

TRANSFORM YOUR VALUE CHAIN WITH

## VOORTMAN'S AUTOMATION AND DIGITIZATION



## VOORTMAN IS COMMITTED TO SUPPORTING YOU IN EVERY STEP OF THE CHAIN

In today's rapidly changing and competitive manufacturing landscape, having a 360° understanding of your processes and operations is essential. Luckily, digitization has opened up a world of powerful tools that enable you to access critical cross-company information, empowering you to make well-informed decisions to optimize your processes. With the ability to integrate machines and systems and access real-time data, you can stay ahead of the curve and position yourself for long-term success.

With perfectly aligned digital solutions from Voortman and SigmaNEST, we are committed to supporting you in this journey, providing the tools and resources you need to gather, connect, and analyze data effectively. Benefit from real-time cross company data that's connected, so you can make powerful decisions leading your business forward with confidence.

Why wait? Unlocking advanced manufacturing capabilities is within reach – explore how we support you in every step in the value chain, from order management to final product.





Say goodbye to inconsistency and confusion across different phases of the value chain; let SimTrans bring true harmony into play by seamlessly connecting diverse data from various systems. With a mutual data flow, all your systems remain synchronized, ensuring that you have access to the most accurate information in real-time.

#### Single source of accurate and real-time data

With this mutual data flow, all SigmaNESTgenerated data, such as estimated processing times, costs, plates used, waste rates, and program status updates, can be sent back to your MRP/ ERP packages. This automated data loop allows for real-time work order tracking with updates and feedback, eliminating manual data entry. Similarly, changes made to work orders, stocks, delivery times, or customer information in your MRP system will also be automatically updated in SigmaNEST. So, gone are the days of uncertainty regarding whether the data is outdated; now, it is always upto-the-minute! With SimTrans as your centralized source of accurate and up-to-date data, you can start with automating your order management and quoting process.





#### Import files easily: eliminate duplicate and manual work

It starts with your customer's inquiry. You want to provide your customers with the most accurate quote possible. Received files can be imported into SigmaNEST software, which supports common file formats used in the steel industry (e.g., .STEP, .CDL, .DXF, .DWG, and .DSTV). However, as more companies use native formats, integrating your nesting solution with your existing CAD programs is essential. Adding the CAD import module enables direct import of native formats such as SolidWorks, Solid Edge, Creo, Inventor, Siemens NX, and Catia. This integration eliminates duplicate manual work and ensures all information is maintained.

#### Your benefits

- SimTrans brings harmony by connecting your machines, ERP and SigmaNEST.
- ♠ A mutual data loop ensures synchronized, real-time info on orders, customers, delivery times, stocks and more.
- Directly import all common and native file formats, eliminating manual work.



#### **QUOTING**



















5 ORDER

#### Easily generate reliable quotes

Efficient and reliable quote creation is a major challenge and time-consuming task in production associated with orders. However, with SigmaNEST's innovative quoting module you can generate precise quotes and work orders quickly and automatically. This module calculates processing times and material costs for each part using SigmaNEST and Voortman machine processing information, ensuring competitive, accurate cost prices.

Any secondary machine operation that is not controlled by SigmaNEST and does not require a nesting program, can still be included in your quote. Operations such as deburring, bending, coating or varnishing can be added based on the geometry of the part or surface since you know the length and width. For operations that cannot be calculated using geometry, like manual drilling/ beveling, you can set up rules and variables to calculate costs. Configuring the Quoting module to

precisely mirror your factory's operations will result in pricing that accurately corresponds with your costs. This optimal approach offers exceptional value and will give you the confidence to set the prices of your products.

## Convert it to work orders with a simple click

With a simple mouse click, you can turn an accepted quote into an active work order. Now it's time to watch the orders and projects take off! Get ready for nesting those jobs in no time and start production. Easily track the status of your orders in real-time from quotation to production, and keep your customers informed with accurate, up-to-date information on their order status.

## Your benefits

- Generate quotes quickly and precisely with the Quoting module.
- Calculate all costs, including secondary operations.
- Track order status in real-time from quotation to production and keep customers informed.







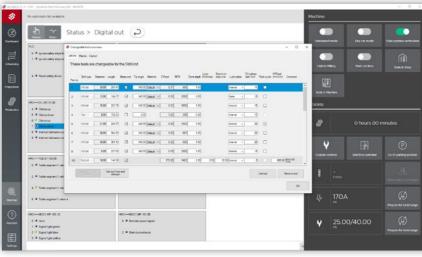
WORK PREPARATION

Save time and simplify your work preparation with SigmaNEST - an efficient nesting software that creates an optimal list of nests and machine programs and assigns each nest to the best-suited machine in the factory considering all the cutting technologies available (e.g. Waterjet, Laser, and Plasma). It's like having a personal assistant with advanced knowledge about cutting technologies and machine capabilities.



