



A D V A N C E D C O A T I N G S O L U T I O N S

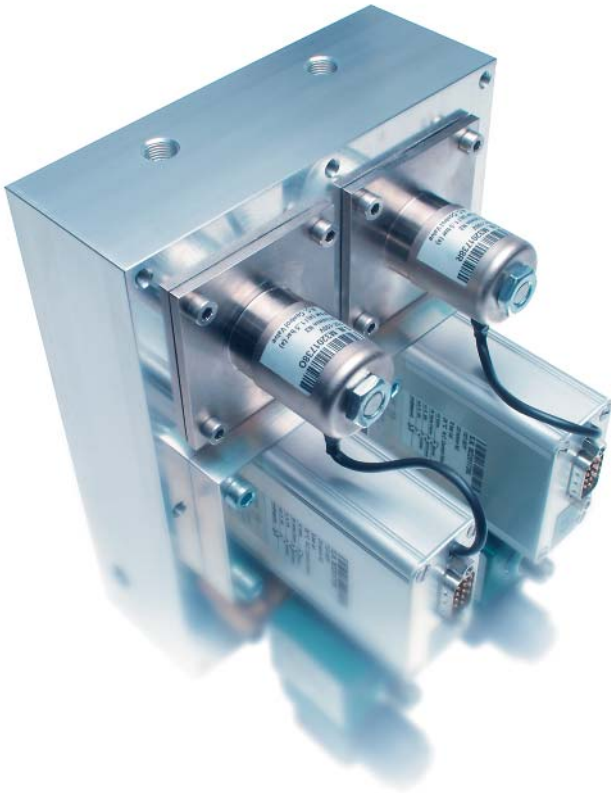


It flows

CPF Powder Feeders for Standard, Micro and Nano Powders

Fine Arts

Powder Feeders to Satisfy the Highest Demands



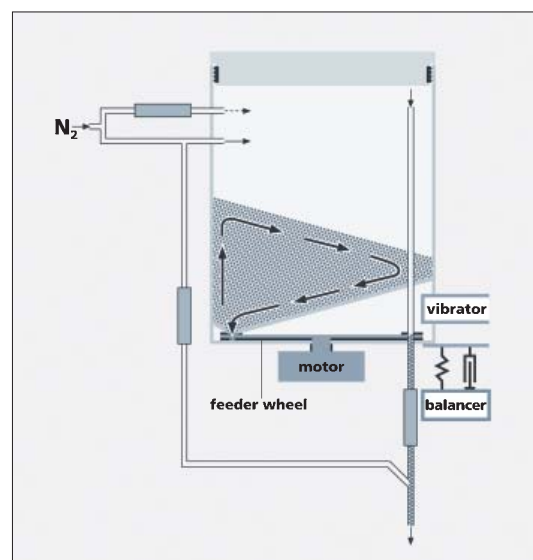
The CPF powder feeder achieves an accuracy of up to 2% for a number of powder types and operates on volumetric and gravimetric feeding principles. It is dust-protected and there are different versions available for plasma, laser and HVOF coating.

Thermico's CPF powder feeder is the result of our consistent R&D efforts to overcome the poor flow properties of micro-fine powders of $-10\ \mu\text{m}$, for which we have developed a vibration system that fluidizes the powder.

The CPF feeder wheel operates independently of the powder column and measures the powder into the carrier gas flow with a high precision rate, transporting it to the torch. The carrier gas flow is mass flow-controlled with an accuracy of $\pm 2\%$ from the chosen flow values. The powder containers are easy to change and clean and may be equipped with a standard plus two optional feeder wheels.

Using gravimetric control via the scale/feeder wheel control circuit ensures a steady powder flow to achieve a high degree of precision.

Thermico's CPF powder feeders are an ideal solution when it comes to the special quality requirements of the aviation industry.



Under Construction

The Advantages of a Modular System

Thermico powder feeders are assembled to a modular construction principle from tried and tested basic components. Depending on the customer's individual requirements, the following modules are available:

- transport container incl. drive, feeder wheel and bypass valve
- gas mass flow control for carrier gas
- container heater up to 80° C
- carrier gas heater and thermal hose insulation
- dust-protection casing to maintain industrial health and safety standards when working with micro and nano powders, including acrylic glass pane
- powder feed hoses, nominal widths D4, D3,1 D2 and D1 mm
- powder laboratory
- development and testing service.



Basic Level

CPF 1 for Beginners

Our CPF 1 basic model guarantees an easy and low-budget start in the world of standard and micro powders. Thermico's basic model is perfectly suited for upgrades and the replacement of conventional powder feeders. The CPF 1 is equipped with a transport container and vibration technology, as well as external carrier gas control.

The accuracy of the powder feed is around $\pm 5\%$.

The transport wheel is adjusted by means of a shaft encoder and display, the remote control via a manual panel.

Container and carrier gas heater for the CPF 1 are optional.



Advanced Level

The CPF 2 with Carrier Gas Mass Flow Control for Sophisticated Demands

The CPF 2 has proved itself as a robust standard model, offering a precise carrier gas control accuracy of $\pm 1\%$ and a powder measuring accuracy of $\pm 5\%$ from the chosen flow values.

This basic low-cost model is equipped with a transport container, vibration system and carrier gas mass flow control. Alternatively available as a twin model, featuring two transport containers and two carrier gas lines.

This stand-alone version has a fixed operator panel featuring a touch screen display, while transport wheel and transport gas are controlled via a shaft encoder.

The CPF 2 is ideally suited for upgrades and the replacement of traditional powder feeders.

Container and carrier gas heater module are optional.



Top Level

The CPF 2 Featuring Gravimetric System for Perfectionists

This top-of-the-range model impresses with its gravimetric control of a powder measuring accuracy of $\pm 2\%$ and its display and documentation in g/min.

The CPF 2 comes complete with transport container, vibration system and carrier gas mass flow control, is available as a single or twin model and fulfils maximum requirements. Its protective casing featuring an extractor connection for the handling of micro and nano powders is an additional distinctive feature.

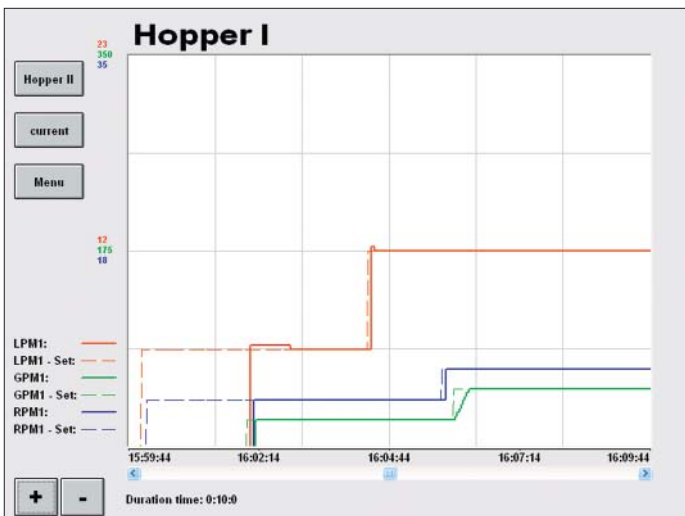




Another crucial extra is its weighing system, which guarantees utmost precision due to its gravimetric powder measuring system.

Thermico's top model is available in two designs: as a remote model for integration into a super-ordinate control system – linked to a super-ordinate PLC or PC by an analogue interface or data bus – or as a stand-alone version featuring its own control and operator panel with a 7.4" touch screen.

Container and carrier gas heater modules are optional for both versions.





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