8760 Fastems

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**
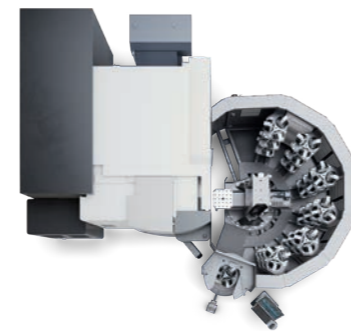 starting from 9 m²
  floorspace requirement

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

220 % faster payback

	No automation	with FPT
Investment cost*	400,000 €	**590,000 €**
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 2m**

*   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
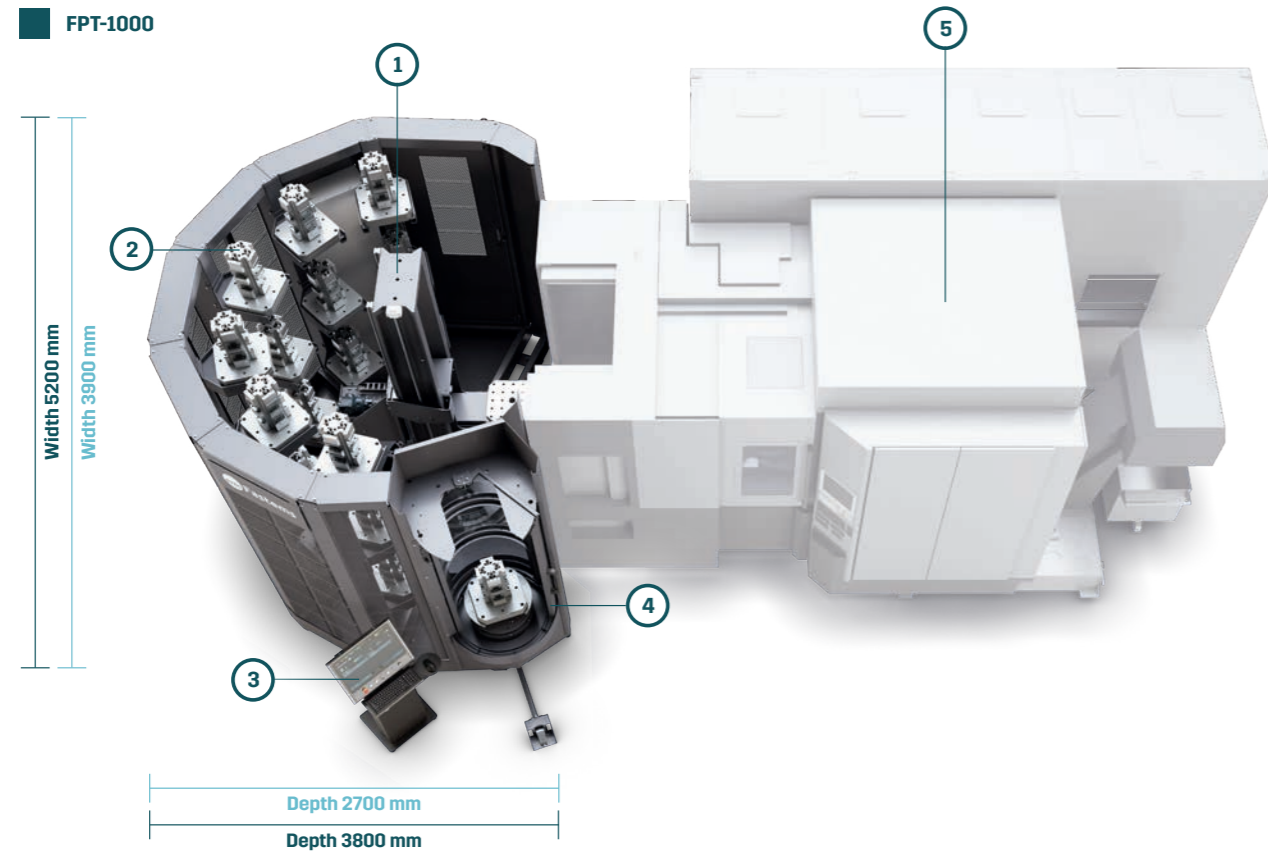   + unmanned night shift

Comparison on 3 typical pallet automation systems

	No automation	Traditional OEM pallet tower	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	–	9 to 18 m²	**9 to 16 m²**

At a glance

■ FPT-500
■ FPT-1000

Width 5200 mm
Width 3900 mm

①
②
③
④
⑤

Depth 2700 mm
Depth 3800 mm

Height 3100 - 3800 mm
Height 3100 - 3800 mm

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 9 to 16 square meter floorspace. 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.
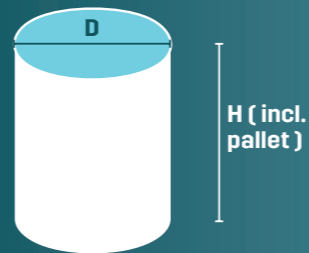
The operator working area consists of a compact and ergonomic station for loading and unloading the work pieces; and a fully adjustable control panel to offer a comfortable operator experience.

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) [1]	1200 mm	750 mm	500 mm	1200 mm	750 mm	500 mm
Storage levels	2	3	4	2	3	4
Storage places	12	18	24	12	18	24
Load weight [2]	500 kg			1000 kg		
Length	3900 mm			5200 mm		
Width	2700 mm			3800 mm		
Height (incl. load)	3100-3800 mm			3100-3800 mm		
Control system	Fastems MMS			Fastems MMS		

D
H (incl. pallet)

FEATURES

- 2-4 pallet shelves depending on load height
- Compact solution from 9 to 16 sqm
- 1 machine per system
- Integrated coolant handling
- MMS cell controller with touch panel
- Can be installed next to a wall

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.
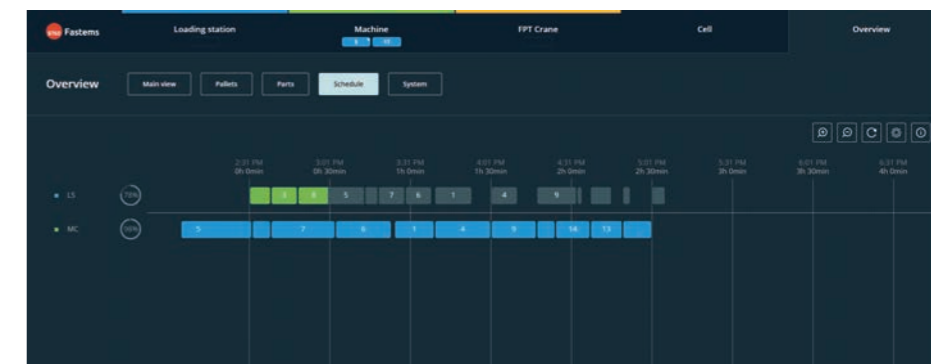
ULTIMATE

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