FST-10 & FST-20
Single or Double Powder Feeder

The FST-10 Single or FST-20 double powder feeders are part of a wide range of feeders supplied by Flame Spray Technologies that are suitable for all thermal spray, laser and welding applications. These feeders have excellent track records in providing high precision and repeatable powder feed for all the aforementioned processes.

The FST-10 single and FST-20 double powder feeders are some of the easiest to operate and most reliable powder feeders in their class. They have low maintenance requirements and supply powder to the gun in a manner that ensures high quality coatings day in/day out. With the double versions, the two feed lines can be operated separately or simultaneously.

The feeders operate on a volumetric principle that directly controls the powder feed rate by a variable speed powder wheel. Using the Profinet interfaces, all data of the feeders (set/actual values) can be controlled by a master device (e.g. robot control) and transferred back to the feeders PLC.

The feeders are standard equipped with a 1.5 liter hopper. 5 liter hoppers, as well as heating devices, are available upon request.
The proven volumetric feeding principle design has become the standard in the thermal spray industry. The mass flow controlled (MFC) feeder offers unparalleled powder feeding accuracy and repeatability.

**Optionally closed loop weight loss**

The FST-10 or FST-20 can be supplied as a closed loop weight loss feeder (FST-10/WL or FST-20/WL). The powder hopper is mounted on scales in an open cabinet. The scales are connected to the PLC which ensures a closed loop control of powder feeding. The RPM of the grooved disk is continuously closed loop controlled based on the weight loss of the canister.

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**Summary**

- Single or double powder feeder based on the volumetric principle used for accurate and homogeneous powder feed to the plasma or HVOF torch.
- The powder feeder is remotely controlled by the thermal spray system.
- All powder feed carrier gases are Mass Flow Controlled. MFC’s are built-in the FST system gas module or built in the powder feeder when stand-alone option is selected.
- The entire powder feeder is designed to meet all required safety and gas control standards.

**Technical features**

- RPM of feeder wheel: 0.2 to 10 in 0.1 steps (Set/actual value)
- RPM of stirrer in percent 0-100% in 1% steps (Set/actual value)
- Interface CPU with Profinet
- Powder hopper mounted on a mobile cabinet: 300 x 600 x 1.400 mm (DxWxH)
- Color 9007/6029 (other color upon request)
- Controller: Siemens S7-300 SPS
- Motor driven hopper with stirrer with PINS
- 1,5 or optional 5 Liter powder hopper
- Standard disc groove 16 mm x 1.2 mm for a feed rate of approx. 5 to 200 g/min (other discs on request)
- AC volt cable 230V 6m long with Euro plug
- English documentation
- CE-Conformity Declaration

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**Note:** for more technical details about our systems, please contact your local FST sales contact.