Scheduling Report

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1 Introduction

Table 1: Problem

Name	Timepoints as Date	Nr Products	Nr Process	Nr Disjunctive Resources	Nr Cumulative Resources	Nr Orders	Nr Jobs	Nr Tasks
P1	true	5	5	8	1	20	20	80

2 Orders

Table 2: Orders (Total 20)

Name	Product	Process	Qty	Release	Due	Earliness Weight	Lateness Weight
Order0	Prod0	Process 0	2	0	973	1.00	1.00
Order1	Prod2	Process 2	2	0	2,243	1.00	1.00
Order2	Prod4	Process 4	4	0	928	1.00	1.00
Order3	Prod4	Process 4	1	0	2,546	1.00	1.00
Order4	Prod3	Process 3	1	0	2,809	1.00	1.00
Order5	Prod3	Process 3	4	0	506	1.00	1.00
Order6	Prod1	Process 1	5	0	800	1.00	1.00
Order7	Prod0	Process 0	7	0	159	1.00	1.00

Name	Product	Process	Qty	Release	Due	Earliness Weight	Lateness Weight
Order8	Prod3	Process 3	5	0	2,759	1.00	1.00
Order9	Prod1	Process 1	5	0	1,852	1.00	1.00
Order10	Prod1	Process 1	2	0	287	1.00	1.00
Order11	Prod1	Process 1	4	0	80	1.00	1.00
Order12	Prod1	Process 1	8	0	1,696	1.00	1.00
Order13	Prod4	Process 4	4	0	1,838	1.00	1.00
Order14	Prod3	Process 3	5	0	2,542	1.00	1.00
Order15	Prod2	Process 2	5	0	1,013	1.00	1.00
Order16	Prod3	Process 3	2	0	1,602	1.00	1.00
Order17	Prod2	Process 2	5	0	2,862	1.00	1.00
Order18	Prod2	Process 2	6	0	335	1.00	1.00
Order19	Prod2	Process 2	9	0	2,403	1.00	1.00

3   Solution

Table 3: Solutions (Total 1)

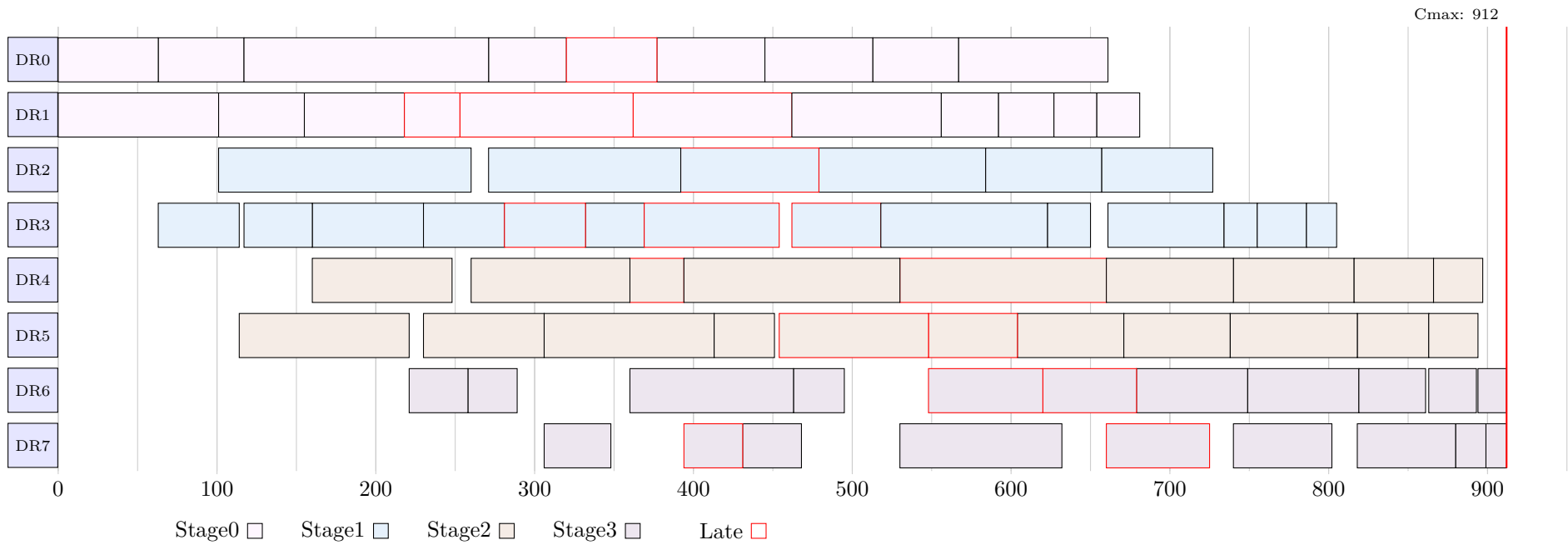| Name	Solver Status	Objective Value	Bound	Gap	Makespan	Flowtime	Total Lateness	Max Lateness	Nr Late	Total Earliness	Max Earliness	Nr Early	Model Type	Objective Type	Time
Sol1	Solution	912	546.00	0.40	912	13,135	1,594	599	4	18,692	2,291	16	CPO	Makespan	60.10

Figure 1: Machine Gantt for Solution Sol1

Figure 2: Job Gantt for Solution Sol1

Resource Utilization for Solution Sol1

Cumulative Resource Use CR0