



LabService
Providers

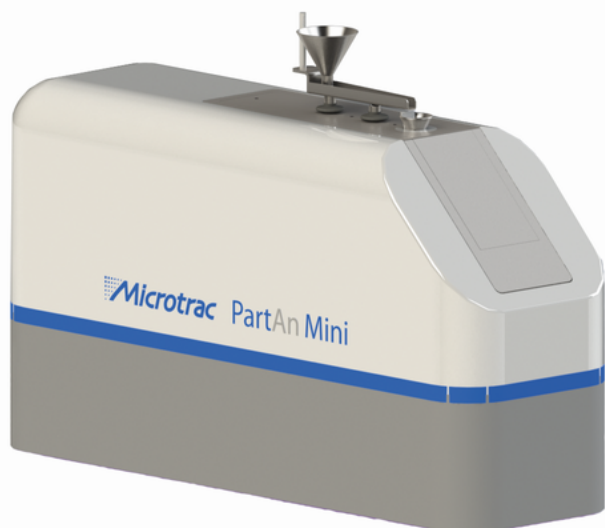
LABORATORY EQUIPMENT & INSTRUMENTATION
PRODUCT CATALOGUE

PARTICLE SHAPE & SIZE ANALYSERS

PARTICLE SHAPE & SIZE ANALYSERS



LABORATORY & PRODUCTION IMAGE ANALYSIS



PARTAN MINI

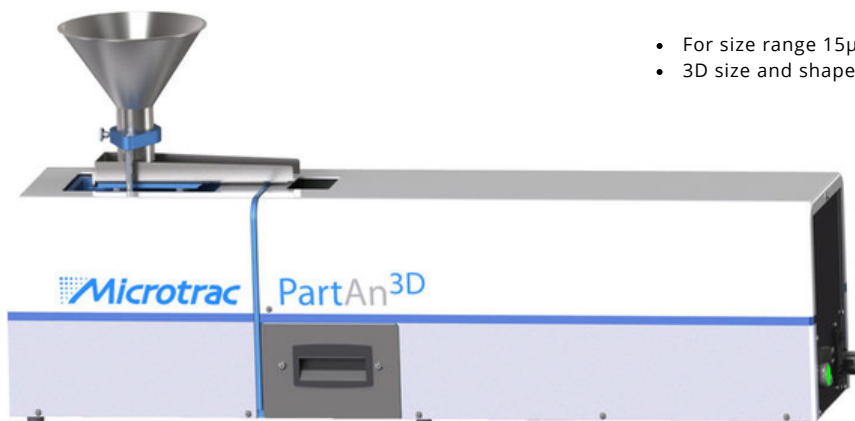
- Fine particle size and shape analyser.
- Characterizes >30 morphological parameters.
- Measurement of dry particles ranging in size from 4µm to 4,500µm.
- Utilises compressed air to disperse fine powders.
- Analyses 100 images per second with a high-speed, high-resolution camera.
- Rugged design with a compact footprint.
- Enclosed optical system reduces downtime for maintenance.

PARTAN 3D & 3D PRO

- Characterizes >30 morphological parameters including 3D.
- Measurement of dry particles ranging in size from 15µm to 35,000µm.
- 3D size and shape for particles ranging in size from 35µm to 35,000µm.
- Analyses 100 images per second with a high-speed, high-resolution camera.
- Rugged design adaptable to any laboratory setting.
- Enclosed optical system reduces downtime for maintenance.

PARTAN 3D PRO

- For size range 15µm to 35,000µm.
- 3D size and shape for particles ranging in size from 35µm to 35,000µm

