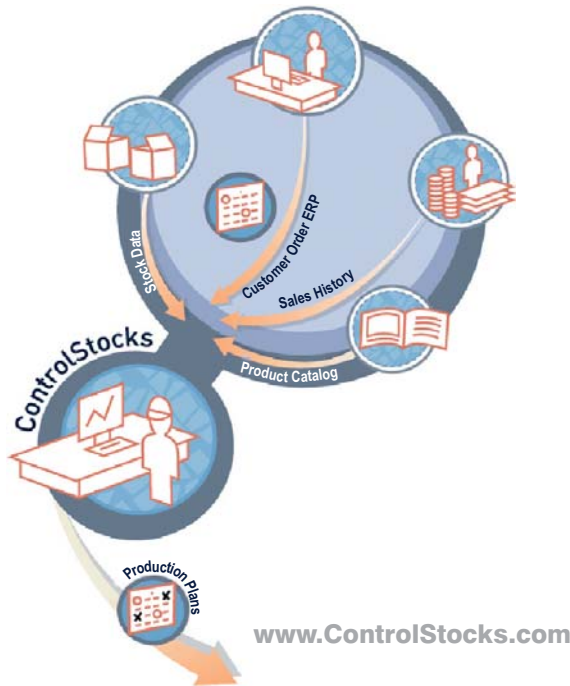


ITI Technologies

Optimization Systems for Production Scheduling and Procurement



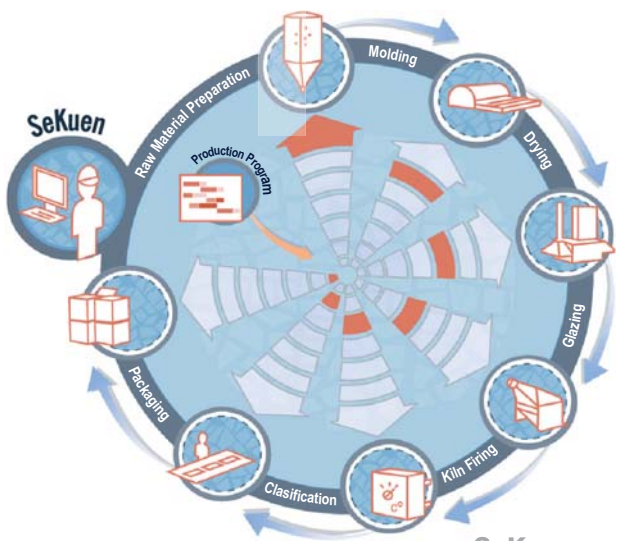
www.ControlStocks.com

Planning for **optimized production** and **procurement**

What should we produce or buy? In what quantities? When should we produce or buy products?

ControlStocks is a powerful and easy to use tool for the production planning and/or procurement, that helps to find an optimal solution for the previous questions, also obtaining many advantages:

- Calculation of sales forecasts, consumption, and dynamic safety stock based on advanced statistical methods.
- Control and reduction of stock levels and stock outs in warehouses.
- Management of auxiliary products.
- Adaptable to different productive and commercial sectors.
- Connectivity and adaptability to ERP systems and any data source.



