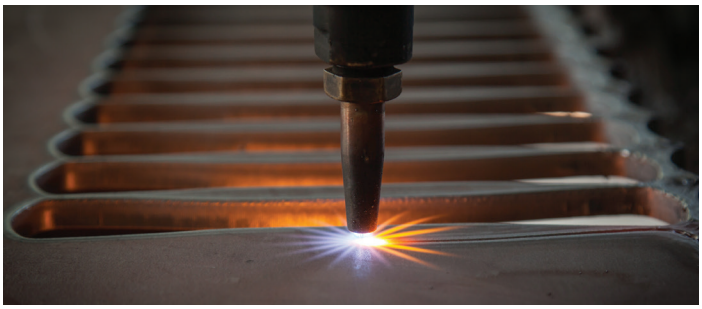
SOLUTION SHEET

OnSite Production manufacturing execution system (MES)

OnSite Production manufacturing execution system (MES) brings control and clarity to prefabrication shops. It is easy deploy and gives production managers, planners and workshop operators real-time tools to keep work moving.

Order and part status are visible in real time, and production data travels with each order from creation through to completion.



Why OnSite Production MES?

Efficient work planning

OnSite Production MES provides flexible tools for work planning. Parts can be imported from CAD applications or created directly within the platform Technology information, such as cutting order, starting points, quality classes, piercings and beveling, can be added directly to the drawing. The system automatically checks inputs and flags errors early, helpingteams resolve issues before production begins. Nesting can be done manually or with semi- or fully automatic nesting tools. Several plates and remnants can be managed within the same nesting area, allowing the material to be used more efficiently and reducing waste.

Flexible work queue control

The work queue management application allows production managers to schedule work based onpriority and deadlines, move urgent jobs forward and balance workloads across machines. Production events, such as pauses, rejections and completed works, can easily be monitored in real-time.

Faster cutting

After work queues are set, NC programs are available directly at the cutting workshops. Orders always attach all relevant information (CAD geometries, drawings, files or even photos) to the works in the workshop.

The cutting machine start and complete work quickly, with all parts reported at once or in smaller batches when needed. Defective parts can be rejected and automatically returned for re-nesting and recutting. Time and material usage are captured and allocated to parts or orders, supporting accurate tracking and future planning.

Charge numbers flow from material to parts and remnants, allowing full traceability and easy data export. The production manager always sees the current situation with machine breaks and production events as well as their duration. When needed, these can be used to calculate e.g. average throughput times or machine utilization ratios.

Stickers can be printed for all parts in a nesting with a few clicks. Labels can include order, part, and drawing numbers, material information, barcodes and information about coming work phases. The geometry of a part can be added to the label to ease the picking and packing of the correct parts.

Key features

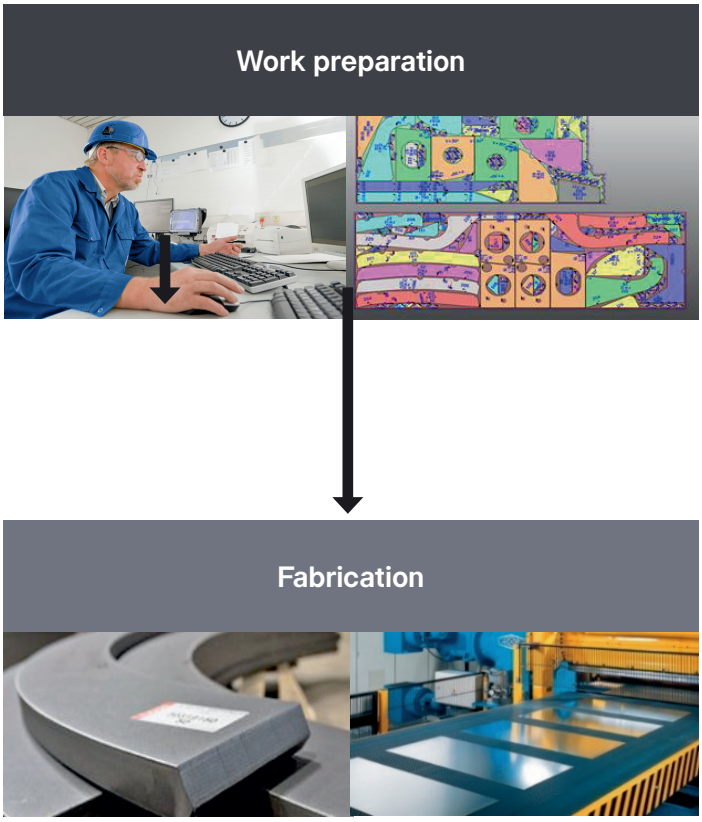
Interfaces with other systems

OnSite Production MES is based on an structured query language (SQL) database making it easy to integrate with financial and storage management systems of prefabrication shops. Data is always real time, and there is no need for manual input from system to system.

Extends to the entire production process

OnSiteProduction MES can expandto the steel service center production control system. In shipyards, OnSite Production MES can be migrated to the OnSite Production enterprise system. These expanded systems support additional processes such as drilling, blasting, beveling, packing and dispatching, along with tools for quotation, inventory and assembly management.

Steel service center processes managed by OnSite Production MES



Import part geometries, check errors

Import production data

Plate part nesting

Plate material optimization

Create NC codes for machines

Send guidance to workshops

Create material picking list

Manage material storages

Manage remnants

Receive new materials for storage

Change work priorities on workshops

Pick materials from storage to cutting workshops

Cutting

Print stickers and reports

Manage rejected parts

Make packing / palleting

About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

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