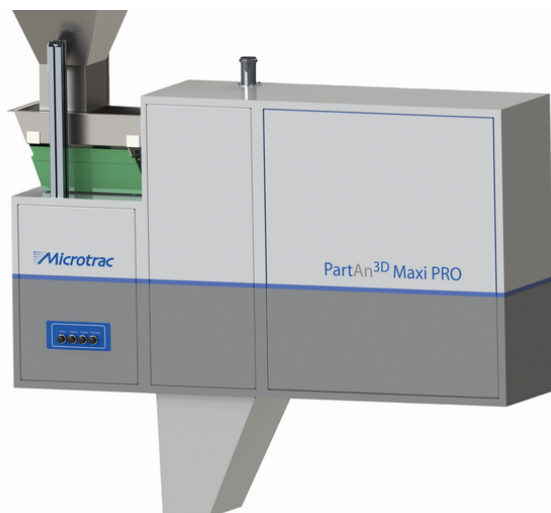


PARTAN 3D MAXI & 3D MAXI PRO

- Characterizes >30 morphological parameters including 3D.
- Measurement of dry particles ranging from 280µm to 127,000µm.
- 3D size and shape for particles ranging in size from 35µm to 35,000µm.
- Analyses 100 images per second with a high-speed, high-resolution camera.
- Rugged design adaptable to any laboratory setting.
- Enclosed optical system reduces downtime for maintenance.

PARTAN 3D MAXI PRO

- 3D size and shape analysis for large materials ranging in size from 280µm to 127,000µm.



PARTAN SI & SI PRO

- Wet particle size and shape analyser integrated proven laser diffraction technology.
- Provides visual (image) validation of agglomeration.
- Measures size distribution of particles from 0.01µm to 280,000µm.
- Measures >30 morphological parameters of materials ranging from 5µm to 1500µm.
- 3D size and shape for particles ranging in size from 35µm to 35,000µm.
- Sample recirculatory with various speed settings.
- Inline sonication provides a high degree of flexibility for sample dispersion.
- Rugged design adaptable to any laboratory setting.
- Enclosed optical system reduces downtime for maintenance.

PARTAN SI PRO

- Particle size and shape analyser for wet dispersions ranging in size from 5µm to 1500µm.
- Suitable for integration into any process loop.
- Features a proprietary sample extraction process that ensures optimal conditioning of materials.
- Scalable volume requirement to meet a wide range of analysis needs.

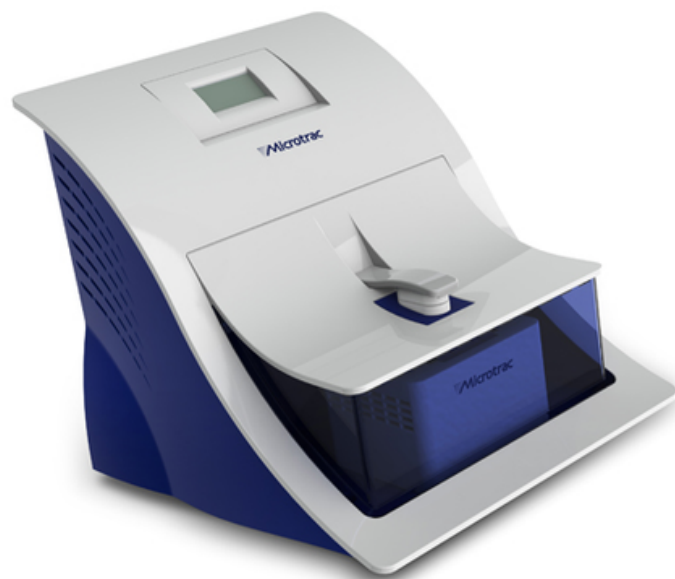
3D MEASUREMENT SOFTWARE

- Powerful, patented 3D measurement software for unparalleled analysis capacity.
- Classification function allows users to focus on areas that need improvement or duplication to increase overall production quality.
- Compare multiple parameters to make critical decisions about the quality of material.
- Permanent configuration of a Standard Operating Procedure —ideal for multiple users across multiple shifts.
- Identify and isolate parameters of interest for further investigation.
- Report on all filters to provide a more detailed understanding of areas of interest during the analysis.
- Exclude filters from measurement and limit reporting to necessary data.
- Easy data export to 3rd party software platforms
- Comprehensive reporting for R&D and methods development. (Choose a number of channels and channel widths; choose from >30 morphological parameters in 1 to 6 tabular columns; streamline and lockdown for at-a-glance QC “pass/fail”; image library querying).

DUSTMON

- Measures dust index of granular and powder products.
- Determines quantity of dust created - even low dust concentrators.
- Eliminates risk of excessive dust created by products.
- Calculates particle size distribution
- Uses light obscuration to determine the length of time it takes for dust to settle.





