IB Verfahrenstechnik

A brand by **Piab Group**

MPS 30 - The ultrasonic screening station
with integrated pneumatic conveying for printers **with large build chambers**

Powder sieving stations

- Printer-independent
- Process stable
- Powerful
- Compact

Efficient **ultrasonic screening station** for powder recovery

IB
Verfahrenstechnik

www.ib-verfahrenstechnik.de/en

Ultrasonic sieving station MPS 30

Simple powder handling for medium and large building chambers

1 Multilingual user interface
7“ HMI with programmable parameter sets

2 Vacuum conveying system incl. weight control
Directly from the building chamber via the integrated vacuum conveying system with a feed volume of 30 liters. Including weighing system

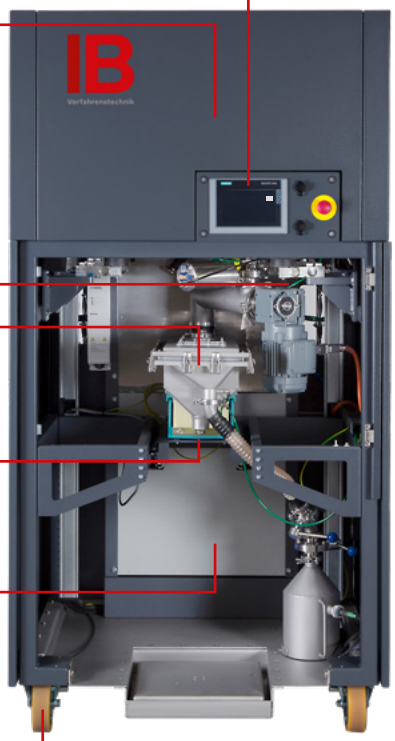
3 Dosing unit
Defined powder loading of the ultrasonic sieve via screw conveyor with variable frequency drive

4 Ultrasonic sieve module
Powerful linear sieve incl. ultrasonic cleaning for long service life and high screen throughputs

5 Inert gas injection
Inert gas purging and oxygen monitoring for screening reactive materials

6 Container connection and weighing system
Container connection incl. weighing system compatible with all 3D printers incl. container weighing. 5l oversize container with level indicator

7 Compact and mobile
Securing the position via locking rollers

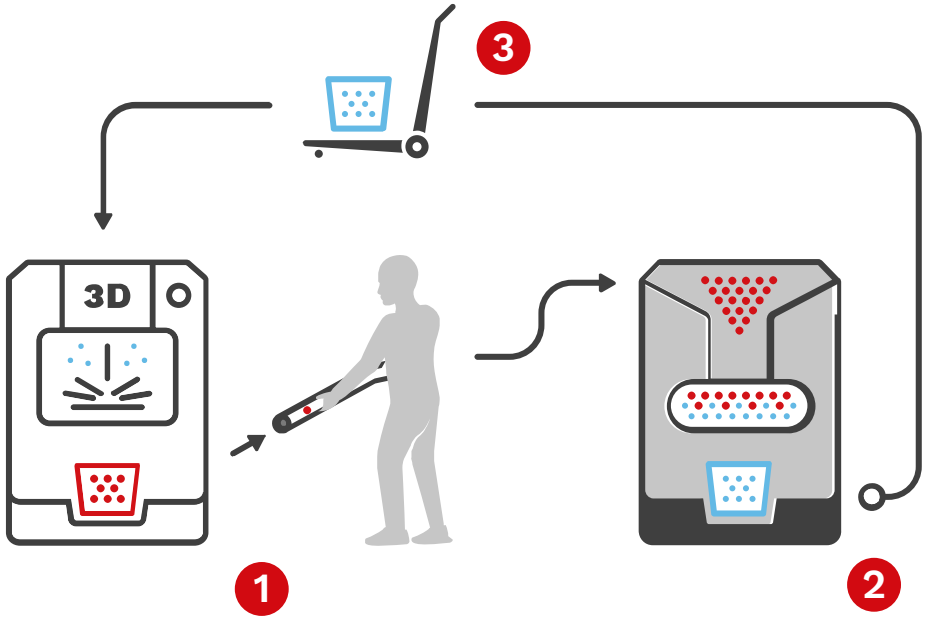


Technical Data

Dimensions	↔	1050 x 1100 x 2100 mm (W x D x H)
Empty weight		450 kg net
Mesh siza		37 µm - 250 µm
Screen drive	≈	Linear drive with ultrasonic cleaning
Inert gas		Argon / Nitrogen
Container volume		3D printer dependent, oversize 5 liters
Electr. connection		400 V, 50-60 Hz
Documentation		CE / EAC | ATEX / GOST

Universally compatible in the smallest space and with the highest reliability

The MPS 30 Ultrasonic Sieving Station enables used powder to be fed directly from the building chamber of the 3D printer via the integrated vacuum conveying system. The return transport of the recycled powder back to the 3D printer takes place via the existing containers.



1. Conveying the powder from the 3D printer via a suction lance into the sieving station MPS 30
2. Inerting and ultrasonic sieving of the used powder in the MPS 30
3. Removing the container from the screening station and transport back to the 3D printer

The advantages

- Powerful ultrasonic sieve with long service life
- Powder feed directly from the building chamber via vacuum conveying system with 30l feed volume
- Inert gas purging and oxygen-monitoring
- CE and EAC compliant
- Weight control of the vacuum conveying system as well as the powder container
- Sieve throughput aluminum 3l / min at 63 µm
- Sieve throughput titanium or stainless steel 6l / min at 63 µm
- ATEX and GOST certified

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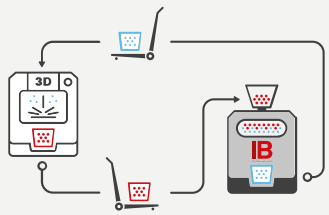
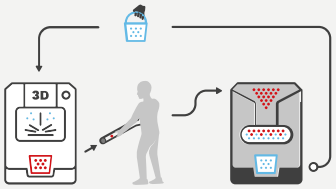
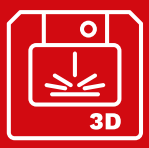
MPS screening stations for every application



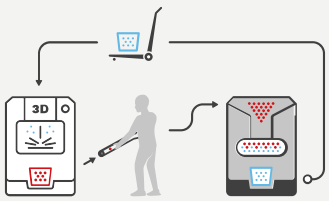
MPS X1



MPS 5



MPS 30



MPS X1
The sieving station for flexible powder feeding via powder hopper

MPS 5
The very compact screening station for 3D printers with small Building spaces

MPS 30
The powerful and adaptable screening station for medium and large printers

Since April 2023, IB-Verfahrenstechnik is part of piab group

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ATEX APPROVED
Zertifiziert für die Zonen 20, 21 und 22