



Elevate your CNC production.

# Flexible Pallet Tower FPT

# Plug-and-play automation for 300-630 mm pallets.



- **FAST DELIVERY**  
with standardized solution
- **4 AND 5 AXIS MACHINES**  
with and without APC
- **EASY TO OPERATE**  
single view user interface
- **VERY COMPACT**  
starting from 10 m<sup>2</sup> floorspace requirement

Automating machining processes and enabling unattended operation are proven ways to improve productivity and profits. Make the most out of 8,760 hours a year with the affordable and compact Flexible Pallet Tower (FPT) that offers configurable storage for up to 24 pallets with a small footprint.

## Comparable payback example

	No automation	with FPT
<b>Investment cost*</b>	400,000 €	<b>590,000 €</b>
<b>Machining hours/year **</b>	1,600 h	<b>5,100 h</b>
<b>Machine tool utilization rate</b>	40 %	<b>85 % ***</b>
<b>Total income per year</b> (machining sales price 100 € / h)	160,000 €	<b>510,000 €</b>
<b>Payback time</b>	2y 6m	<b>1y 2m</b>

**220 %**  
faster  
payback

\* calculated with a 5-axis HMC and 18 pallets  
 \*\* 50 weeks, 5 days per week, 2 manned shifts (+1 unmanned when automated) per day  
 \*\*\* no spindle time loss due manual setup changes + unmanned night shift

