SIMOGGA
PLANNER

SIMOGGA
Visualize·Quantify·Optimize

SIMPLE, VISUAL AND INTERACTIVE

Advanced planning and scheduling software to visualize, quantify and optimize your production

Benefits

- Eased problem identification and development of various solutions
- Acceleration in the **decision-making** process and increases **collaboration**
- Unique tool for finite capacity planning and fine scheduling under constraints
- Simulated and controlled growth
- Reduction in costs, Lead Time, WIP
- Increase of the **agility** by anticipating the variation of load and reacting against production aleas
- Easy to use and involve the teams

Functions

- **Automatic scheduling** to bring agility on the shop floor and for the commercial department
- Modification of all parameters of the schedule on the fly
- Immediate assessment of KPIs
- Generation of **different scenarios** to quickly compare the influence of the different decisions
- **Graphical and visual representation** of the schedule and of the blocking elements
- Visual analysis of the **causes of delays** (Machines, operators…)
- Integration of **travel distances** to optimize scheduling
- Tracking of operations and follow the production in real time dashboards
- **Progressive deployment** and integration to other systems/data base or stand alone

About

SIMOGGA Planner is a software solution used to simulate production planning and generate automated scheduling in real time. It provides detailed schedules of production which helps in scaling down existing problems related to manufacturing operations. It is a major enabler of achieving overall production efficiency by allowing manufacturing companies to visualize, quantify and optimize their entire production – by taking each constraint and specificity of the factory into account. SIMOGGA Planner enables plant managers to take full control of production which allows them to anticipate changes while being proactive.

SIMOGGA Planner allows all possible alternative planning setups to be tested and compared in order to find the scenario that is most suitable and beneficial for the entire plant. Its easy to use graphical user interface allows the involvement of different stakeholders to build solutions together to facilitate the change management process. The visual and interactive interface permits to identify machines that are either under or over capacitated and those that generate a lot of waiting time; which makes for easy identification of bottlenecks during the different periods of production and greatly contributes to the reduction in Lead Time. But facilitates the tracking of the different levels of the Work-In-Progress to initiate increase in the plant's overall productivity.

Operational Excellence

Business value

Keeping track of all the operational activities in a plant can sometimes be challenging for manufacturers. A company's ability to anticipate changes, control both the production planning and scheduling have become the most important elements that every manufacturer wants to recognize. This is because during production, a variety of materials and labour need to be smoothly coordinated to meet customer requirements and evolving market demand.

The planning system of SIMOGGA improves factory efficiency by scheduling and planning each operation of production in the best possible way by taking into account the operational constraints and limited resources.

Contact : Emmanuelle Vin
M : +32 479 727 905
@ : evin@simogga.com
www.simogga.com

SIMOGGA™

Decrease Leadtime by **25 to 75 %**

Decrease the planning management time by **50 to 75%**

Increase the **throughput, resource usage** and **operational agility**

Improve the **delivery date** and **time**

Decrease the **WIP** on the shop floor

Increase the efficiency of each **actor** of the factory

SIMOGGA Planner features

- From macro to micro data: set global data and progressively increase the granularity
- Use different levels of details to simulate a part or the whole shop floor
- Insert data extracted from ERP through Excel/XML input or direct integration
- Manipulate data through the user interface and visualize them (example: Gantt chart with operations precedence's)
- Use flow representation (SIMOGGA Layout Design) to validate the data and their consistency
- Configure the schedule based on the needs (shifts, capacity, resources…).
- Build the first scenario with a small amount of data to gradually increase the complexity
- Build and compare various scenarios before applying the best one

Progressive deployment from simulations to real time scheduling

The planning system of SIMOGGA improves factory efficiency by scheduling and planning each operation of production in the best possible way by using gradual step by step processes that are distinguished in four levels:

1. The modeling and optimizing of a production site by simulation. The simulation model enables the planning of the production while considering constraints, available materials and human resources
2. The deletion of Excel files and the creation of the schedule automatically based on the data extracted from the ERP
3. The continuous adaptation of planning according to the current state of production through progressive integration with ERP
4. The continuous improvement of agility based on data collected, analyzed and transformed into visual information

Global Gantt

Lead Time and Touch Time

Buffer size
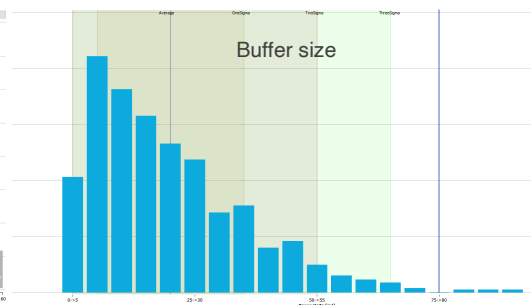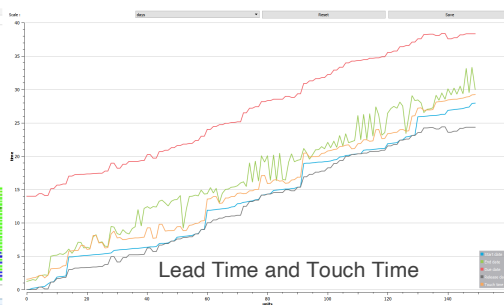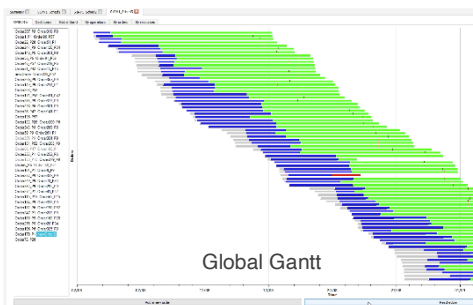
Data Features

- Set a global shift for the factory and sub-shifts for each resource (human and material)
- Schedule each step of the processes from the setup to the measurement and control
- Assign multiple resources (Machine, equipment, tools, human) to each operation
- Use alternative routing and process to automatically reassign the products to different machines

Constraints

- Customize the batches
- Group products for specific machines and operations
- Dedicate operator(s) to specific machines, zones or by skills
- Limit the number of concurrent orders treated in the shop floor
- Define the schedule's priority (Due date, Release date, …)
- Set a machine as bottleneck to pull the production

Analysis/Results Features

- Simulate the production with randomized orders if the list of orders is not available
- View detailed information on each machine/product/order
- Visualize highlighted bottleneck(s) based on the waiting time and analyse the causes of these delays (Machines, equipment or operator's availabilities)
- Remove the bottleneck machines by using alternative processes and redirect the workload to machines that are not operating to full capacity
- Visualize Gantt Chart of the schedule for machines and equipment
- Compare multiples KPIs (Lead Time, Use of machines, Lateness, Makespan, Waiting time, Buffer size, etc.)
- Show multiple graphs representing each KPI
- Quickly compare multiple scenarios, data and results
- Generate the long-term planning and validates the capacity
- Schedule the list of tasks by WorkCentre, by worker
- Export files and results in CSV, JPG, PNG