#### Lean on the built-in intelligence

Make light work of your work preparation process with Voortman's renowned VACAM Machine Software and its built-in intelligence. It empowers the machine to make autonomous decisions for milling, blind tapping, and complex bevel cutting. With auto-calculated milling paths, complete bevel geometries and automated tapping sequences, there's no need for full process knowledge or manual, time-consuming adjustments upfront. The machine takes care of everything and does the job automatically. Enjoy major automation advantages and time savings today! Once the nesting plan is completed, all relevant information is digitally transferred to VACAM.



#### Tested parameters = predictable time calculations

You know that time is money, and accurate time calculations are essential to the production process. Unlike other manufacturers, Voortman offers a whole set of tested parameters for their machines, so you can accurately calculate the time each machine takes to drill, mill, and cut. This accuracy is invaluable as it helps you plan for every phase of the production process, from materials procurement to delivery. You can rest assured that every job will be completed efficiently and on time.



- Increase factory productivity with an easy automated paperless work preparation process.
- ← Create the optimal nesting in SigmaNEST and automatically assign work orders to the best-suited machines.
- Reap the benefits of the machine's ability to make autonomous decisions through its built-in intelligence.





time and

material?"



free production

processes?"

PRODUCTION PLANNING

Effective production scheduling by utilizing the appropriate machines at the right time is key for responding to and winning new contracts, meeting deadlines, and maintaining flexibility. Therefore, after automatically generating optimal nesting programs, it is crucial to balance machine workloads and jobs to ensure error-free and on-track production.

# Optimize shop floor operations with Load Manager: Proactive planning and load analysis

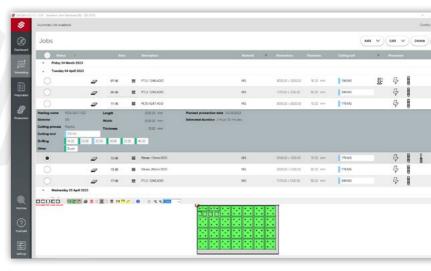
Streamline and take control of your shop floor operations with Load Manager: Achieve proactive machine planning, load analysis, and efficient production with multiple machines and operations. You can easily balance machine workloads,

reassign jobs, and resolve issues through a central dashboard. Allocate or reallocate programs effortlessly to any machine in the group using a calendar timeline view – you just drag & drop! The dispatch list keeps track of programs assigned to each machine. And don't worry about

parts ending up in the wrong places; the software ensures they always go to their intended machine.

## Ensure timely job completion with VACAM Scheduling Overview

Of course, you want to make sure that all jobs fit within the scheduled time. Transform your job scheduling into a stress-free process with VACAM Scheduling Overview. Reduce paperwork and uncertainties related to production times. Expected production times for each job let you fit the jobs into the scheduled time within Scheduling Overview.





#### Let the operator find the perfect sequence

Once jobs have been prepared in the office into Scheduling Overview, your machine operators can see which jobs need to be processed when and which require additional tooling. If an operator notices some space or flexibility in the scheduled jobs, they can decide to use VACAM Sequencing at the machine. By considering factors such as production times, amperages, material thicknesses, and tools per nesting, operators can quickly estimate whether nests can be planned and clustered more efficiently in terms of sequence.

#### Your benefits

- Easily balance machine workloads, reassign jobs and resolve issues with Load Manager.
- Confidently fit all jobs within scheduled time with VACAM Scheduling Overview.
- Get paperless real-time updates to and from the shop floor for better visibility and control.





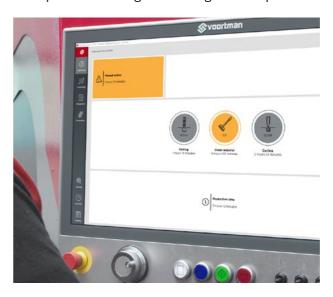


# PRODUCTION CONTROL

In order to provide you with as much machine feedback and information and to keep your plate processing machine running efficiently and on schedule, ground-breaking functionalities have been added to our VACAM control software. Herewith, you can appoint your operators as managers, since their main task will shift from operating the machine to loading and unloading and managing the entire workshop.

#### Access real-time, predictive data on the Operator Dashboard

With the VACAM Operator Dashboard, information becomes interactive, with active and predictive elements. The dashboard shows the time per process, the number of operations still to be performed and the remaining production time. It indicates if the machine runs the job as scheduled. But most importantly, it shows when your operator needs to be present at the machine for a manual action. During times when they are not needed at the machine, work can be done in other areas in the workshop. Or in other words; adding value where it is most needed at that moment, for example at unloading and sorting finished parts.





