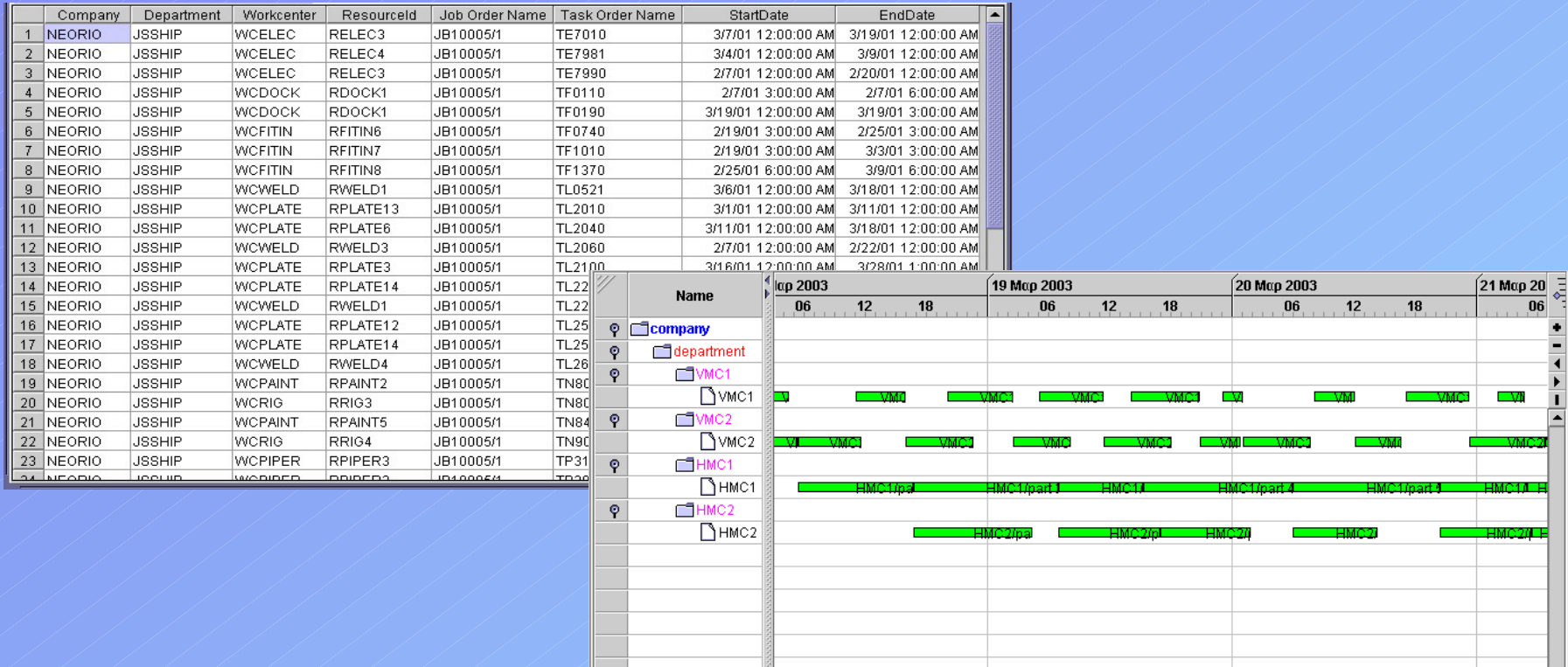


Production Systems Planning, Control & Networking

Real-time Manufacturing Scheduling And Production Planning Planning results



Chryssolouris, G., S. Makris, V. Xanthakis and D. Mourtzis "Towards the internet based supply chain management for the shiprepair industry", *International Journal of Computer Integrated Manufacturing*, (Vol.17, No.1, January-February 2004), pp. 45-57.

Production Systems Planning, Control & Networking

Real-time Manufacturing Scheduling And Production Planning Planning results

WC21: WorkCenter Tab panel

(*)Company: NEORIO
(*)Department: JSSHIP
(*)WorkCenter: WCPIPER
Description:
Fiting Section

Resources Policies Notes

Results

	Resource Name	Resource Description	Department Id	Work Center Id	Comp
1	RPIPER1	Pipers Resource	JSSHIP	WCPIPER	NEOR
2	RPIPER2	2nd Pipers Resource	JSSHIP	WCPIPER	NEOR
3	RPIPER3	3rd Pipers Resource	JSSHIP	WCPIPER	NEOR
4	RPIPER4	4th Pipers Resource	JSSHIP	WCPIPER	NEOR
5	RPIPER5	5th Pipers Resource	JSSHIP	WCPIPER	NEOR

