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# Flowsense sets new standards: Constant layer thicknesses thanks to automatic control of the powder quantity

With Flowsense, WAGNER is launching a ground-breaking technology that measures and fully automatically controls the powder output. The result: Consistently high-quality results and reduced powder consumption thanks to constant layer thicknesses. This makes Flowsense a quantum leap in powder application.

As part of the Flowsense technology, each individual feeding element is equipped with high-precision measuring sensors. The smart system constantly monitors the powder flow and compares the powder quantity with the target values. Flowsense can even measure the powder output in g/min and individually for each gun. The exact dosing of the powder quantity can be saved in the recipe and is permanently reproducible, without any manual corrections, which would be necessary without Flowsense.

## High quality & savings thanks to constant layer thicknesses

In powder centers without Flowsense, the user has to monitor the powder quantity himself in order to be able to readjust it in good time. The so-called sawtooth effect occurs to varying degrees and leads to uneven powder output during production. With Flowsense, however, the output parameters are adjusted independently and deviations are corrected automatically. The system even compensates for influences on the output, e.g. caused by fluidization and fluctuating powder levels. The sawtooth effect is smoothed out by the control to a micro-sawtooth that can no longer be measured. The powder output can be adjusted much better to the target layer thickness, which in turn minimizes the safety margin. This enables significant powder savings. Constant coating thicknesses within certain limits are also an important criterion for certification by quality associations for industrial coating.

#### **Extended service life of wear parts**

Another advantage is predictive maintenance: As Flowsense permanently monitors the powder flow, blockages, for example, are detected in good time and rejects are avoided. In combination with the injector technology, Flowsense also provides information on the current status of the collector nozzles. This is clearly visualized on the touchscreen of the powder center in a traffic light system. This allows the user to keep an eye on the exact system status at all times and provides continuous information on



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whether the coating can achieve the desired quality. This allows the user to replace the collector nozzles in no time at all and exactly when it is actually necessary.

### Simple operation & integration with IoT

Flowsense is configured and operated on the powder center's touchscreen with intuitive user guidance. Flowsense works mainly in the background and automatically displays relevant information. The smart system will also be integrated into WAGNER's COATIFY information and management platform, which can be used to intelligently visualize your own coating system. With detailed knowledge about the system status and information about which recipe can currently be reliably produced, the user can control production in a cost-optimized and sustainable way.

Flowsense is also convincing in practice: WAGNER customers who are already using the system can confirm the benefits across the board. The automated powder quantity control significantly reduces the workload of coating employees. Customers also report immediately recognizable quality improvements.

Find more information at:

go.wagner-group.com/flowsense



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# **Pictures:**





The status of each individual gun or injector is clearly displayed on the touchscreen in a traffic light system. The request for the next wear part change only appears when it is actually necessary.