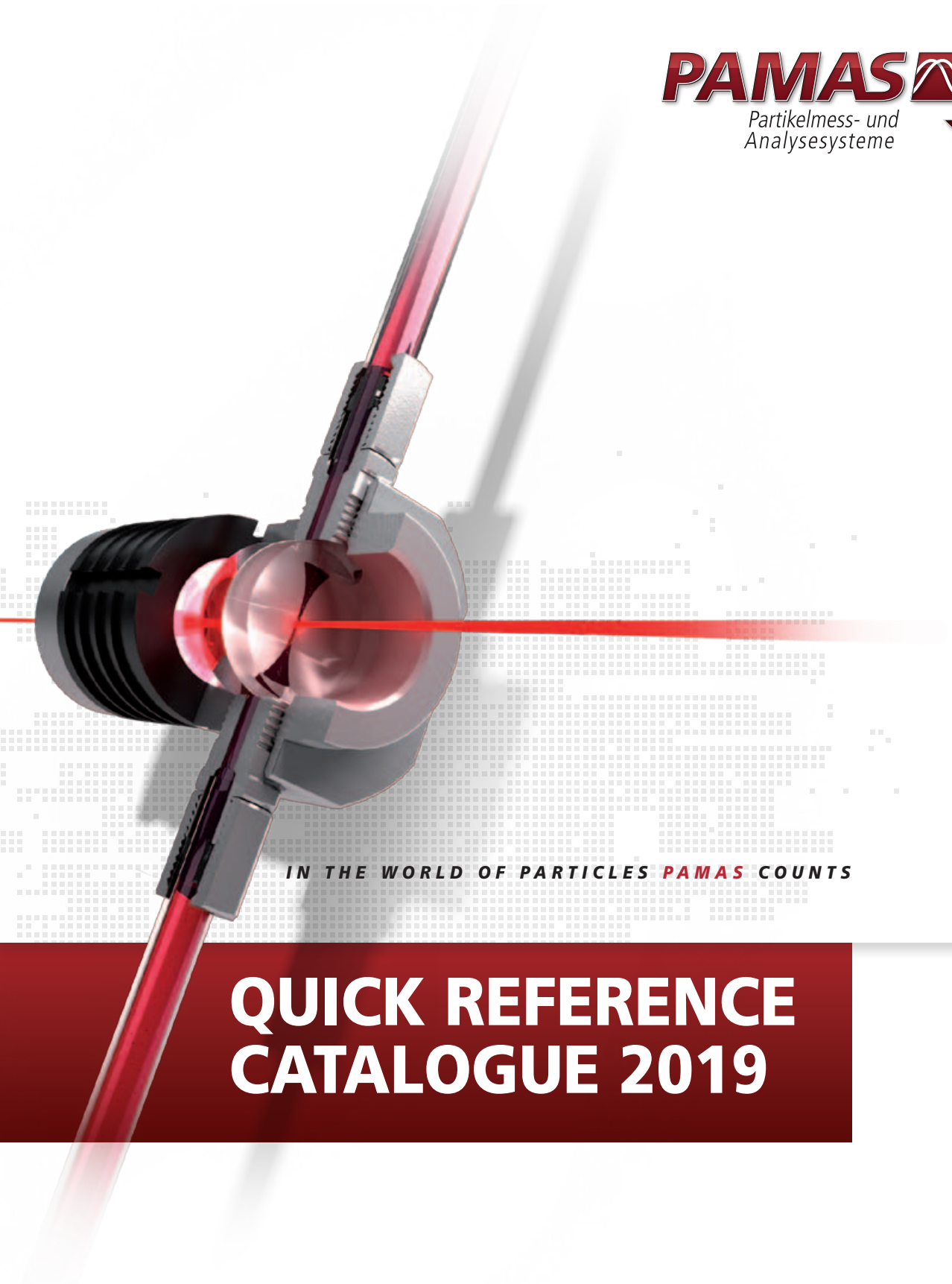
PAMAS
Partikelmess- und Analysesysteme



IN THE WORLD OF PARTICLES PAMAS COUNTS

QUICK REFERENCE CATALOGUE 2019

PAMAS
Partikelmess- und Analysesysteme

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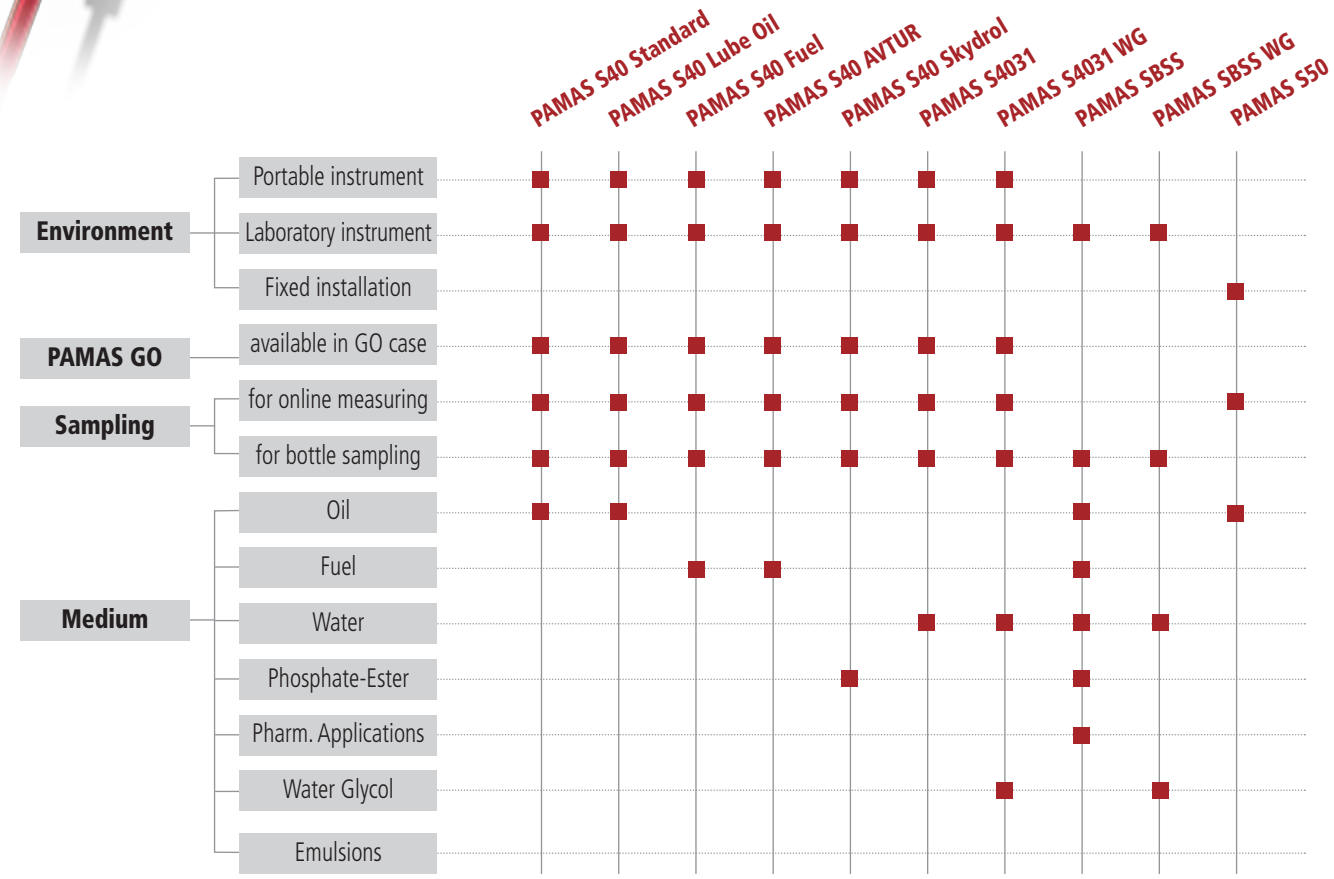
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Overview on features and applications of PAMAS products



■ = recommended
□ = possible (ask manufacturer)



PAMAS
Partikelmess- und Analysesysteme



PAMAS S40
Standard version

Application:
Portable particle counter for oil based liquids,
like hydraulic oil, gearbox oil, motor oil, lubrication oil, etc.;
handles batch and online measurements.

