

A young girl with dark hair, wearing a white shirt and blue overalls, is riding a large, mechanical dragon. The dragon is white and grey with red accents, including a propeller on its tail and small red lights. It has large, transparent wings and is flying over a vast, arid landscape with wavy, layered rock formations. The sky is filled with soft, white clouds. The overall scene is surreal and imaginative.

NEW HORIZONS IN POWDER ANALYSIS

Anton Paar offers the world's broadest portfolio in powder characterization

DENSITY

PARTICLE SIZE

SURFACE AREA

PORE SIZE

CELL POROSITY

REACTIVE AREA

CHEMICAL COMPOSITION

ZETA POTENTIAL

POWDER FLOW PROPERTIES

Particle size analyzers

Particles can be complex, but measuring them doesn't have to be. PSA series enable particle size measurements at just the touch of a button, and much more:

- PSA series: Laser diffraction for size analysis of liquid and dry dispersions
- The multi-laser technology provides an extensive range of measurable particle sizes from 0.1 μm to 2500 μm
- Focus on your particles: Kalliope™ software reduces operator involvement to a minimum



Powder rheology

Advanced true powder rheology that brings the full array of traditional rheological methods, and decades of experience, into the field of granular media:

- The amazing precision of renowned MCR Evolution rheometers, upgraded to a versatile and powerful rheometer for powder characterization
- High reproducibility through fully automated measurement modes
- Multiple measurement modes for both quality control and scientific purposes
- Exchangeable measurement systems and flexible software allow characterization from hopper design to segregation testing and state-of-art fluidized bed rheometry



Adsorption analyzers

In adsorption analysis, it is essential to combine both intelligent instrument design and advanced computational data reduction models:

- Wide range of instruments for vapor sorption, physisorption, chemisorption, and high-pressure sorption
- Fully automated systems with multi-station analysis and sample preparation options
- Perfect for analyzing pore size, surface area, and gas/solid interactions of catalysts, pharmaceuticals, battery materials, adsorbents, and all other porous materials
- World-renowned data reduction models and quick measurement reports, for traditional and complex new materials



Mercury Intrusion Porosimeter

The most widely used method to determine the porosity of macroporous materials:

- Designed to provide the safest operator experience, even when working with mercury
- Features such as the simplified liquid mercury introduction and automated oil purging make PoreMaster the easiest-to-use mercury intrusion porosimeter
- The ultimate in high-pressure data resolution is achieved via the control provided by the screw drive and the intelligence of the autospeed pressure generation routine
- Liquid mercury filling and low-pressure measurements as well as high-pressure measurements are typically completed within 30 minutes



Solid density analyzers

Get all the solid density values you need from one source – with the highest accuracy available:

- An instrument portfolio that covers measurements of true or skeletal density, tapped bulk density, and geometric density
- Best-in-class: Highest-accuracy results over the widest measurement range
- Safe and cost-effective: No liquid mercury needed to measure geometric density
- Non-destructive gas pycnometry: Works with inert and clean gas



Raman spectrometers

Get precise Raman spectra to analyze the composition of your powder sample, while benefiting from easiest guided workflows available on the instrument:

- Choice between a Direct model with sample compartment and a Fiber model with flexible probe for measurements outside the instrument
- Combination of two wavelengths for maximum sample variety
- Specialized reference libraries covering thousands of substances
- Analysis of chemical composition, verification in quality assurance, and monitoring of sample's changes



New horizons in powder analysis

In the world's broadest powder characterization portfolio, you will certainly find the right solution for your daily work.

Find out which instruments are suitable for you and which technologies they employ. The better you know your particles, the better you can predict your material's behavior. And the better your measuring technology is, the better you know your particles.

Have a look at all the parameters you can measure with Anton Paar particle characterization instruments.



**Anton Paar offers the world's broadest portfolio
in powder characterization:**

29 instruments to determine more than 12 different parameters.

To find out more browse through our portfolio here:

www.anton-paar.com/particle-characterization