www.SeKuen.com

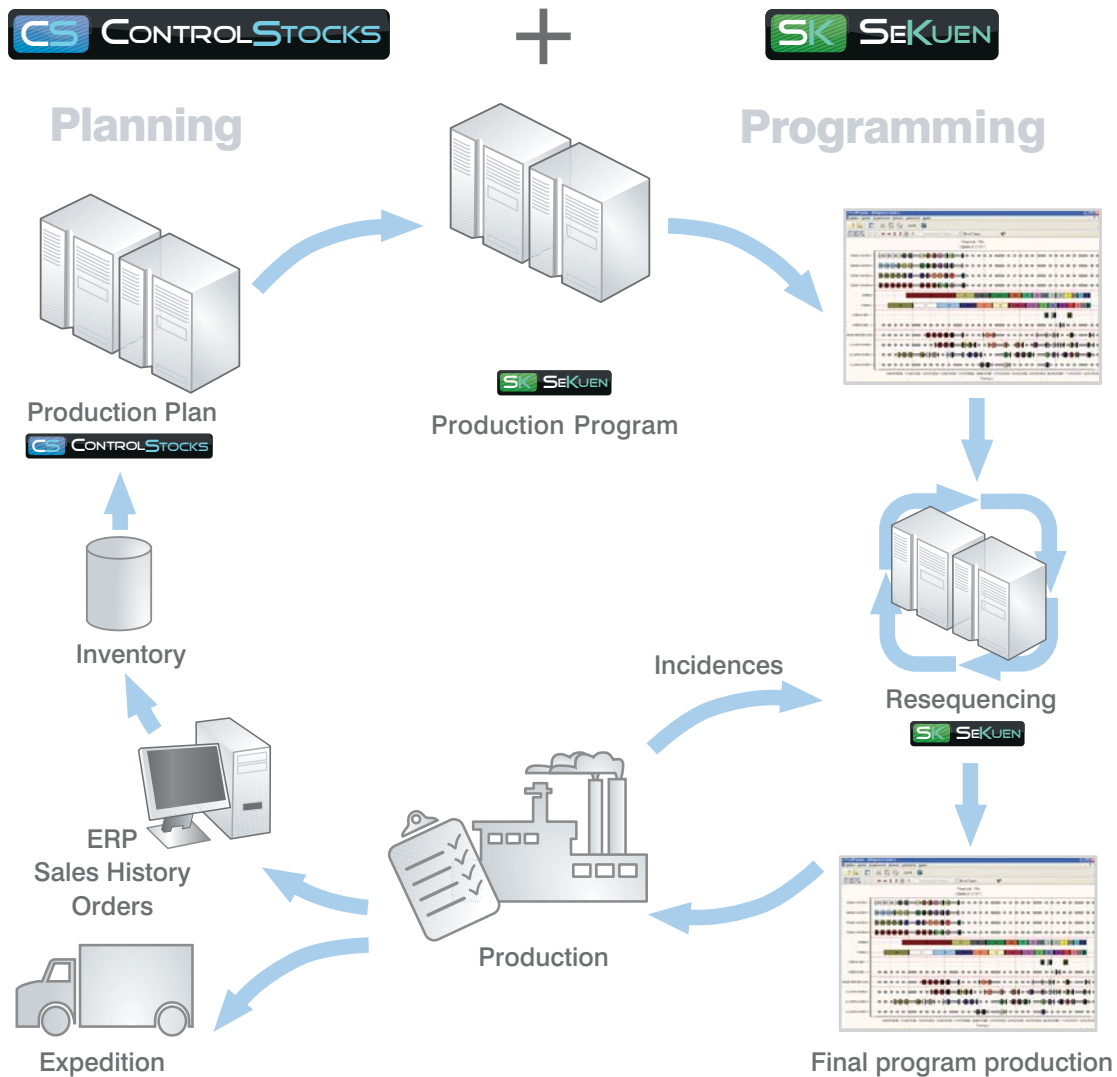
Finite capacity **production scheduling optimization**

How to produce? Which machines to use? Which sequence is the best?

SeKuen is a system that is able to obtain optimized production schedules with finite capacity. SeKuen obtains a detailed production program that allows managing the deadlines realistically and effectively.

It provides production schedules per plant, machine..., availability of resources and is adaptable to any productive configuration. The applied optimization algorithms are specific for problems of production programming in realistic environments. In addition, SeKuen can consider various optimization objectives together at the same time. Some of these objectives are: minimization of the total manufacturing time, minimization of delays in deliveries, minimization of changeovers, and many others.

ITI Technologies Optimization Systems for Production Scheduling and Procurement



From the inventory, sales history and existing orders, ControlStocks generates a production plan that takes into account sales forecasts, minimum manufacturing batches, declines in production, provisioning times, internal and external consumptions, etc. This production plan serves as an input for SeKuen that obtains a detailed finite capacity production program after applying advanced optimization algorithms. It takes into account different production characteristics like different machines with different speeds, overlaps in the production, limited in-process inventory capacity, resource

availability schedules, products that do not meet the quality standards, recirculation, stage skipping, precedence relations among jobs and/or tasks, etc. Unexpected events, like new rush orders, can be managed by the resequencing engine in a quick and simple way without affecting the current program or by affecting it in the least possible way.

The joint use of the two tools allows you to make complex decisions in a short time, with less risk and with final results superior to what is obtainable with current software packages and clearly superior than the human excel approach.