NANOTRAC WAVE II

- Accurate particle size zeta potential analyser ideal for characterising nanoparticles.
- Enhanced optical signal for superior accuracy compliments of Reference Beating – available only from Microtrac.
- Unique probe design, fixed optics, and 180° back-scatter collection enables fast and precise measurement across the widest concentration range – from ppm to near solids (40 % w/v).
- No “A priori” or advance knowledge of the particle size distribution required.
- Measure Zeta Potential closer to iso-electric point by eliminating errors caused by electro-osmotic flow.
- ZP measurement ranges from -200 to +200mV
- User definable data presentation modes.
- Distribution – standard volume particle size distribution.
- Ensures data consistency when transitioning from “legacy” instrument.
- Simultaneous measurement of size and concentration.
- Removable sample cell – available in Teflon or stainless steel.
- 150 µl sample volume required – ideal for high value materials.
- Peltier temperature control device.
- Multiple flow cell options – ability to connect a titrator.



NANOTRAC WAVE II Q

- Nanoparticle size analyser that accurately measures colloidal systems across widest concentration range on the market from ppm to 40% w/v
- Measures particle size from 0.8 to 6,500 nanometers.
- Simultaneous measurement of size and concentration.
- Cuvette error detection alerts.
- No blank measurement or prior knowledge of size distribution required – simply load cuvette and measure.
- Peltier temperature control device.
- Compatible with 5 cuvette volumes (Macro; Glass; Semi Micro; Micro; Stainless Steel / Sapphire).
- Compliant with ISO 22412 and CFR21 Part 11.

NANOTRAC-FLEX

- In-situ particle size analyser with fast and accurate analysis capability.
- Ideal for measuring particles across a wide concentration ranges using minimal sample volume.
- External probe with 180° back-scatter grants the flexibility to measure suspensions from sub-nanometer to several microns, in-situ or on a laboratory bench.
- Turn any vessel into a sample cell – the external probe allows you to dip and measure.
- Numerous probe lengths available from 1.0 meter to 3.5 meters
- Small sample volume required, as low as 5 µl
- Amplified optical signal for unparalleled accuracy and sensitivity, compliments of Reference Beating – only from Microtrac.
- Measures particles ranging in size from 0.8 to 6,500 nanometers.
- No “A priori” knowledge of the particle size distribution is required.
- Simultaneously measure size and concentration.
- Universal solvent compatibility.
- Molecular weight determination.
- Compliant with ISO 22412 & CFR21 Part 11.



SYNCHRONOUS SIZE & SHAPE ANALYSERS

MICROTRAC SYNC

- Synchronises size and shape measurement in one instrument.
- Integrates the world's leading laser diffraction and dynamic image analysis technology in one instrument.
- Measurement from 0.01 to 4000 microns.
- Advanced design for unsurpassed dispersion of wet or dry material.
- Fast and easy switch between wet and dry measurements.
- Easy to use, integrated DIA and LD FLEX software.
- Powerful reporting that integrates particle size and shape data.
- One run yields PSD with more than 30 size and shape parameters - one sample, one bench, one sample path, one sample cell, one analysis.
- Significantly reduced troubleshooting time on unexpected particle size.
- Optimal viewing and qualification of particles.
- Ease of use with integrated SOPs, no set up time and no learning curve.
- Ease of changeover from wet to dry facilitates multiple users running a variety of materials.
- Optimal quality control by adding shape to size specifications.



MICROTRAC S3500

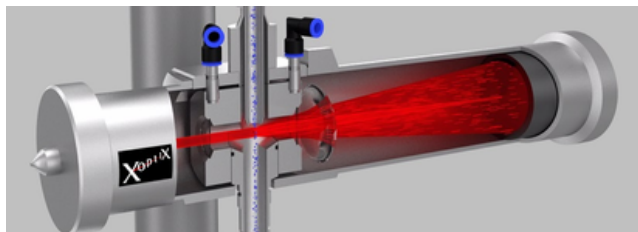
- Tri-laser, red, multi-detector, multi-angle optical system.
- Ideal for general purpose PSD.
- Measures from 20nm to 2800µm.
- Algorithms that utilise Mie compensation and Modified Mie calculations for non-spherical particles.
- 1-2-3 red laser configurations available.
- Up to 3 red 780 nm lasers.
- Wet/dry capability.
- Legacy calculation mode available.
- Enclosed optical path ensures complete protection of the optical components leading to little or no operator intervention.
- Small bench footprint.



