

TRICORN:Scheduler

Scheduling & Capacity Planning System

TRICORN:Scheduler is a real-time, finite capacity workshop scheduling and planning system developed by Fauser AG in Munich and is tightly integrated into TRICORN:Production.

The system is a workshop planning tool designed to help engineering and manufacturing companies optimise their resources and plan production to achieve delivery efficiencies and cost targets.

Seamlessly integrated into Tricorn's Production Control system, TRICORN:Scheduler can update the production plan instantly as requirements change and as manufacturing events are recorded on the factory floor or in the administration office. Having accurate, detailed and live data ensures that the schedule reflects the true situation on the shop floor, allowing managers to take appropriate action based on factual information.

PLANNING INTERFACE

Clear Gantt chart style graphics are easy to understand and familiar to planners, allowing them to visualise the resources available and the jobs to be completed. In addition, a choice of barcode readers, touch-screens or terminals simplifies data collection around the work shop.

TRICORN:Scheduler includes a drag and drop interface which eases the rescheduling of tasks to suit changing circumstances. The results of changes are automatically calculated and graphically displayed, showing the impact on delivery dates across the whole schedule. Traffic light colour coding quickly highlights jobs which are on target for delivery, those which are nearing their due date and those which are overdue.

TRICORN:Scheduler is a key component part of Tricorn's integrated manufacturing solution, sharing the same database. This ensures that any changes made in TRICORN:Production are automatically and instantly reflected in TRICORN:Scheduler. Similarly, any change to the schedule, such as a completed operation, absence or subcontracting operation is immediately reported in TRICORN:Production.

Clear and easy to use one screen technology ensures rapid training and fast software implementation. Users can be productive very quickly, modelling their processes in TRICORN:Scheduler and profiting from instant status reports, which will enable them to optimise their efficiency levels.

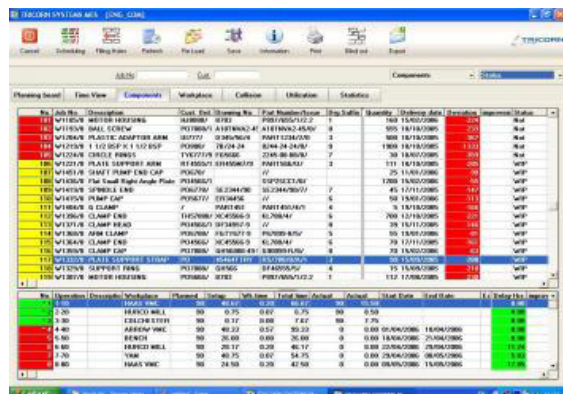
WORKFLOW MANAGEMENT

Jobs and operations are automatically loaded into TRICORN:Scheduler from TRICORN:Production. Through complete integration, new work, including individual components and multilevel assemblies, immediately become

Key Features

- ✓ "Drag & Drop" from one work centre to another.
- ✓ Multiple scheduling methods (delivery date, pass through, just-in-time).
- ✓ "What-if" simulation to assess delivery performance.
- ✓ Capacity visibility weeks into the future.
- ✓ "Capacity Reservations" for expected orders.
- ✓ "Overlap" capability for consecutive operations.
- ✓ Automatic countdown for off-site operations (subcontract).
- ✓ Delivery performance charts.
- ✓ Work centre utilisation.
- ✓ View selected customer works order status.
- ✓ Easily set available hours for a specific resource or group.
- ✓ Multiple shift patterns and calendars.
- ✓ Link similar processes.

part of the schedule, enabling users to graphically see the effect on delivery dates and resources. It is also possible to make "Capacity Reservations" for projected orders and see whether or not a delivery date can be achieved.



No.	Job No.	Description	Start	End	Urgency No.	Prod. Number/Order	Stat. Status	Quantity	Delivery Date	Urgency Status
101	WFL001	WFL001	01.01.2010	01.01.2010	1	101	01	1000	01.01.2010	01
102	WFL002	WFL002	01.01.2010	01.01.2010	2	102	02	1000	01.01.2010	02
103	WFL003	WFL003	01.01.2010	01.01.2010	3	103	03	1000	01.01.2010	03
104	WFL004	WFL004	01.01.2010	01.01.2010	4	104	04	1000	01.01.2010	04
105	WFL005	WFL005	01.01.2010	01.01.2010	5	105	05	1000	01.01.2010	05
106	WFL006	WFL006	01.01.2010	01.01.2010	6	106	06	1000	01.01.2010	06
107	WFL007	WFL007	01.01.2010	01.01.2010	7	107	07	1000	01.01.2010	07
108	WFL008	WFL008	01.01.2010	01.01.2010	8	108	08	1000	01.01.2010	08
109	WFL009	WFL009	01.01.2010	01.01.2010	9	109	09	1000	01.01.2010	09
110	WFL010	WFL010	01.01.2010	01.01.2010	10	110	10	1000	01.01.2010	10
111	WFL011	WFL011	01.01.2010	01.01.2010	11	111	11	1000	01.01.2010	11
112	WFL012	WFL012	01.01.2010	01.01.2010	12	112	12	1000	01.01.2010	12
113	WFL013	WFL013	01.01.2010	01.01.2010	13	113	13	1000	01.01.2010	13
114	WFL014	WFL014	01.01.2010	01.01.2010	14	114	14	1000	01.01.2010	14
115	WFL015	WFL015	01.01.2010	01.01.2010	15	115	15	1000	01.01.2010	15
116	WFL016	WFL016	01.01.2010	01.01.2010	16	116	16	1000	01.01.2010	16
117	WFL017	WFL017	01.01.2010	01.01.2010	17	117	17	1000	01.01.2010	17
118	WFL018	WFL018	01.01.2010	01.01.2010	18	118	18	1000	01.01.2010	18
119	WFL019	WFL019	01.01.2010	01.01.2010	19	119	19	1000	01.01.2010	19
120	WFL020	WFL020	01.01.2010	01.01.2010	20	120	20	1000	01.01.2010	20