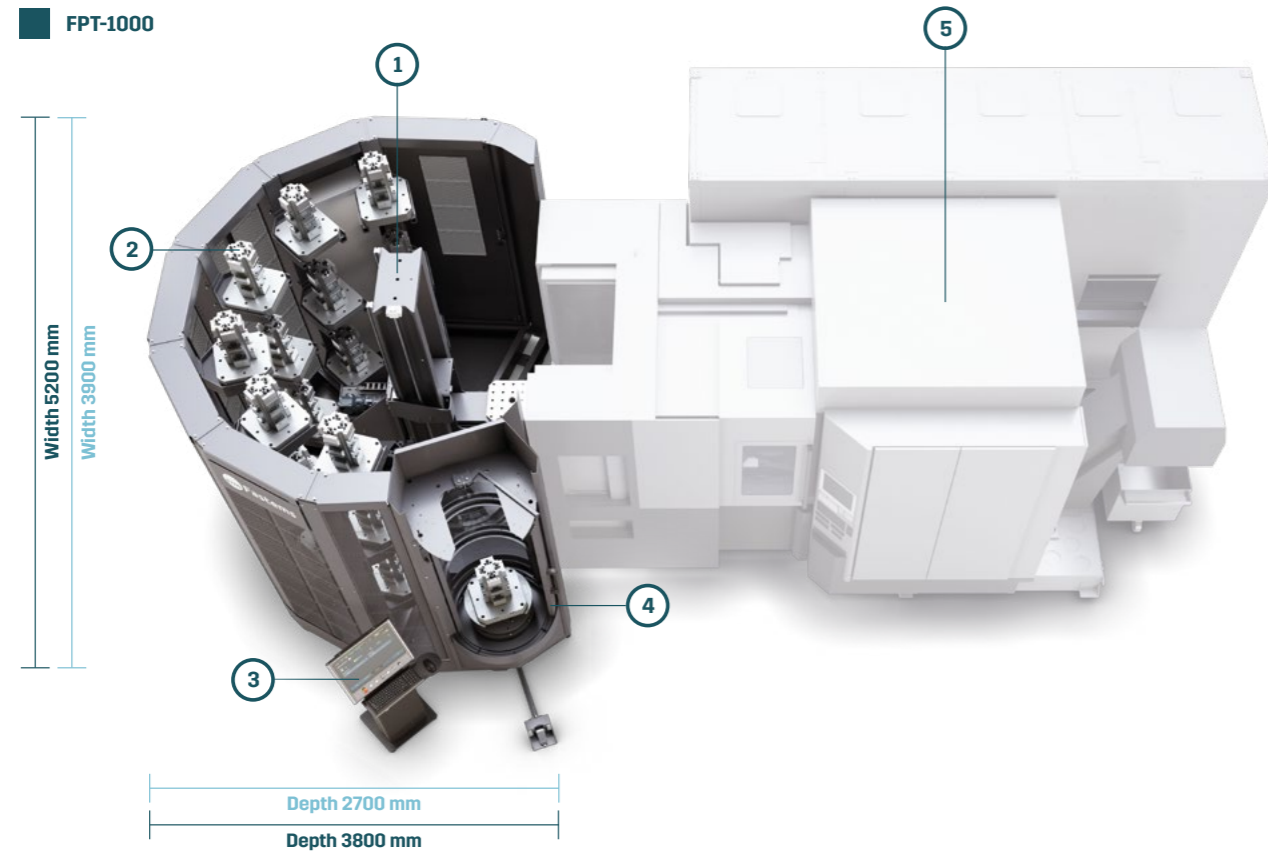


## Comparison on 3 typical pallet automation systems

	No automation	Traditional OEM pallet tower	<b>Flexible pallet tower</b>
<b>Machine tool brands</b>	–	Limited	<b>Any</b>
<b>Machine type</b>	–	Machines with APC	<b>Machines with/without APC</b>
<b>New or existing machine tools</b>	–	New	<b>Both</b>
<b>Unmanned production capacity (pallets)</b>	1	Up to 21	<b>Up to 24</b>
<b>Machine tool utilization</b>	40 %	75 %	<b>85 %</b>
<b>Variable load heights</b>	–	No	<b>Yes</b>
<b>Configurable pallet storage</b>	–	No	<b>From 2 to 4 levels</b>
<b>Single-view user interface</b>	–	Yes	<b>Yes</b>
<b>Order prioritization</b>	Manual	Queue	<b>Automatic</b>
<b>Real-time automatic KPI reports</b>	No	No	<b>Yes</b>
<b>Needed floor space</b>	–	10 to 20 m <sup>2</sup>	<b>10 to 19 m<sup>2</sup></b>

# At a glance

- FPT-500
- FPT-1000



FPT is an affordable and compact automation system for 4 and 5 axis machine tools with or without automatic pallet changers (APC). With a wide library of ready-made machine interfaces, FPT integrates with any machine tool brand, plug-and-play.

FPT works with 300 to 630 mm pallets with two versions, requiring only 10 to 19 square meter

floorpace. The system can be installed against a wall as well. The configurable storage offers capacity for 12 to 24 pallets in 2 to 4 levels, depending on load height.

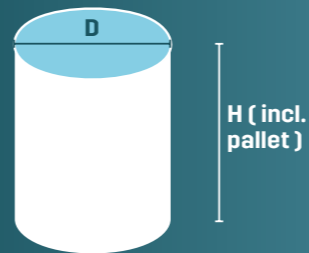
The operator working area consists of a compact and ergonomic station for loading and unloading the work pieces; and a fully adjustable control panel to offer a comfortable operator experience.



- 1 Stacker crane**  
- Pallet transportation
- 2 Pallet storage**  
- Configurable from 2 to 4 levels  
- Ask for two load heights optimization!
- 3 Cell Controller**  
- Touch operating panel  
- Ergonomic with adjustable height
- 4 Loading station**  
- Ergonomic operation  
- Clamping and unloading the parts  
- At a glance system status
- 5 Machine tool**  
- With or without automatic pallet changer  
- 300 to 630 mm pallets  
- Over 90 brands already interfaced with Fastems



	FPT-500			FPT-1000		
Nominal machine pallet size	300-500 mm			500-630 mm		
Maximum load rotational diameter (D)	∅ 630 mm			∅ 900 mm		
Maximum load height (H) <sup>1</sup>	1200 mm	750 mm	500 mm	1200 mm	900 mm	600 mm
Storage levels	2	3	4	2	3	4
Storage places <sup>2</sup>	12	18	24	12	18	24
Load weight <sup>3</sup>	500 kg			1000 kg		
Width	3900 mm			5200 mm		
Depth	2700 mm			3800 mm		
Height (incl. load)	3100-3800 mm			3100-3800 mm		
Control system	Fastems MMS			Fastems MMS		