#### Easy unloading, sorting and rescheduling with Color Offload

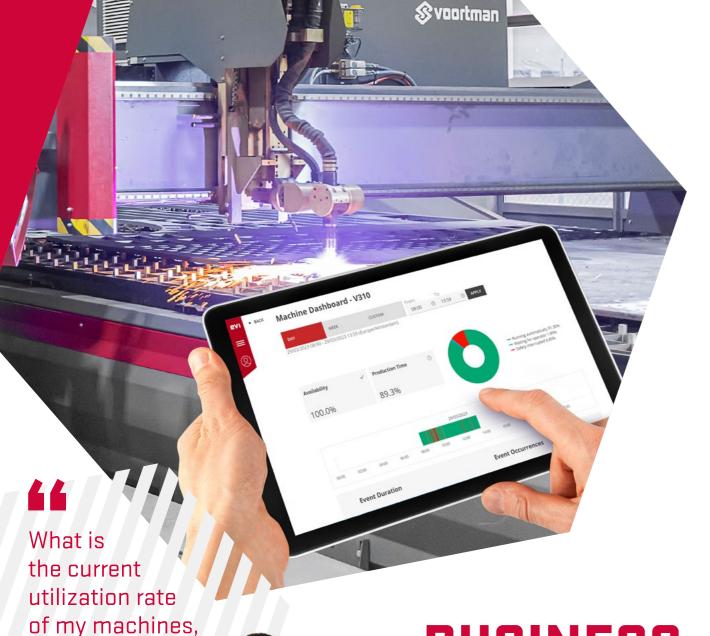
Looking at the unloading and sorting process, several work orders have been mixed during the planning phase, to save time and material. Plates are fully nested, including the use of existing remnant plates so fewer actions are required. However, it is also important that these various, mixed orders can be easily separated during unloading and sorting. You can lean on the SigmaNEST Color Offload module, making unloading and sorting easier by color coding and displaying parts grouped by customer, work order or factory routing. At the same time, your operator can flag parts that may have had quality issues. Substandard parts are rejected and automatically reported back and rescheduled for future nests.

#### Your benefits

- Access real-time and predictive machine data on large 24" interactive Operator Dashboard.
- Operators know exactly when to be at the machine, while they get other work done.
- Color Offload simplifies part identification and sorting by assigning unique groups.
- Automatically return rejected part data to the order system for rescheduling.



TRANSFORM YOUR VALUE CHAIN WITH



# BUSINESS INSIGHTS

Relying on operators' and managers' experience may suffice for daily operations, but for efficiency improvements, understanding machine status and downtime reasons is crucial.

#### Meet EVI – Always connected and monitoring production

EVI is always there to provide insight and information, whether the machine is on, off, running, or waiting. By staying in touch and monitoring production, EVI keeps up with you and ensures that you're always connected to the process. You can access EVI through the app on your mobile phone, tablet or if you are logged in to the EVI webpage on your laptop. The connection is very accessible. If the machine is off or not running properly, you'll be notified on your device, much like an instant message service. EVI keeps a close eye on the machine. Why? To increase the machine's output, prevent downtime, improve uptime and eliminate the need for your operator to constantly be present the machine.

#### EVI prevents downtime

As soon as EVI detects that a machine has stopped running, it triggers an immediate notification. Whether through a bleep or vibration on your mobile phone, a light on your tablet, or an update on the dashboard via the EVI app, your operator is instantly informed of the issue. With EVI, your production manager can delve into the depths of your production! This powerful tool allows to gain insight into any issues that arise, and provides comprehensive analysis of both real-time and historical machine data. Get instant access to reports detailing any downtimes - pinpointing exactly what caused them. All this info can be accessed remotely at anytime from anywhere across the globe; so no matter where you are or



when it is, keep tabs on productivity performance in real-time. By tracking this information, EVI helps you analyze why there was any downtime, to prevent future downtime and improve uptime.

#### EVI empowers operators

EVI supports unmanned production, freeing your operators from needing to stay close to the machines. This allows them to work on other tasks while the machines are running, increasing overall efficiency. With EVI in place, operators no longer need to constantly monitor the dashboard since the system is watching over the machines. They only need to be present when they receive a notification that a machine has stopped. This means that the same number of operators can now take care of multiple machines. EVI thinks along with you.



• Easily determine why there was downtime.





and what factors

are contributing

to any periods

of downtime?"

#### **PLATE & PIPE PROCESSING**

The economical cutting & marking plate processing machine.

A flexible multi-torch cutting & marking plate processing machine.

The all-in-one plate processing solution to (bevel) cut, drill, mill, mark, thread-tap and countersink.

A pass-through plate processing machine with automated unloading for small part production.

A pass-through heavy plate drilling, cutting and milling machine with automatic part removal and deburring.

Add-on for V303, V304 and V310. Plate- and pipe processing on a single station.



