105	25.922652

Cumulated Statistics of the Parts which the Drain Deleted

Object	All Types	Part
Drain	391	391

Part Types which the Drain Deleted

Drain	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	12.21%	0.00%	4.09%	0.00%	3.18%	0.00%	19.48%	0.04%	0.00%	76.50%	0.00%	3.97%	0.00%	80.51%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.01%

Detailed Statistics of the Part Types which the Drain Deleted

Drain	Life Time				Exit Time				Throughput		
	Mean Value	Standard Deviation	Minimum	Maximum	Mean Value	Standard Deviation	Minimum	Maximum	Total	Per Hour	Per Day
Part	22:51:30.7193	4:48:42.4568	3:32:32.1224	1:01:37:19.8530	55:03.6069	9:14.1209	30:22.2929	1:21:20.9784	391	1.0801105	25.922652

## Service Statistics - Importer Statistics

Object	Total Delay	Reason for the Delay		
		Waiting for Services and Parts	Waiting for Parts	Waiting for Set-up Exporters
Corte_Laser	0.00%	0.00%	0.00%	0.00%
Doblado_CNC	0.00%	0.00%	0.00%	0.00%
Soldadura	0.00%	0.00%	0.00%	0.00%
Ensamblaje	0.00%	0.00%	0.00%	0.00%
Pintura	0.00%	0.00%	0.00%	0.00%
Source1	0.00%	0.00%	0.00%	0.00%
Buffer	0.00%	0.00%	0.00%	0.00%

### Importers Waiting for Services and Parts

Object	Waiting for Services and Parts	Count	Sum	Mean Value	Standard Deviation
Corte_Laser	0.00%	0	0.0000	0.0000	0.0000
Doblado_CNC	0.00%	0	0.0000	0.0000	0.0000
Soldadura	0.00%	0	0.0000	0.0000	0.0000
Ensamblaje	0.00%	0	0.0000	0.0000	0.0000
Pintura	0.00%	0	0.0000	0.0000	0.0000
Source1	0.00%	0	0.0000	0.0000	0.0000
Buffer	0.00%	0	0.0000	0.0000	0.0000

### Waiting Times for Services and Parts

Object	Waiting for Parts	Count	Sum	Mean Value	Standard Deviation
Corte_Laser	0.00%	0	0.0000	0.0000	0.0000
Doblado_CNC	0.00%	0	0.0000	0.0000	0.0000
Soldadura	0.00%	0	0.0000	0.0000	0.0000
Ensamblaje	0.00%	0	0.0000	0.0000	0.0000
Pintura	0.00%	0	0.0000	0.0000	0.0000
Source1	0.00%	0	0.0000	0.0000	0.0000
Buffer	0.00%	0	0.0000	0.0000	0.0000

### 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
Corte_Laser	0.00%	0	0.0000	0.0000	0.0000	0.00%	0.00%	0.00%
Doblado_CNC	0.00%	0	0.0000	0.0000	0.0000	0.00%	0.00%	0.00%
Soldadura	0.00%	0	0.0000	0.0000	0.0000	0.00%	0.00%	0.00%
Ensamblaje	0.00%	0	0.0000	0.0000	0.0000	0.00%	0.00%	0.00%
Pintura	0.00%	0	0.0000	0.0000	0.0000	0.00%	0.00%	0.00%
Source1	0.00%	0	0.0000	0.0000	0.0000	0.00%	0.00%	0.00%
Buffer	0.00%	0	0.0000	0.0000	0.0000	0.00%	0.00%	0.00%

### Waiting Times for Set-up Exporters