## FEATURES

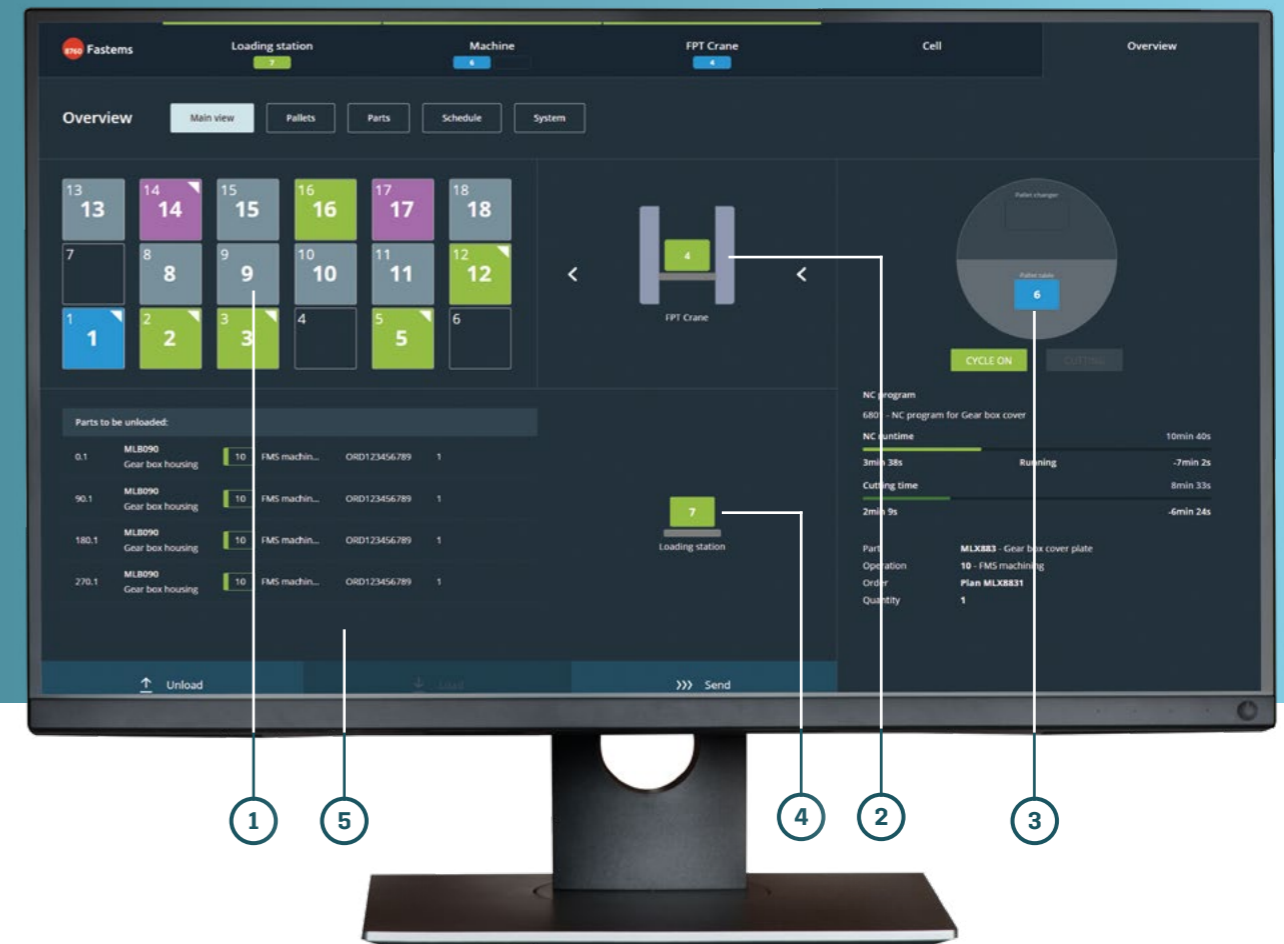
- 2-4 pallet shelves depending on load height
- Compact solution from 10 to 19 sqm
- 1 machine per system
- Integrated coolant handling
- MMS cell controller with touch panel
- Can be installed next to a wall

4 The pallet storage of FPT can be configured based on the load heights from two to four levels.

1, 3 Including pallet  
2 Configuration depends on the selected machine tool

# Manufacturing Management Software MMS

- Drag-and-drop production order
- Ready-made interfaces for hundreds of machine tools
- Recognizes resource bottlenecks in advance
- Automatic KPI reporting



## Easy production control

FPT is controlled by Fastems Manufacturing Management Software (MMS). With hundreds of ready-made machine tool interfaces you can enjoy the MMS benefits right from the day one.

