

VSP-PC Powder Coater Deposit nanoparticles on your powder

Reproducible powder samples with catalytically active powders in less than one day

Fully automated gas-phase synthesis and coating of powder support

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Concept visualisation of the VSP-PC. No rights can be derrived from this document.

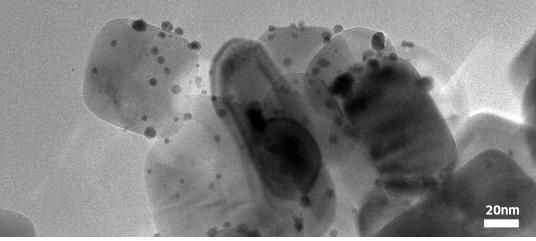
Fast, reproducible and automated production of

model catalyst samples

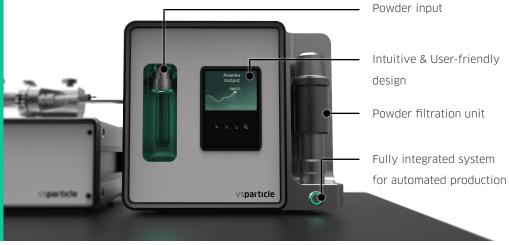
Powder samples with varying nanoparticle size and target loadings are key in catalysis research. However, complex particle synthesis methods impair reproducibility. Furthermore, powder handling and functionalization involves many process steps, affecting catalytic performance in a negative way. With the VSP-PC powders can be coated homogeneously in the gas phase drastically reducing development time. The automated synthesis and coating ensures reproducible sample fabrication at the push of a button.

Details

The VSP-PC is a table-top, user-friendly powder coater device that enables automated production of powders coated with catalytic nanoparticles. The powder batch size and particle size can easily be tuned with just a few process parameters that can be operated from a user interface. Typical preparation of a batch of powder (~500mg/h) can be done in less than a day with less than one hour operating time.



5 nm Au nanoparticles on Titaniumoxide support deposited with the VSP-PC



VSP-PC main characteristics

Request more information on the DEMO program now!

Joerie Gennisse +31 88 308 0419 j.gennisse@vsparticle.com

Specifications

Target Electrode material	metals, metal oxides, carbon
Particle size	cluster size to 10nm particles
Support	compatible powders <100 micron
Powder output	1 mg/h (100 wt% loading) up to 1000 mg/h (0.1
	wt% loading)
Carrier gas	Ar, N2, Contact VSPARTICLE for use of reactive
	gases such as H_2 and O_2
Flow rate	10-35 slpm