Live recording of events from around the workshop feed back into TRICORN:Scheduler. This keeps the schedule up to date with the current status of production, so information about work-in-progress, the to-do list for each resource, and the on-time delivery status of each job will be accurate. Viewing terminals make it possible to share this information around the factory.

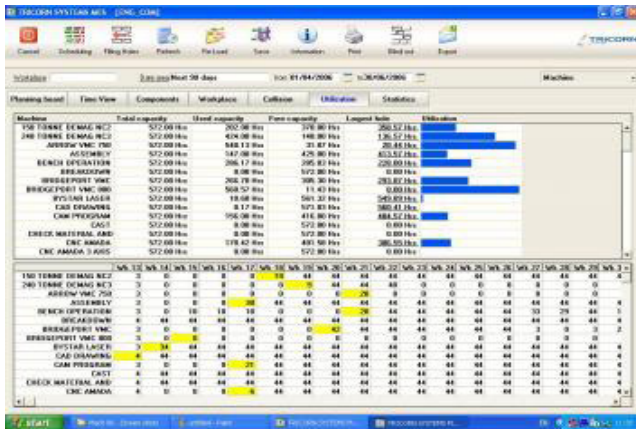
TRICORN:Scheduler makes it easy to try "what if" scenarios. Adding extra resources, moving operations, and

changing shift patterns can all be tested with real data. Gantt chart graphics show the results, allowing managers to optimise the utilisation of resources, reduce manufacturing times, cut work in progress, deal with bottlenecks and increase productivity.

Interactively managing the schedule, with its drag and drop interface automatically reflects in the reports available in the software. Traffic light graphics highlight jobs that are within their delivery target, those which are close to their target and those which are overdue. Users have reported an 80% increase in on-time delivery, 50% reduction in work in progress and 25% increase in productivity through active management of the schedule with TRICORN:Scheduler.

RESOURCE MANAGEMENT

TRICORN:Scheduler models the resources available to manufacturers, including work groups, holidays, absences, shift patterns and subcontracting, to provide a true snapshot of what is available at any instant. Tools to change the model allow daily variations, like just-in-time orders, machine breakdown or overtime, to be quickly incorporated and viewed in real time.



Look-ahead facilities make it possible to check the capacity of each resource and test the impact of new contracts on the ability to deliver on time, up to one year in advance. Analysis of the status of each resource will highlight both bottlenecks and spare capacity, giving managers sufficient information to allocate additional resources or search for suitable new work.

The drag and drop interface enables "what if" interrogation

of the schedule. By moving tasks and altering resources users get instant graphical feedback, enabling them to see the impact of changes such as new orders, subcontracting, new equipment, altered shift patterns and alternative processes.

Resource management in TRICORN:Scheduler makes it easy to optimise the use of manufacturing facilities, maximising productivity, return on investment, and profit.

REPORTING

TRICORN:Scheduler utilises live data throughout the system, providing information such as work in progress, the status of delivery schedules and hours spent on each job. This is collated using data gathered from around the shop floor through barcode readers, touch screens and terminals. Hence the resulting reports are an accurate snapshot of the progress of production.

Each individual resource, including a subcontracted one, can be analysed to show, for example, the load, start and finish times for individual operations and time spent on each job. By sharing the information with TRICORN:Production actual performance can be compared with the plan at any stage of manufacture. This allows appropriate remedial action to be taken to keep costs under control before the job is completed.

Reporting will also identify bottlenecks and spare capacity. Analysis of how this varies and when it occurs will enable managers to maximise the utilisation of their resources based on real information.

Highlighting when parts will be delivered is a key reporting function. TRICORN:Scheduler shows the current status of each job, with a colour coded traffic light system - green for within its planned time, amber for nearing its completion date, and red for overdue. Users can see at a glance which jobs need attention and have reported increases in on time delivery of 80% with the software.

The live and accurate management information generated by TRICORN:Scheduler makes it easy for companies to optimise their processes, control cost and improve their performance as a supplier.