



Elevate your CNC production.

Flexible Pallet Tower FPT

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



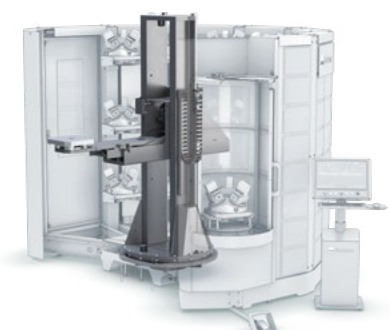
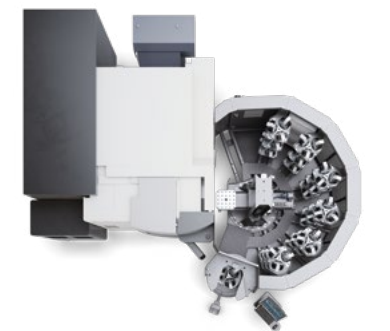
- **FAST DELIVERY**
with standardized solution
- **4 AND 5 AXIS MACHINES**
with and without APC
- **EASY TO OPERATE**
single view user interface
- **VERY COMPACT**
starting from 10 m² floorspace requirement

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-500
Investment cost*	\$ 400,000	\$ 640,000
Machining hours/year **	1,600 h	5,100 h
Machine tool utilization rate	40 %	85 % ***
Total income per year (machining sales price \$ 100 / h)	\$ 160,000	\$ 510,000
Payback time	2y 6m	1y 3m

200 %
faster
payback



* calculated with a 5-axis HMC with modifications plus 18 pallets

** 50 weeks, 5 days per week, 2 manned shifts (+1 unmanned when automated) per day

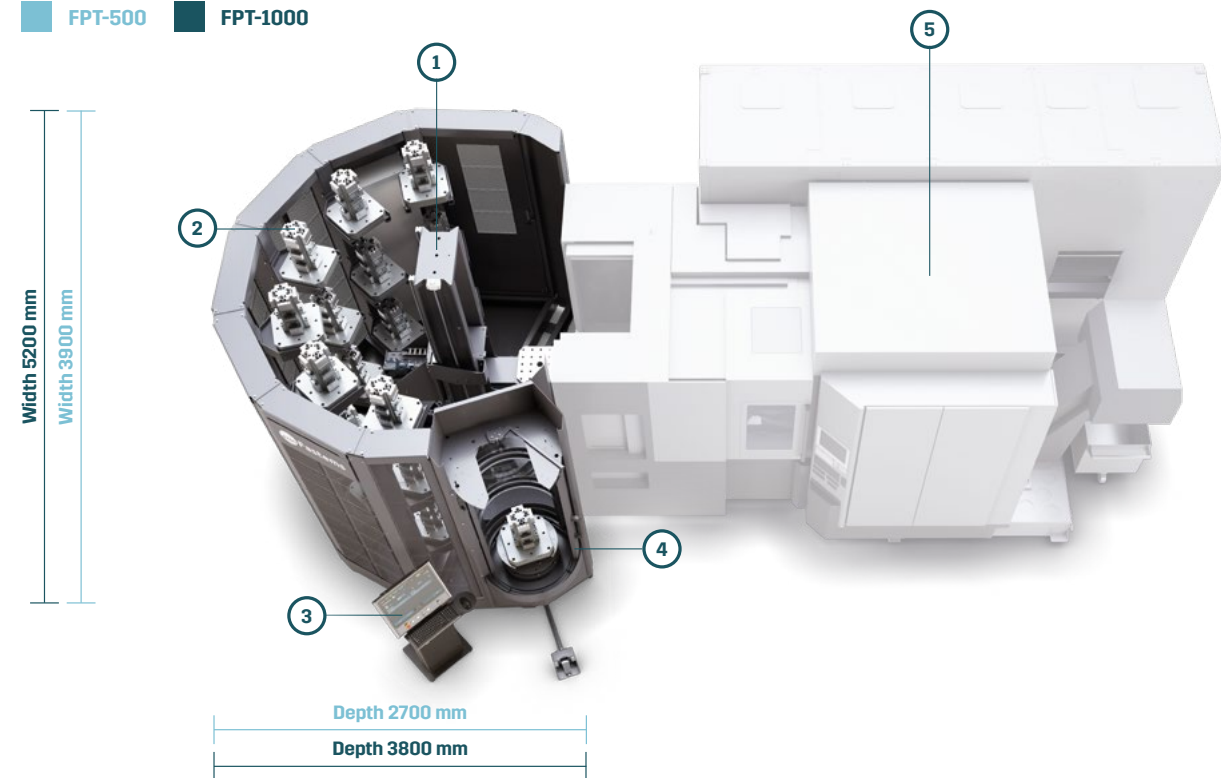
*** no spindle time loss due manual setup changes + unmanned night shift

