



## Exchange P 500/4

Increased productivity solution for  
Laser Sintering systems

## TECHNICAL DATA | EXCHANGE P 500/4

Buffering, loading, and storing exchange frames from and to an EOS P 500 Laser Sintering system for several automated build jobs in a row.

Compatible with: EOS P 500, GRENZEBACH Transport P 500

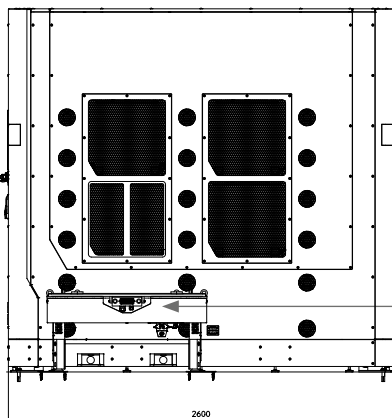
### The Exchange P 500/4 includes following features:

- » Fully automated loading and unloading of the EOS P 500 with an integrated conveyor system and shuttle
- » Four buffer positions for exchange frames, three with an automatically placed cover to completely close the top
- » Passive cool-down of finished build jobs in a buffer position with max. temperature of 250 °C (482 °F)
- » Full maintenance accessibility to the EOS P 500 system possible
- » Load and unload of exchange frames to/from the Exchange P 500/4 with a manual or electric lifter
- » Temperature monitoring of exchange frames at buffer positions
- » Control via Touch Panel (17") or fully automated via MES
- » Horizontal process and safety communication to EOS P 500
- » Vertical OPC-UA communication to MES possible

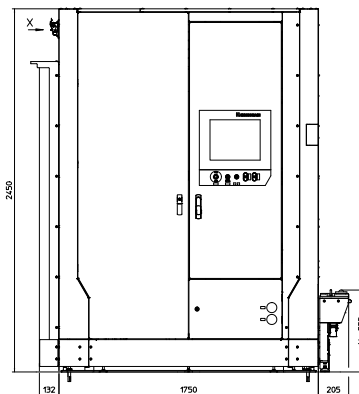
### Optional:

- » Inertization of finished build jobs to decrease powder ageing while cooling down
- » Controlled furnace module to speed build job preparation and enable a homogeneous active cool-down of finished build jobs (under development)
- » Docking frame for GRENZEBACH Transport P 500 to load and unload exchange frames to/from the Exchange P 500/4 manually or fully automated via AGV

### Layout:



Front view  
(includes an optional docking frame)



Side view with HMI  
(includes an optional docking frame)

### Dimensions & weight:

Length	Approx. 1,882 mm (74.09 in)
Width	Approx. 2,600 mm (102.36 in)
Height	Approx. 2,450 mm (96.46 in)
Weight	Approx. 2,500 kg

### Recommended installation space:

Length	Approx. 4,200 mm (165.35 in)
Width	Approx. 5,400 mm (212.60 in)
Height	Approx. 2,950 mm (116.14 in)

**Floor load:** 0,5 N/mm<sup>2</sup>

**Control:** Siemens S7-1500  
17" Touch Panel

### Emissions:

Sound pressure level	< 70 dB(A)
Max. temperature exchange frame	250 °C (482 °F)

**Safety:** CE compliant  
UL possible

### Consumption:

Compressed air	Approx. 0.2 m <sup>3</sup> /h (7.06 ft <sup>3</sup> /h)
Gas consumption	N.a. / depends on customer process
Power	1.5 kW
Protection by fuses	16 A
Feeder cable	3x 2.5 mm <sup>2</sup> (0.0039 in <sup>2</sup> )
Voltage	400 V
Electrical cabinet	Integrated in machine frame

### Grenzebach Maschinenbau GmbH

Albanusstraße 1  
86663 Asbach-Bäumenheim Hamlar, Germany  
Phone: +49 906 982-2000  
E-mail: am@grenzebach.com

Version 09|2022