Sample input:
Low pressure: 0 to 6 bar - batch and online mode
High pressure: 3 to 420 bar - online mode

Viscosity at 22° C:
Up to 200 cSt; pressurised up to 350 cSt

Sensor specifications:
Particle sensor: PAMAS HCB-LD-50/50
Maximum concentration:
24.000 particles per ml at 7.8 % coincidence

Calibration:
- Standard calibration as per ISO 11171:
  size range 4 µm(c) to 70 µm(c)

- 8 size channels:
  4, 6, 10, 14, 21, 25, 38 and 70 µm(c)
  according to the cleanliness standards
  SAE AS 4059 and ISO 4406:1999

- Optional calibration as per ISO 4402:
  size range 2 to 100 µm

  8 size channels:
  2, 5, 10, 15, 20, 25, 50 and 100 µm
  according to the cleanliness standards
  NAS 1638 and ISO 4406:1987



PAMAS S40 Lube
Lube oil version

Application:
Portable particle counter for lubricating oil

Handles batch and low pressure online measurements.

Sample input:
0 to 6 bar batch and online mode

Viscosity at 22° C:
up to 1000 cSt

Sensor specifications:
Particle sensor: PAMAS HCB-LD-50/50
Maximum concentration:
24.000 particles per ml at 7.8 % coincidence

Calibration:
- Standard calibration as per ISO 11171:
  size range 4 µm(c) to 70 µm(c)

- 8 size channels:
  4, 6, 10, 14, 21, 25, 38 and 70 µm(c)
  according to the cleanliness standards
  SAE AS 4059 and ISO 4406:1999

- Optional calibration as per ISO 4402:
  size range 2 to 100 µm

  8 size channels:
  2, 5, 10, 15, 20, 25, 50 and 100 µm
  according to the cleanliness standards
  NAS 1638 and ISO 4406:1987



PAMAS S40 Fuel
Fuel version

Application:
Portable particle counter for contamination control in low viscous liquids.

The particle counter is optimised for fuel analysis through structural alterations at the flow path.

Sample inlet:
0 to 6 bar batch and online mode

Sensor specifications:
Particle sensor: PAMAS HCB-LD-50/50
Maximum concentration:
24.000 particles per ml at 7.8 % coincidence

Calibration:

- Standard calibration as per ISO 11171:
  size range 4 - 70 µm(c)

- 8 size channels:
  4, 6, 10, 14, 21, 25, 38 and 70 µm(c);
  according to the cleanliness standards
  SAE AS 4059 and ISO 4406:1999

- Optional calibration as per ISO 4402:
  size range 2 to 100 µm

  8 size channels:
  2, 5, 10, 15, 20, 25, 50 and 100 µm
  according to the cleanliness standards
  NAS 1638 and ISO 4406:1987

PAMAS
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PAMAS S40 Skydrol
Phosphate-Ester version

Application:
Portable particle counter for phosphate ester based hydraulic liquids, mainly used in airplane hydraulic systems.

Sample input:
- Low pressure: 0 to 6 bar - batch and online mode
- High pressure: 3 to 420 bar - online mode

Sensor specifications:
Particle sensor: PAMAS HCB-LD-50/50
Maximum concentration:
24.000 particles per ml at 7.8 % coincidence

Calibration:
- Standard calibration as per ISO 11171:
  size range 4 to 70 µm(c)

- 8 size channels:
  4, 6, 10, 14, 21, 25, 38 and 70 µm(c);
  according to the cleanliness standards
  SAE AS 4059 and ISO 4406:1999

- Optional calibration as per ISO 4402:
  size range 2 to 100 µm

  8 size channels:
  2, 5, 10, 15, 20, 25, 50 and 100 µm
  according to the cleanliness standards
  NAS 1638 and ISO 4406:1987

PAMAS
Partikelmess- und Analysesysteme



PAMAS S40 AVTUR
Aviation Turbine Fuel version

Application:
Portable multifunctional particle counting system for Aviation Turbine Fuel, Diesel, etc.

Ideal for:
- online measurements at pressureless systems or at live systems up to 6 bar
- offline measurements using sample bottles (laboratory mode)
- long-term analysis
- filter verification
- bypass filtration monitoring

Technical Data:
- free adjustable size channels
- special AVTUR mode according to the standards EI-IP 577 and DEF STAN 91-91 (Edition 7)



PAMAS S4031
Multifunctional version

Application:
Portable multifunctional particle counting system for water, organic and corrosive fluids (please confirm sample fluid before quoting).

Sample inlet:
0 to 6 bar - batch and online mode

Sensor specifications:
Particle sensor PAMAS HCB-LD-50/50
Maximum concentration:
24,000 particles per ml at 7.8% coincidence

Calibration:
According to ISO 21501
Size range: 2 to 200 µm,
1 to 400 µm (option on request).

Technical Data:
up to 32 free adjustable size channels.