View Add Delete

WC21: WorkCenter Tab panel

(*)Company: NEORIO
(*)Department: JSSHIP
(*)WorkCenter: WCPIPER
Description:

Resources Policies Notes

Policy Name: 8_SHIPS_FIFO

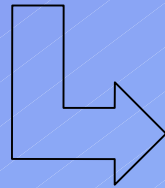
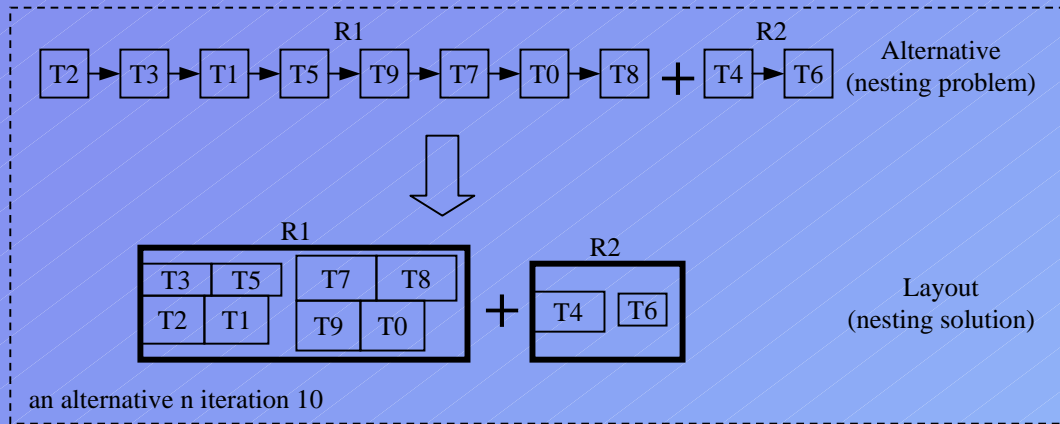
Rule Selection

Scheduling Rule: FIFO

- CLEVER
- EDD
- FIFO
- SPT

Production Systems Planning, Control & Networking

Real-time Manufacturing Scheduling And Production Planning



The screenshot shows the Evergreen software interface. The title bar is "Evergreen - Evergr1". The menu bar includes File, Edit, View, Solve, Window, and Help. The toolbar contains icons for file operations and help.

There are two document windows: "Evergr1:2" and "Evergr1:1". "Evergr1:2" shows a grid of red rectangles representing tasks. "Evergr1:1" shows a more detailed view of the task scheduling, with red and blue rectangles.

At the bottom, there are two tables: "Machine" and "Carpets".