Comparison on 3 typical pallet automation systems

	No automation	Traditional OEM pallet tower	Flexible pallet tower
Machine tool brands	–	Limited	Any
Machine type	–	Machines with APC	Machines with/without APC
New or existing machine tools	–	New	Both
Unmanned production capacity (pallets)	1	Up to 21	Up to 24
Machine tool utilization	40 %	75 %	85 %
Variable load heights	–	No	Yes
Configurable pallet storage	–	No	From 2 to 4 levels
Single-view user interface	–	Yes	Yes
Order prioritization	Manual	Queue	Automatic
Real-time automatic KPI reports	No	No	Yes
Needed floor space	–	10 to 20 m ²	10 to 19 m²

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

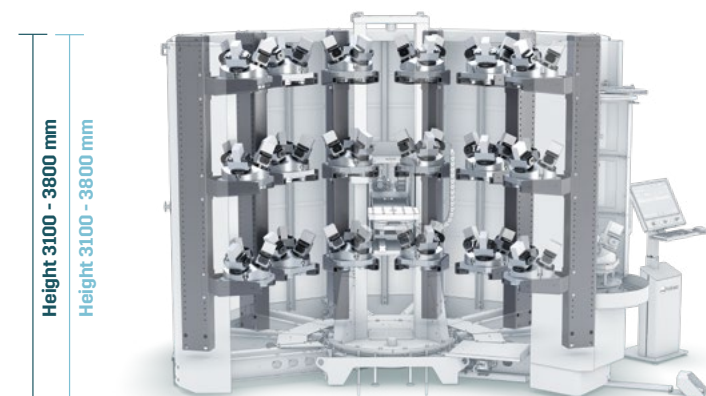
floor space. The system can be installed against a wall as well. The configurable storage offers capacity for 12 to 24 pallets in 2 to 4 levels, depending on load height.

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.

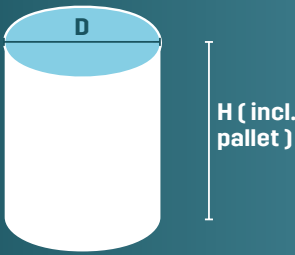
- ① **Stacker crane**
- Pallet transportation
- ② **Pallet storage**
- Configurable from 2 to 4 levels
- Ask for two load heights optimization!
- ③ **Cell Controller**
- Touch operating panel
- Ergonomic with adjustable height
- ④ **Loading station**
- Ergonomic operation
- Clamping and unloading the 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)	Ø 630 mm			Ø 900 mm		
Maximum load height (H) ¹	1200 mm	750 mm	500 mm	1200 mm	900 mm	600 mm
Storage levels	2	3	4	2	3	4
Storage places ²	12	18	24	12	18	24
Load weight ³	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		