PAMAS S4031 WG
Water-Glycol version

Application:
Portable particle counting system for water based liquids, mainly used for hydraulic systems in the offshore oil industry

Sample Input:
0 to 6 bar – batch and online mode

Sensor specifications:
Particle sensor PAMAS HCB-LD-50/50
Maximum concentration:
24,000 particles per ml at 7.8% coincidence

Calibration
- according to ISO 11171: size range 4 to 70 µm(c)
- according to ISO 21501: size range 2 to 200 µm

Technical data:
up to 32 free adjustable size channels

Three different channels settings
for Water-Glycol measurements are pre-set in the system:

- SAE AS 4059 A–F, 4 to 70 µm(c):
  > 4, > 6, > 14, > 21, > 38, > 70 µm(c)
- SAE AS 4059 B–F, 6 to 70 µm(c):
  > 6, > 14, > 21, > 38, > 70 µm(c)
- NAS 1638 / 5 to 100 µm:
  -> 5, > 15, > 25, > 50, > 100 µm

PAMAS
Partikelmess- und Analysesysteme

Portable particle counters



PAMAS GO
Rugged case for harsh environments

- PAMAS S40 GO / Standard
- PAMAS S40 GO / Lube
- PAMAS S40 GO / Fuel
- PAMAS S40 GO / Skydrol
- PAMAS S40 GO AVTUR / Aviation Turbine Fuel
- PAMAS S4031 GO
- PAMAS S4031 GO WG / Water-Glycol



Carrying bag for particle counter in rugged case PAMAS GO

- black textile bag for safe and easy transportation
- designed for the rugged case PAMAS GO: the case perfectly fits into the carrying bag.
- equipped with 3 handy side pockets for documents or additional material
- size: 400 x 210 x 210 mm



PAMAS SBSS
Standard version

Application:
Laboratory particle counter for high viscosity liquids. Usable for laboratory measurements and as reference system in oil laboratories. Integrated vacuum and pressure facilities. Programmable for bottle sampling to a minimum of handling (as stand alone system or controlled by PAMAS PMA software).

The PAMAS SBSS system is used for hydraulic oils, insulation and turbine oils, organic fluids or solvents. With the software PAMAS USP, the system may be also used to analyse pharmaceutical fluids of higher viscosity according to international pharmacopoeia.

Viscosity at 22° C:
up to 1600 cSt

Sensor specifications:
Particle sensor PAMAS HCB-LD-50/50
Maximum concentration:
24,000 particles per ml at 7.8% coincidence

Calibration:
- according to ISO 11171: Size range 4 to 70 µm(c)
- according to ISO 21501: Size range 1 to 200 µm

Size of sample bottle:
- maximum diameter: 7 cm
- maximum height: 18 cm

Software:
PAMAS PMA (Particle Measuring and Analysing Software) or PAMAS USP (Pharmaceutical Procedural Software)



PAMAS SBSS WG
for Water-Glycol

Laboratory particle counter for the measurement of water/glycol samples in the offshore oil and gas industry.

Integrated vacuum and pressure devices.
Programmable for bottle sampling to a minimum of handling.

Applications:
- Water/Glycol hydraulic fluids
- Subsea Christmas tree, used in wellhead assemblies
- Hydraulic Power Units
- Hydraulic Accumulators
- Subsea umbilicals
- Hydraulic valves and control systems

Viscosity at 22° C:
up to 1600 cSt

Sensor specifications:
Particle sensor PAMAS HCB-LD-50/50
Maximum concentration:
24,000 particles per ml at 7.8% coincidence

Calibration:
- according to ISO 11171: Size range 4 to 70 µm(c)
- according to ISO 21501: Size range 1 to 200 µm

Size of sample bottle:
- maximum diameter: 7 cm
- maximum height: 18 cm

Software:
PAMAS PMA (Particle Measuring and Analysing Software)



PAMAS SBSS Small Volume version
for small volumes of higher viscosity samples

Applications:
The PAMAS SBSS can be equipped with a smaller pressure container: With the help of this new feature, the instrument is able to analyse under pressure also smaller volumes of higher viscosity samples.

The PAMAS SBSS laboratory instrument offers full flexibility, as almost all measuring parameters can be set by the user and adapted to the specific application.

With these new options available, the pharmaceutical industry, in particular, will take great benefit of the small pressure container, allowing them to degas and analyse under pressure higher viscosity liquids in small volume containers down to 1.5 millilitre.

