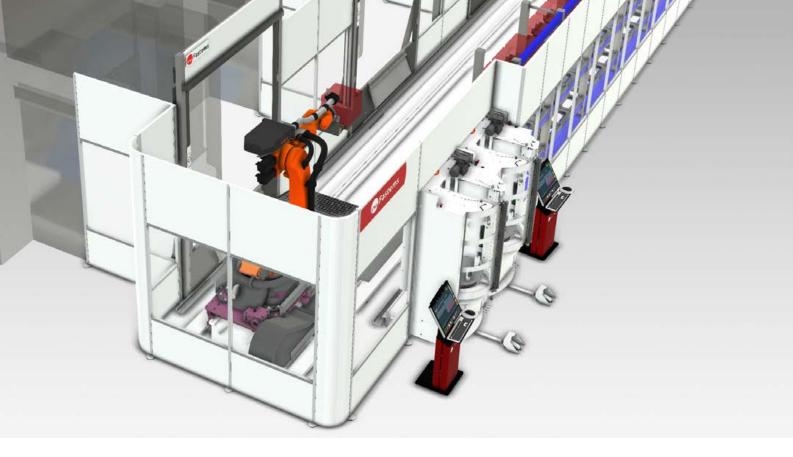


## Take your Production Capacity to the Next Level.

Adaptive FMS Product Family





## What is FMS?

**Flexible Manufacturing System** is a pallet-based system for automating machining centers and finishing processes, enabling high productivity regardless of the workpiece variety. Automation enables higher spindle utilization, decreases the manpower need per machine, ensures constant quality level and allows bottleneck resources to be shared. When stand-alone machines run averagely 2,000 out of 8,760 hours annually, machines in an FMS run averagely 6,000 hours.

## From Flexible to Adaptive.

- Integrates with 60+ machine tool brands fit for almost any machine tool and device
- Future-proof investment: extendability for your needs today and tomorrow
- Short payback time
- The most compact footprint with large pallet storage capacity
- Robust and beautiful industrial design with ergonomics as the key driver

## **UPs and DOWNs** of Adaptive FMS.



#### UP

#### Productivity

- Rock around the clock with lights-out manufacturing
- Bottleneck resources shared between machines
- Automatic scheduling and simulation of production

#### Quality

• Delight your customers, no more surprises or unaccurate deliveries

#### DOWN

#### Costs

• Recognize your production bottlenecks in advance and save costs

#### Lead-times

- Know your production: get rif of Excels and running after missing resources or changing orders Set-up times
- Payback time

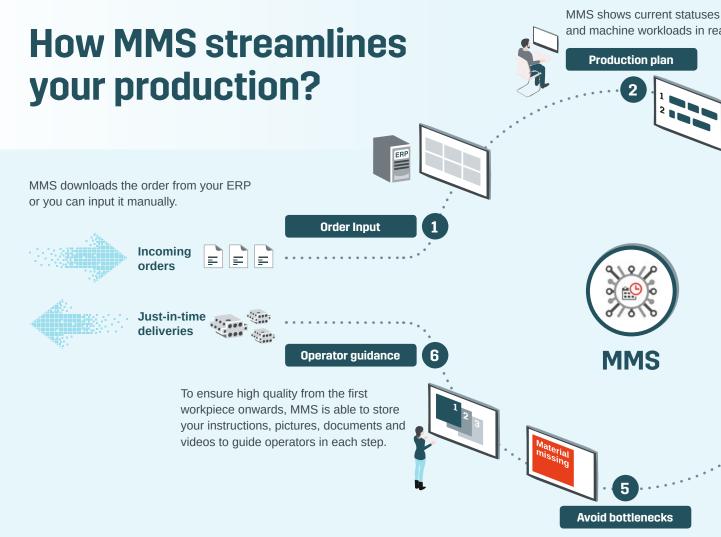


	No automation	With FMS	
Investment cost 3 machine tools**	1,200,000€	1,200,000€	
Investment cost automation	0€	400,000 €	
Machine tool utilization rate	40 %	85 %***	
Machining hours / year ****	4,800 h	15,300 h	001404
Total income per year (machining selling price 100 €/h)	480,000 €	1,530,000€	COMPAN PAYBAC WITH 3
Payback time	2.5 years	1 year	TOOLS
<ul> <li>* example calculation excludes indirect costs</li> <li>** calculated with 3 x 5-axis HMC</li> <li>*** unmanned night shift + no spidle time loss due manual setup changes</li> <li>**** 50 weeks, 5 days per week, 2 manned shifts (+ 1 unmanned with automation) per day</li> </ul>			

#### RABLE CK MACHINE

### The brain of your production: MANUFACTURING MANAGEMENT SOFTWARE.

MMS is the industry's most advanced production planning and execution software. MMS is always one step ahead by automatically calculating the optimized production workflow and necessary resources based orders. MMS adapts automatically to changes in the daily production schedule and displays information to maintain the production output.



MMS guides your operators on needed or missing resources, breaking tools or upcoming production stops to keep the production going smoothly.



of all your planned orders al time, in one view.

MMS checks all the needed resources in advance: NC programs, machines, tools, fixtures, and materials. It also calculates capacity needs and recognizes possible bottlenecks.

#### Resource check



MMS automatically sets job schedule to each workplace and machine. It tracks changes in real-time and when something unexpected happens or prioritites change, it automatically reschedules the production orders.



4

#### **Remote monitoring**

When you are out the office, you can configure your mobile device to receive messages and alerts on your production.



MMS Dashboard gives you a graphical real-time overview on key performance indicators like spindle utilization rates, machine capacities and OEE. It can be easily configured to your individual needs and used for sharing information among your personnel.



# Which FMS is suitable for you?

FMS Specifications	ROBOFMS ONE	ROBOFMS	FMS ONE
Load weight incl. pallet (kg)	0 – 275	0-1,000	500 - 3,000
Machines (quantity)	1-10	1-10	1-10
Additional processes	Material management	Material management Tool automation Washing Deburring Measuring Automatic loading	Material management
Customizable	Fastems standard components and software	Yes	Fastems standard components and software

### Make your production integrated – Additional processes we can integrate

- Material management
- Tool automation

Tool presetting device

Lathe automation

Washing

Deburring

- Measuring
- Automatic loading



## We are Fastems. We are here for you.

"At Fastems, we believe that building and maintaining a strong manufacturing base is essential for the development of our society and the well-being of the people."

That is why we do everything in our power to increase the competitive advantage of our customers and to make their production facilities as efficient, profitable and forward-thinking as possible – through intelligent digitization and process automation.

- Decades of industry experience and more than 4,000 successfully installed systems worldwide
- Systems that optimize your time cycles, reduce costs and improve the usability of your existing machinery

- Systems that have been developed with the health and safety of your personnel in mind
- 24/7 support to ensure maximum productivity during all 8,760 hours of the year

We look forward to helping you determine the potential of your manufacturing processes and to finding a solution that is right for you!



Subject to technical changes



#### www.fastems.com