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



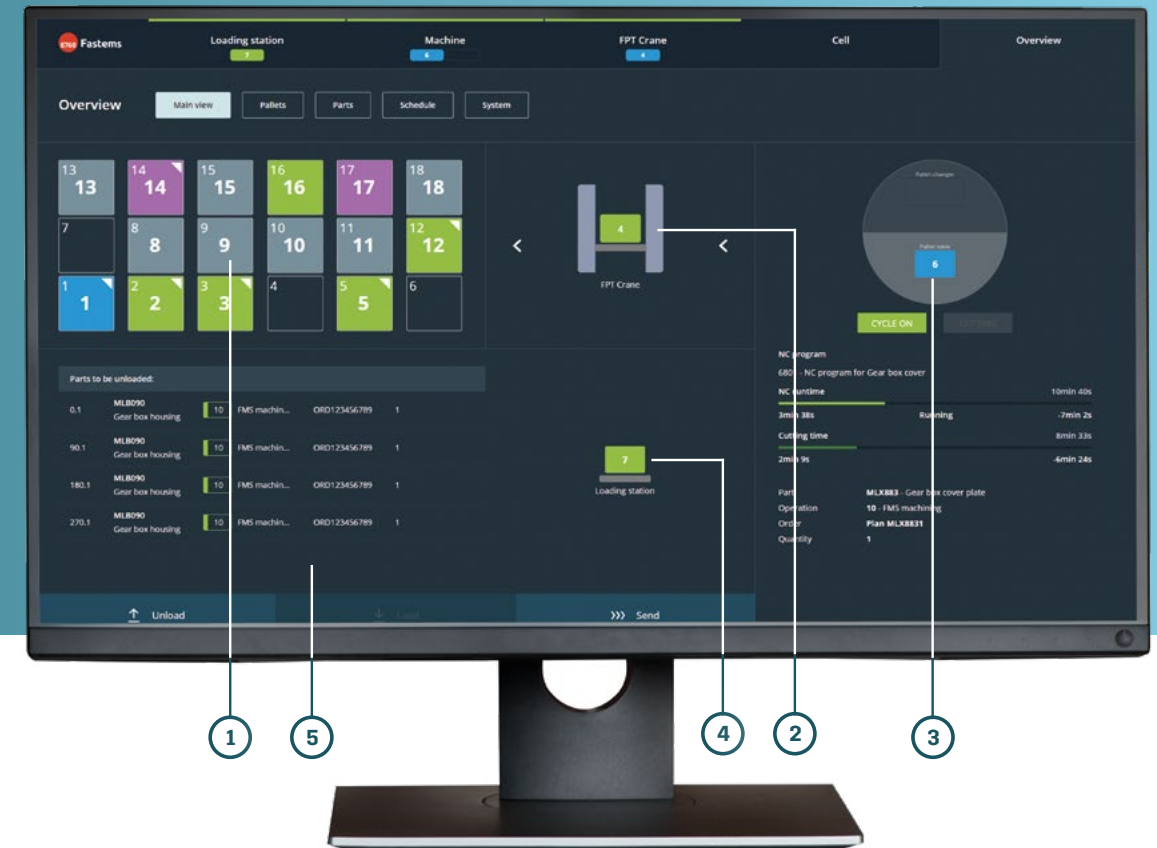
FEATURES

- 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

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.

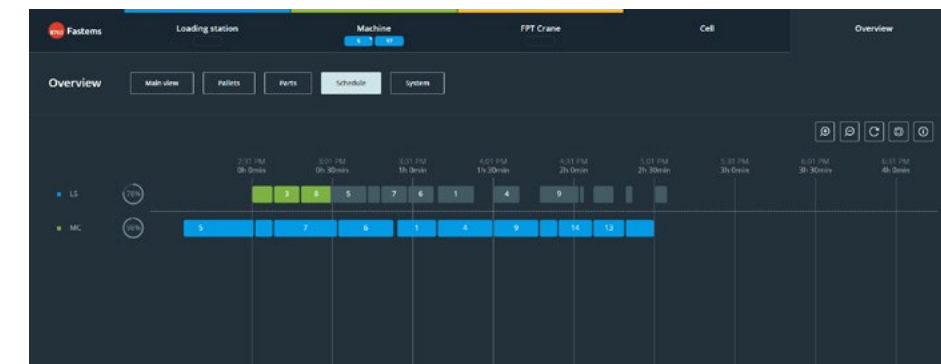
ULTIMATE

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