

AZO Ultrasonic Screener type UFS 765

Control screening

Protective screening

Separation of foreign particles

Breaking up lumps

Screening under inert gas atmosphere

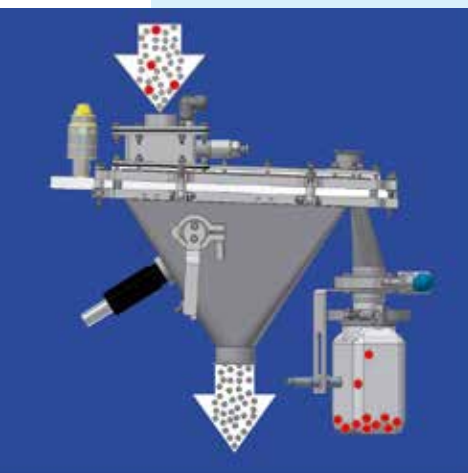
Preferred applications

The UFS 765 ultrasonic screener was specially developed for screening metal powders when feeding 3D metal printers. Metal powders are screened before being conveyed to the 3D printer, and any coarse material is separated out. By inerting, even highly reactive powders can be screened safely under an inert gas atmosphere. Unmelted powder from the 3D printer is recirculated, rescreened and reused.

Special advantages

- The low overall height enables the integration of the screener into powder supply modules
- Supply of inert gas for safe screening under inert gas atmosphere
- Safe and automatic discharge for coarse material
- Simple and quick inspection of the screen
- Automatic cleaning of the screen by ultrasound
- Chrome-nickel steel design with various surface finishes

THE INNOVATION



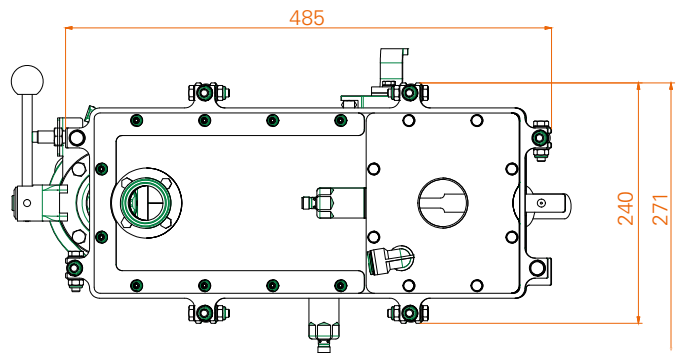
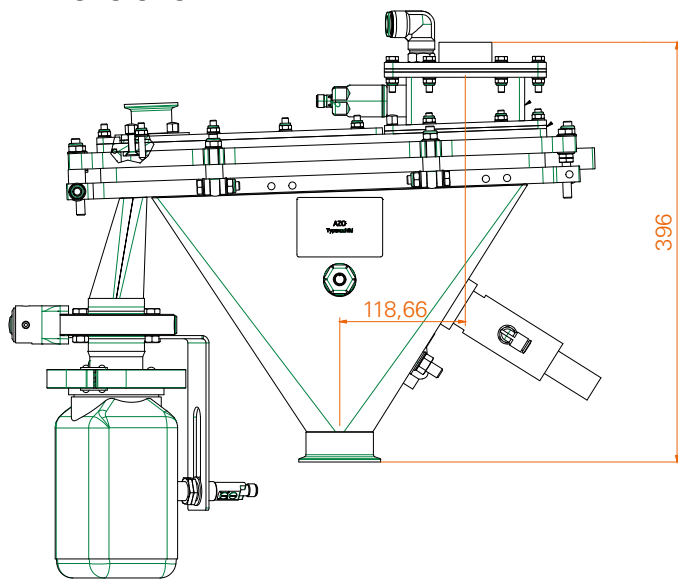
How it works

The bulk material is fed directly onto the screen via the product inlet. The converter of the ultrasonic system is mounted on the screen frame and is energized by the ultrasonic generator with ultrasonic frequency. The vibration is transmitted to the frame and thus to the screen surface. Due to the vibration and the set angle of inclination of the screen, the bulk

material is conveyed over the screen surface. The fines fall through the screen into the fines outlet, from where they can be conveyed pneumatically or by gravity to the next process step. Contained coarse material is transported over the screen surface to the coarse material outlet, where it is discharged from the system. Due to the high-

frequency vibration of the screen, the screen surface is automatically cleaned, which extends the cleaning intervals of the machine and at the same time shortens the setup times of the machine.

Dimensions



Technical Data

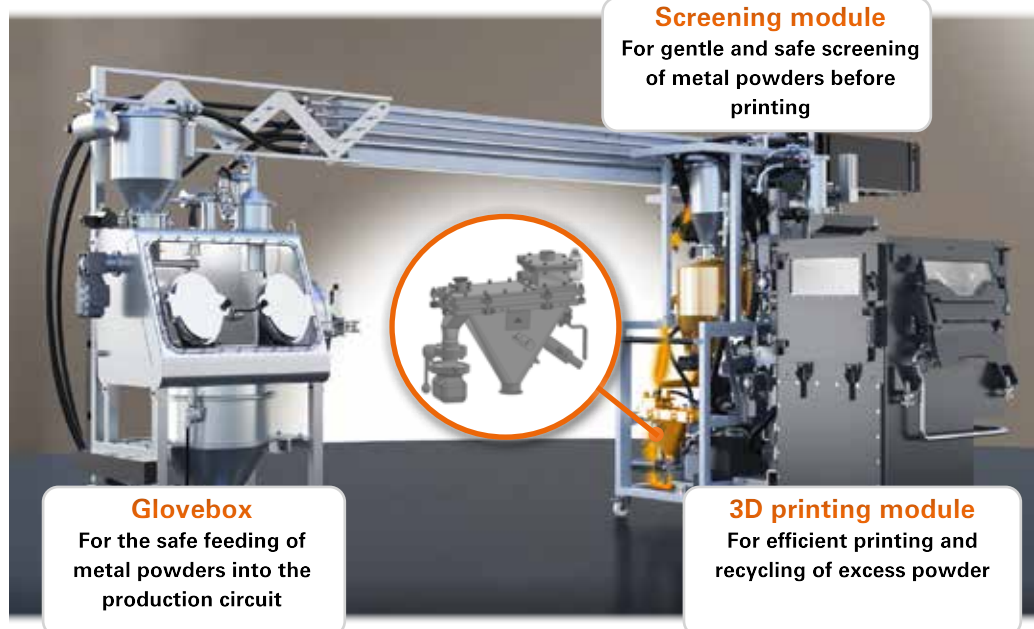
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|-----------------------------|--|
| Type: | UFS 765 |
| Screening surface: | 180 mm x 425 mm (765 cm ²) |
| Standard mesh size: | 100 µm |
| Other mesh sizes available: | 63 µm, 128 µm |
| Screening performance: | Depending on bulk material and mesh size |

Example of use

The ultrasonic screener type UFS 765 is available in combination with a glovebox as a stand-alone solution for screening or as part of the integrated AZO solution for reliable and safe feeding of 3D printers with metal powder.

Screening surfaces with product-specific screen meshes and mesh sizes can be exchanged.

Newly added metal powder can be screened with specified mesh sizes for incoming material inspection. Powder in circulation must be screened before reuse.



Screening module
For gentle and safe screening of metal powders before printing

Glovebox
For the safe feeding of metal powders into the production circuit

3D printing module
For efficient printing and recycling of excess powder

Scan the QR code for more information about this AZO solution



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