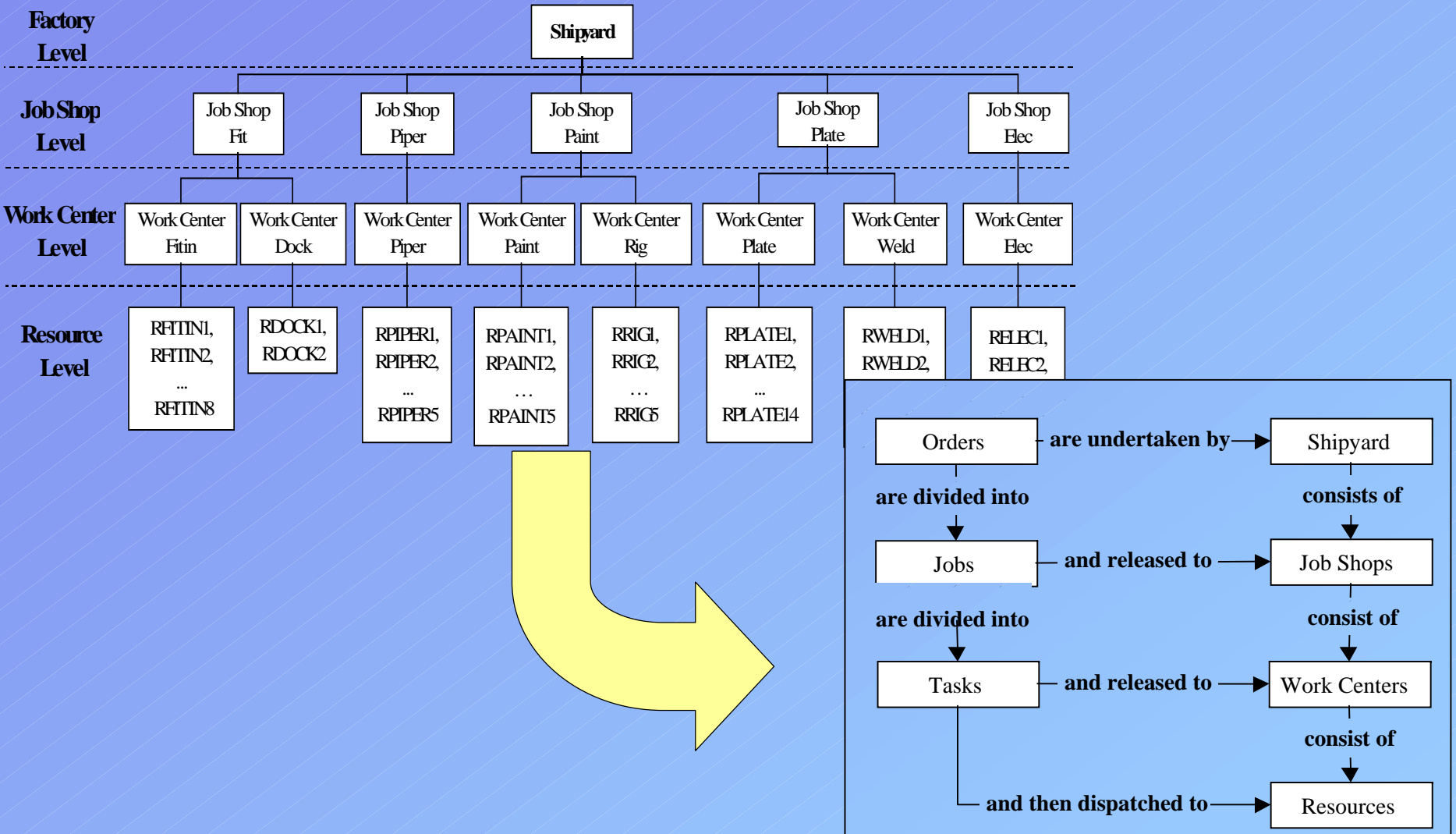
Machine	Max. Width
LOOM2	400

Task Id	Type	Design	Width	Length	Order	Start Time	End Time
11	0115	11	159	240	4/1988	Sun 18.04.99, 09:28	Sun 18.04.99, 12:42
11	0115	11	159	240	4/1988	Sun 18.04.99, 09:28	Sun 18.04.99, 12:42

For Help, press F1

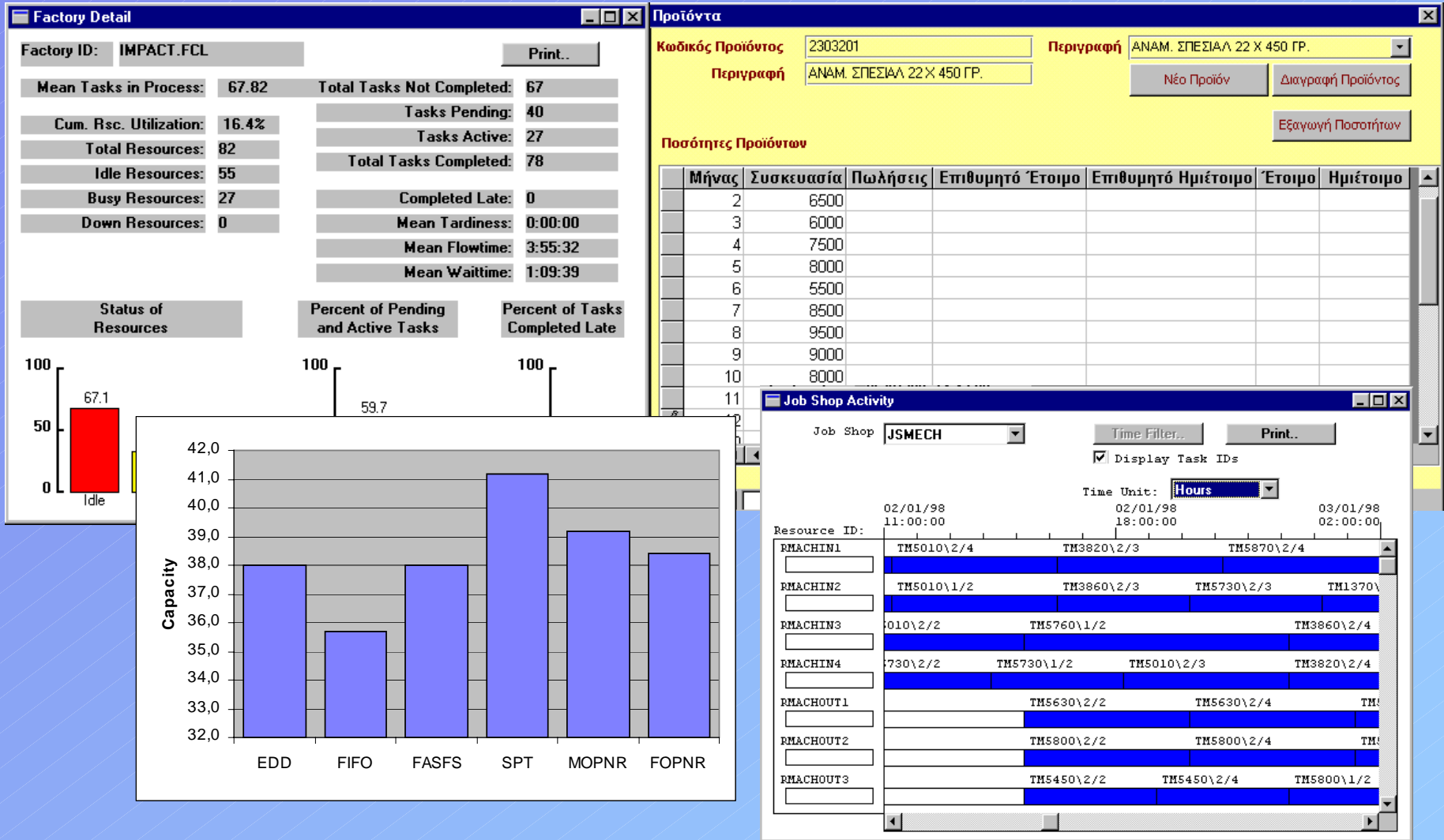
Production Systems Planning, Control & Networking

