

Resource	Schedule Start	Schedule End	Utilized Duration
615	2021-10-18 10:30:00	2021-10-23 12:05:00	66
616	2021-10-17 19:15:00	2021-10-23 13:15:00	61.8
617	2021-10-17 20:30:00	2021-10-23 14:00:00	59.5
AS16	2021-10-17 22:40:00	2021-10-18 04:40:00	12
AS26 TD	2021-10-18 04:15:00	2021-10-22 18:55:00	45.9
AS26 VII	2021-10-18 05:10:00	2021-10-18 09:40:00	4.5
Dome 121	2021-10-18 18:10:00	2021-10-23 14:10:00	82.9
Dome 2215	2021-10-18 10:10:00	2021-10-19 23:40:00	37.5
Dome 89	2021-10-17 16:05:00	2021-10-18 02:30:00	10.4
Flexible	2021-10-17 22:40:00	2021-10-23 14:00:00	
I/N 1619	2021-10-17 19:55:00	2021-10-18 07:10:00	9
I/N 2224	2021-10-18 09:40:00	2021-10-18 11:40:00	4
I/N 2667	2021-10-18 02:00:00	2021-10-23 15:10:00	22.7
I/N 2668	2021-10-18 00:50:00	2021-10-18 09:40:00	8.8
I/N 97	2021-10-18 07:40:00	2021-10-20 04:50:00	16.3
Long Transfer Line - L717L	2021-10-18 05:40:00	2021-10-23 13:30:00	30.2
P1	2021-10-18 02:15:00	2021-10-22 18:05:00	67.4
P2	2021-10-18 01:30:00	2021-10-22 15:35:00	67.3
P3	2021-10-17 23:45:00	2021-10-22 18:55:00	73.5
P4	2021-10-17 23:00:00	2021-10-22 16:25:00	67.3
SA	2021-10-18 04:15:00	2021-10-23 03:30:00	76.4
SB	2021-10-17 16:25:00	2021-10-23 08:40:00	88.7
SC	2021-10-17 18:15:00	2021-10-22 22:40:00	79.6
SD	2021-10-17 22:40:00	2021-10-23 13:30:00	81.8

No. of Utilizations	Total no. of Cleanings	Unutilized time	Cleaning Duration	DHT Violations
13	13	55.5	1.3	0
13	13	76.2	1.3	0
13	13	78	1.3	0
2	2	0	2.25	0
11	11	64.8	3	0
1	1	0	2.25	0
12	12	43.1	1.3	0
4	5	10	1.3	0
1	1	0	1.3	0
62	38		1.3	0
1	1	0	1.3	0
1	2	0	1.3	0
13	14	120.5	1.3	0
1	1	0	1.3	0
5	6	41.7	1.3	0
13	13	97.7	1.75	0
11	11	44.4	1.75	0
11	11	42.8	1.75	0
11	12	52.4	1.75	0
11	11	46.1	1.75	0
6	6	42.8	2.3	0
7	7	47.6	2.3	0
6	6	44.8	2.3	0
7	7	53.1	2.3	0

CHT Violations	Number of Pre-cleanings	Parallel Cleanings	Missed Cleanings
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	1	0	0
0	1	0	0
1	0	0	1
0	1	0	0
0	0	0	0
0	0	24	0
0	0	0	0
0	1	0	0
0	1	0	0
0	0	0	0
0	1	0	0
0	0	0	0
0	1	0	0
0	1	0	0
0	2	0	0
0	1	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

[illegible]

Available working Hours	Cleaning time Available	Total actual Cleaning time
145.3	79.3	16.9
145.3	83.5	16.9
145.3	85.8	16.9
145.3	133.3	4.5
145.3	99.4	33
145.3	140.8	2.25
145.3	62.4	15.6
145.3	107.8	6.5
145.3	134.9	1.3
145.3	136.3	1.3
145.3	141.3	2.6
145.3	122.6	18.2
145.3	136.5	1.3
145.3	129	7.8
145.3	115.1	22.75
145.3	77.9	19.25
145.3	78	19.25
145.3	71.8	21
145.3	78	19.25
145.3	68.9	13.8
145.3	56.6	16.1
145.3	65.7	13.8
145.3	63.5	16.1

Resource idle duration	Avg Idle Time %	Resource Usage %
62.4	42.9	45.4
66.6	45.8	42.5
68.9	47.4	40.9
128.8	88.6	8.3
66.4	45.7	31.6
138.6	95.4	3.1
46.8	32.2	57.1
101.3	69.7	25.8
133.6	91.9	7.2
135	92.9	6.2
138.7	95.5	2.8
104.4	71.9	15.6
135.2	93	6.1
121.2	83.4	11.2
92.4	63.6	20.8
58.6	40.3	46.4
58.8	40.5	46.3
50.8	35	50.6
58.8	40.5	46.3
55.1	37.9	52.6
40.5	27.9	61
51.9	35.7	54.8
47.4	32.6	56.3

	MC Group	Constraint	Resources cleaned	No. of cleanings	CIP used Duration	Setup time
0	MC1	A	8	16	32.4	1.2
1	MC1	C	2	5	11.25	0.6
2	MC1	E	9	23	29.9	2.6
3	MC1	V	5	15	19.5	1.6
4	MC2	B	7	25	48.15	2
5	MC2	D	2	6	15.5	1.2
6	MC2	F	14	31	40.3	3.6
7	MC3	B	6	14	27.8	2
8	MC3	D	2	6	14.25	0.4
9	MC3	F	12	44	57.2	5.2
10	MC3	G	1	1	2.25	0
11	MC4	A	6	16	30.2	1.8
12	MC4	C	3	8	16.5	0.8
13	MC4	E	11	25	32.5	3.2
14	MC4	H	1	1	2.25	0.2
15	MC4	V	4	5	6.5	0.8
					386.45	27.2

Available Hours	CIP idle time	CIP idle time%	CIP Usage%
145.2666667	112.9	77.1	22.9
145.2666667	134	91.9	8.1
145.2666667	115.4	78	22
145.2666667	125.8	85.6	14.4
145.2666667	97.1	65.9	34.1
145.2666667	129.8	88.6	11.4
145.2666667	105	70.5	29.5
145.2666667	117.5	79.8	20.2
145.2666667	131	89.9	10.1
145.2666667	88.1	58.5	41.5
145.2666667	143	98.5	1.5
145.2666667	115.1	78.2	21.8
145.2666667	128.8	88.2	11.8
145.2666667	112.8	76	24
145.2666667	143	98.3	1.7
145.2666667	138.8	95	5
2324.266667			
0.177970112			

	MC Group	Resources cleaned	No. of cleanings	CIP used Duration	Setup time	Available Hours
0	MC1	24	59	93.05	6	145.2666667
1	MC2	23	62	103.95	6.8	145.2666667
2	MC3	21	65	101.5	7.6	145.2666667
3	MC4	25	55	87.95	6.8	145.2666667

CIP idle time	No. of possible cleanings	CIP idle time%	CIP Usage%	Inter_Arrival_Time_Model
46.2	29	31.8	68.2	0.782183908
34.5	20	23.8	76.2	0.521857924
36.2	23	24.9	75.1	0.616927083
50.5	31	34.8	65.2	0.863271605

Min Downtime between 2 CIP cleanings

0.78
0.52
0.62
0.86

	Insights	No.
0	Cleaning Adjusted to avoid DHT Violation	7
1	Cleaning Adjusted to avoid CHT Violation	0
2	Utilization Shifted to Avoid Reclean	1
3	No of Parallel Cleaning to avoid extra cleaning	24
4	% of the times Resource got CIP immediately	44.63