MMS offers a single-view user interface with drag-and-drop production ordering and allows bringing new workpieces into the system in under 60 seconds. MMS also automatically tracks and reports the key performance indicators in real time.

## Choose from 3 MMS plans

### STANDARD

Easy to operate - enabling continuous, unattended production for you.

- Pallets are machined based on order-based work queue or FIFO.
- Intuitive user interface with guidance helps operator to focus on the most important tasks.
- Optional ERP interface.

### ADVANCED

Offers transparent and predictive ways to keep you in control.

- Fine scheduling includes production order and resource simulation for up to 96 hours in advance.
- The MMS checks that all the needed NC programs and tools are available via machine tool integration.
- Order completion dates are calculated up to 6 months ahead.

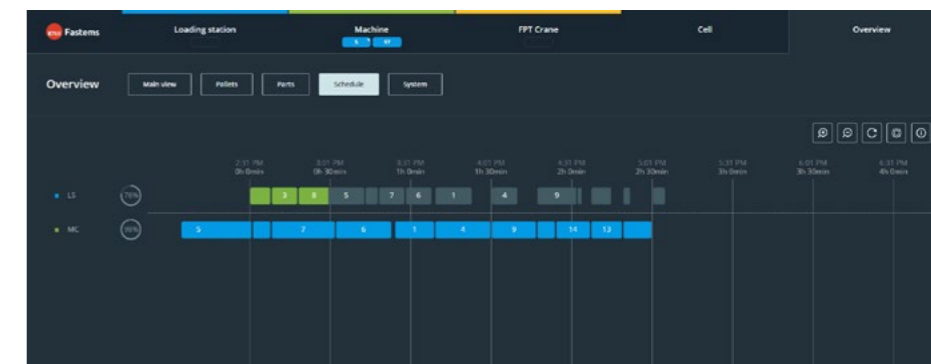
### ULTIMATE

Utilize your existing manufacturing data.

- Define your key performance indicators and view them at a glance with customizable Dashboard.
- Real-time machine status monitoring for continuous production optimization.
- Real-time remote monitoring with alarm functionality for unmanned production.

## At a glance

- 1 **Pallet storage overview**  
- Drag and drop the pallet for machining
- 2 **Stacker crane status**
- 3 **Machine tool view**  
- With or without APC  
- Current NC program and machined part details
- 4 **Loading station status**
- 5 **Operator loading/unloading backlog tasks**



MMS can schedule production automatically based on production orders or FIFO.

WHEN	TOOL	REQUIRED	MISSING LIFE
2:38 PM	6001 Shoulder milling tool CoroMill 390	1 pcs	00:00:55
2:38 PM	6044 Ball nose cutter for roughing CoroMill® 216	16 pcs	05:40:05
2:38 PM	6056 Deep and narrow grooving CoroMill QD	3 pcs	02:10:10
4:41 PM	3006	3 pcs	03:07:16

MMS Advanced package enables tool planning and status views for the easier cutting tool maintenance.

# Services for FPT

## Basics of FPT

Training for a smooth  
ramp-up

Gather your team together to learn how to use FPT and MMS.

## Preventive Maintenance & Spare Packages

For minimum downtimes

With preventive maintenance program you don't have to worry about scheduling of maintenance or changing parts – we will make sure your system runs smoothly at all times.

## 8760 Support

Call us any time

We are here for you 24/7. You can call or send us a support request any time - we are able to solve 85% of issues remotely and our local service is there for you as well.



# Unleash the full potential of your Fastems system

Subject to technical changes



[www.fastems.com](http://www.fastems.com)