INTELLISIZER

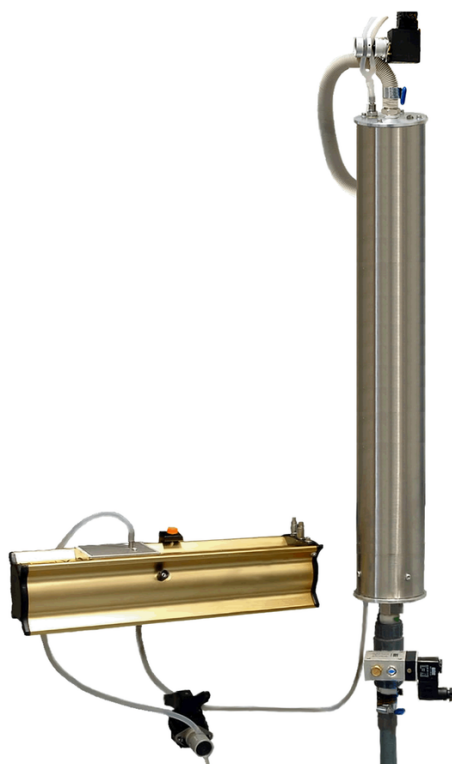
- High quality laser diffraction instrument designed to withstand the challenges of process environments (IP65).
- Size range: 0.1-3000 microns.
- Sampling rate/resolution: 2000/second/16 bit.
- Constructed with high stability lasers, high specification optics and custom designed detectors inside a precision optical bench.
- Kinematic optical mounts.
- State of the art electronics and intelligent, self-maintaining software.
- Measures the complete particle size distribution 2000 times per second.
- 24/7 continuous monitoring of the production process with real-time results and a wide range of sampling options.
- Detailed reporting and data output with a glance, easy to interpret trend data on any time point.
- Integrated functionality for results feedback to PLC/DCS for closed loop control.
- Output available, to meet individual user requirements, from 4-20 ma current loop to Ethernet communication with control PLC/DCS via the industry standard OPC UA protocol.
- Automated separator control for guaranteed in-spec product production and increased throughput from the mill.
- Unique, patented self-monitoring, self-diagnosing and self-cleaning technology guarantees maximum instrument uptime with optimal performance and reliability.
- Ceramic components for increased durability and low maintenance.





PHARMASIZER

- Online particle size analyser for the Pharmaceutical industry for production optimisation and consistent, reliable, repeatable results.
- Integrates quickly and easily into any production facility and reports in real-time (including size distribution graphs) to the process operators / PLCs in a fully closed loop turnkey solution.
- Fully GAMP compliant with materials certification and traceability.
- Software is compliant with 21 CFR Part 11.
- Real-time monitoring (2000 times per second) of particle sizes 0.1 μm to 1100 μm for optimal process monitoring and control.
- Fully automated sampling sequences for bespoke monitoring.
- Constructed from 316L stainless steel.
- All material contact surfaces are electro-polished to Ra 0.5 μm or better.
- Plus connections and O-rings are product specific.
- Clean in Place (CIP) options available.
- ATEX options available.



XO550L WET MEASUREMENT

- Combined, fixed sizing and sampling module for inline measurement.
- Suitable for measuring particles in liquid suspension from 1.2 to 550 microns.
- Sampling system to remove a sample from the process and replace it for real-time particle size measurement with zero product loss.
- Compact, rugged analyser offering a small footprint, high performance and economical solution.
- High stability lasers, high specification optics and custom designed detectors.
- Designed in consideration of ISO 13320.

XO500P DRY MEASUREMENT

- Combined, fixed sizing and sampling module for inline measurement.
- Suitable for measuring particles in air from 1.2 to 550 microns.
- Sampling system to remove a sample from the process and replace it for real-time particle size measurement with zero product loss.
- Compact, rugged analyser offering a small footprint, high performance and economical solution.
- High stability lasers, high specification optics and custom designed detectors.
- Designed in consideration of ISO 13320.





**LabService
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**Equipment & instrumentation for
a wide range of laboratory environments.**

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QUALITY
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