Real-time Manufacturing Scheduling And Production Planning



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Real-time Manufacturing Scheduling And Production Planning



Chryssolouris G., Bechrakis K., Makris S., Xeromerites S., Mourtzis D. and Papakostas N., A Planning and Control Method for Shipyard Processes: A Shiprepair Yard Case Study, In C. Chrysostomides and K. Johansson (Eds.), 10th International conference on Computer Applications in Shipbuilding, ICCAS '99, 127-135, (MIT Press, Cambridge - Massachusetts), June 7-11, 1999.

Production Systems Planning, Control & Networking

Real-time Manufacturing Scheduling And Production Planning Agent based evaluation of alternatives

The screenshot displays two overlapping windows from a manufacturing planning software. The top window, titled "Resources Attributes by Ref", shows configuration for a resource named "Bin Emptier" (Resource Code: MBM1) with attribute "Task Scheduled ProcessTime" (Attribute Code: T_SPT). It lists a reference ID "BK, DNBD, 72, 70, BLND, BM1" and a function "GetOprPrsTm" with parameters "0,3,BK, DNBD, 72, 70, BLND, BM1".

The bottom window, titled "Monitoring", shows a tree view of alternative sets for "Agent 4". The root node is "(1) Alternative Set : Shift Work Orders" with a cost range of "216,080,020.00 - 82,662,500.00". It branches into four sub-alternatives:

- (1) Alternative Set : Increase Labour - Cons 133,417,520.00 - 4,108,680.00
- (2) Alternative Set : Machine Noa Action - C 129,308,840.00 - 34,751,480.00
- (3) Alternative Set : Increase Labour - Cons 129,308,840.00 - 34,751,480.00
- (4) Alternative Set : Machine Noa Action - C 129,308,840.00 - 34,751,480.00

At the bottom of the Monitoring window, a summary table shows:

Agent Id	2	Dye2Blend Agent	Total Cost	216,080,020.00
Constrain Id			(1) Alternative Set : Shift Work Orders 216,080,020.00	
Event Id	MBRDN	Machine Breakdown	(2) Alternative Set : Machine Noa Action - C 133,417,520.00	
Reason Id			(4) Alternative Set : Machine Noa Action - C 129,308,840.00	
Event Time		Function Id	0	

Production Systems Planning, Control & Networking

Real-time Manufacturing Scheduling And Production Planning Multi agent planning

Agent Id	Agent Description	Agent Ip	Agent Port	Agent Status	Agent Host
1	Agent For MD1	127.0.0.1	5002	Running	MORDOR
2	WIP Buffer Agent	127.0.0.1	5003	Running	MORDOR
3	Laying Machine Agent	127.0.0.1	5004	Running	MORDOR
4	Marketing Agent	127.0.0.1	5005	Running	MORDOR

Agent Timings

Evaluation Period (secs) 20 Monitoring Refresh (secs) 5

Agent Timeout (mins) 15 Agent Polling 15

Agent Groups

Start Associate Agents Stop Associate Agents Agent Log

Database: D:\APPS\Rider\rider.mdb

