

Attachment

Technical Description

C-A6003F

Technical Data

General data

X-axis travel	2170	mm
Z-axis travel (single stroke version)	75	mm
Z-axis travel (double stroke version)	250	mm
C-axis range of rotary pallet storage	± 360	°

X-axis drive	servo
Z-axis drive	pneumatic cylinder
C-axis drive of rotary pallet storage	servo

Pallet change time	68	s.
--------------------	----	----

Number of pallet stations:		
For pallets 320 x 320 mm	10	pcs.
For pallets 400 x 400 mm*	6	pcs.
For pallets 500 x 500 mm*	4	pcs.
For pallets Ø148**	24	pcs.
For pallets Ø210**	12	pcs.

Max. workpiece size [Ø x H]:		
For pallets 320 x 320 mm	Ø320 x 400	mm
For pallets 400 x 400 mm*	Ø400 x 400	mm
For pallets 500 x 500 mm*	Ø500 x 400	mm
For pallets Ø148**	Ø180 x 400	mm
For pallets Ø210**	Ø325 x 400	mm

Max. permissible load of handling arm (with pallet)	150 / 250*	kg
Max. permissible load of pallet storage	1500	kg

Interface of automation system	according to DMG MORI standard
System management	iPC integrated with machine control panel

* option

** on request

Lamp inside the pallet storage

Type	LED	
Power	10	W

Electrical Data

Apparent nominal power	1	kVA
Max. real power	0,6	kW
Voltage	400	V
Frequency	50/60	Hz
Fusing (slow-blowing) according to VDE 0100	20	A
Allowed voltage fluctuation at 400 V	± 10	%
Control voltage:	relays 24 V direct current	
Machine lamp:	protection IP 69K, 24V direct current	

Control cabinet:	DIN EN 60204 T1
Control cabinet protection:	IP 54
Cooling of electrical cabinet	by fan

Note:

1. PH 150 FAMOT is designed to work with protective conductor system (protector ground). It cannot be connected to network with earth-leakage protective devices.
2. PH 150 requires separate electrical connection. It is not powered from the machine tool.

Pneumatics

Air connection	6	bar
Air consumption	15	m ³ /h

Environment conditions

Room temperature	+ 15 to + 35	°C
Max. relative air humidity	75	%
Max. installation height above msl	1000	m

Weight

Net weight of the PH unit without pallets	ca. 1550 kg
---	-------------

Dimensions

Pallet storage (without Integration kit)	L x W x H	ca. 1710 x 1764 x 2370 m
--	-----------	--------------------------

Automation system description

The automation system consists of pallet magazine and 2-axes handling arm. The frame of automation system is covered by housing which is in line with machine tool design. Pallet loading station with perfect accessibility ensures easy set-up of the pallet magazine. Handling arm transports the pallet to/from the working area of machine tool. Clamping station with reference points provides high accuracy and repeatability of positioning.

Lubrication

Manual greasing of guideways blocks in strictly defined intervals.

Colour

Covers:	Calcite white / Titanium grey / Graphite black
Sliding protection door:	Graphite black

Levelling elements

4 feet and 2 anchors

Documentation

1 x Operation manual – master (including electrical manual, mechanic manual and programming manual)

Note

This product detects machine relocation. Once the machine is relocated, it is not operable unless its legitimate relocation is confirmed by DMG MORI or its distributor representative.

We reserve the right to apply technical modifications.

C-W0010F

Clamping station EROWA UPC-P (Production)

Dimensions [L x W x H]:	320 x 320 x 64,5 mm
Material:	high quality hardened steel
Clamping modules:	rectangular grid with spacing 150 x 150 mm

Repeatability: <0,002 mm
Clamping of pallet: self-clamping of pallet by springs in case of pressure drop
Pneumatic connection: dried and compressed air, min. 6 bar
air quality according to ISO 8573-1 [3:2:4]
Self-acting clamping force: 50 kN
Weight: 32,9 kg

C-W0018F

Aluminum pallet 320 x 320 with holes

Dimensions [L x W x H]: 320 x 320 x 40 mm
Version: aluminium,
grid of mounting holes D10,5 with spacing 50 mm
Gripping pin: RCS / EWIS Rapid
(compatible with gripper EROWA RSC 5)
Clamping pins: compatible with clamping station EROWA UPC-P
Application: For clamping of workpieces and gauges
Weight: 12 kg

C-P1000F

Jobmanager – Control Comfort Plus includes additional to the standard control different options more for a better efficiency and flexibility of the automation.

- more than one NC-program can be assigned to the pallet;
- complete operation of NC-programs;
- import/export of pallets data;
- tool monitoring (verification of tool availability);
- machine status monitoring;
- monitoring of machine failures;
- diagnostics of automation system and machine tool;
- data transfer from higher management systems.

Machine has to be equipped with M65 function.