



Modular Unpacking and Sieving Station  
for EOS Polymer Systems



# Modular Unpacking and Sieving Station for FORMIGA P 1 Systems and EOS P 3 Systems

The modular unpacking and sieving station combines the tasks *unpack*, *sieve* and *used powder conveying* that are downstream from the Additive Manufacturing process into an optimised system. Both system series FORMIGA P 1 and EOS P 3 are supported and customised adapters ensure the exact fit of the respective exchangeable frame. As a result, one unpacking and sieving station is all that is needed for heterogeneous FORMIGA P 1 and EOS P 3 machine outfits. This leads to significant savings in both the space and investments needed for manufacturing.

## Mode of operation

The exchangeable frame is inserted and locked correctly and its platform is raised electrically at the push of a button. The exchangeable frame unit is thus easily accessible and the components can be ergonomically separated from the used powder. Loose powder is fed into the integrated sieving module through a perforated plate. In the Powder Bin product variant, the sieved material falls into a barrel-shaped container on a trolley while in the Multibox product variant, the sieved powder is transported to a closed Multibox\* by means of a powder pump.

## Product variant Multibox

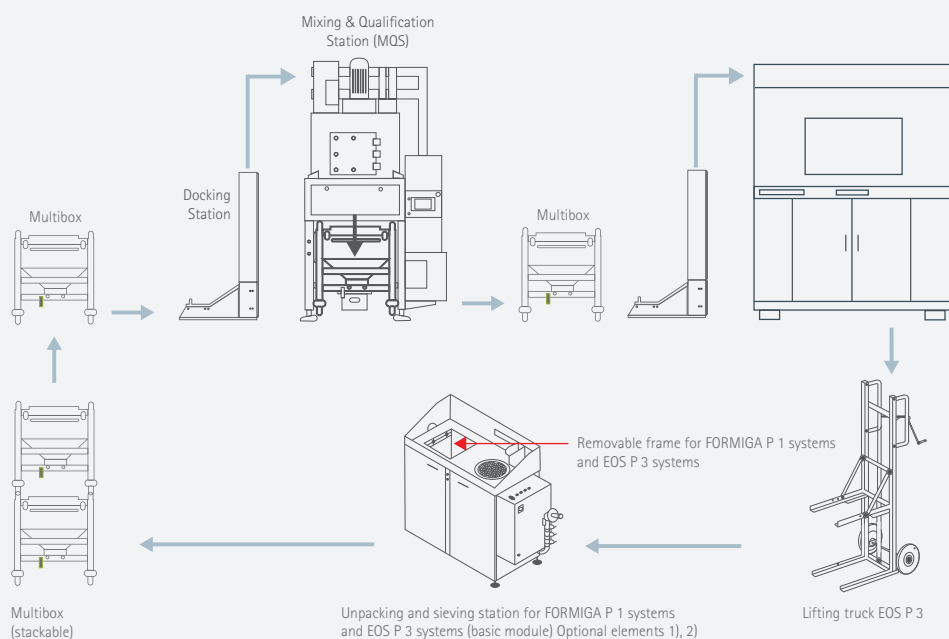
This variant has been designed for users seeking to integrate a professional material management system into their manufacturing. Open pouring processes can be eliminated and a completely closed powder cycle is established through the use of IPCM P plus components

including the Multibox. This rules out the possibility of material contamination and a the effort of lifting heavy powder containers. The used powder in the Multibox is normally returned to the Mixing & Qualification Station (MQS) where new and used powder is mixed, homogenised and conditioned. By means of Multiboxes the conditioned powder is then transported to the respective laser sintering system and fed to it automatically by a Docking Station as required.

The Multibox variant of the modular unpacking and sieving station comprises:

- Basic module of the unpacking and sieving station for FORMIGA P 1 systems and EOS P 3 systems
- Adapter for FORMIGA P 1 or EOS P 3 exchangeable frame
- Optional: dust cover<sup>1)</sup>
- Optional: further adapter for FORMIGA P 1 or EOS P 3 exchangeable frame<sup>2)</sup>

## Product variant Multibox



\* Multibox not included in the scope of delivery. This product is an integral part of the material management solution IPCM P plus. A Multibox is a mobile, stackable material container with a capacity of 230 litres (see schematic diagram and/or IPCM P plus Flyer).