Viscosity at 22° C:
up to 1000 cSt

Sensor specifications:
Particle sensor PAMAS HCB-LD-50/50
Maximum concentration:
24,000 particles per ml at 7.8% coincidence

Calibration:
according to ISO 21501: Size range 1 to 200 µm

Container volume:
down to 1.5 ml

Software:
PAMAS USP (for pharmaceutical applications)



PAMAS SVSS
for low viscous fluids

Application:
Standard laboratory particle counter for pharmaceutical applications. Mainly used in quality control of parenterals, infusion solutions, intravenous fluids, ophthalmic solutions and clean fluids.

Together with the software PAMAS USP, PAMAS SVSS fulfils many national calibration standards for pharmaceutical applications, such as EP, USP, JP, KP, BP, IPC, etc. Possibility to create user specific standards.

Viscosity at 22°C:
up to 15 cSt

Sensor specifications:
available with various PAMAS particle sensors;
the standard sensor PAMAS HCB-LD-50/50
has a maximum particle concentration of 24,000 P/ml
at a coincidence quote of 7.8%

Calibration:
according to ISO 21501: Size range 1 to 200 µm

Sample volume:
- Container volume: 1 ml to 2000 ml
- Analysis volume: 100 µl to 1000 ml

Software:
PAMAS PMA (Particle Measuring and Analysing Software) or
PAMAS USP (Pharmaceutical Procedural Software)



Small Volume Kit for PAMAS SVSS

- for small volumes of low viscosity samples, including infusion solutions, parenterals, pharmaceutical suspensions and intravenous or ophthalmic liquids
- for samples volumes down to 100 µl
- The Small Volume Kit includes a 1 ml syringe, a sensor connector and a probe for sampling down to 100 µl.



Kit of infusion solutions accessories for PAMAS SVSS

- for the analysis of infusion solutions
- Direct measurement out of the liquid bag without filling the infusion solution into another container.
- The kit of infusion solution accessories includes a long tube, a "Luer Lock" connector, a needle and a hook to attach the sample bag.



PAMAS AS3
Autosampler with tray system

Application:
Contamination analysis of a continuously high number of oil samples

Features:
- Fully automated analysis
- Up to 200 samples within 8 hours (i.e. up to 600 samples per day in case of continuous operation).
- Viscosity at 22°C: up to 200 cSt
- Equipped with ultrasonic agitation probe for sample preparation
- Automatic sampling: XYZ robot handles with samples on tray
- Programmable flushing of sample wetted components to prevent cross contamination
- Integrated dilution system for highly contaminated or high viscous fluids and for samples that may contain undissolved additives or undissolved water

Sensor specifications:
Particle sensor PAMAS HCB-LD-50/50
Maximum concentration:
24.000 particles per ml at a coincidence rate of 7.8%



PAMAS FastPatch 2 GO
Advanced automatic microscope system

Applications:
- Dark fluids
- Two phase liquids
- Emulsions
- High levels of contamination
- Very high viscosities

Key Features include:
- Optimised LED ringlight illumination with polarisation function enabling differentiation of metallic/non-metallic particles
- Presentation of counts in accordance with a particle length classification (e.g. in compliance with ISO 4407, ISO 16232, SAE AS 4059, ISO 4406)
- Comprehensive automatic analysis of the entire membrane filter patch
- Specific treatment for particulates in contact with the edge of the image



PAMAS S50
Standard version

Application:
for online measurements under pressure,
e.g. for contamination control and condition monitoring
of hydraulic oil systems, lube oil systems,
test rigs or parts cleaning

Pressure:
0.2 to 20 bar

Flow rate:
5 to 50 ml per minute (free flow)

Viscosity at 22° C:
up to 1000 cSt depending on system pressure

Sensor specifications:
Particle sensor PAMAS HX;
Maximum concentration:
24.000 particles per ml at 7.8 % coincidence

Calibration:
- Size range: 4 to 70 µm(c) as per ISO 11171

- 8 size channels:
  4, 6, 10, 14, 21, 25, 38, 70 µm(c)
  according to cleanliness standards
  SAE AS 4059 and ISO 4406

Software:
PAMAS POV (PAMAS Online Visualisation):
Software for online visualisation of measuring results
and for long-term trend monitoring

PAMAS PCT (PAMAS Component Test):
Software for online monitoring of parts cleanliness
and for roll off cleanliness testing



PAMAS S50P
Standard version with pump

Application:
Online measurements

Option:
pressureless and with pressure

Pressure:
0 to 6 bar

Flow rate:
25 ml per minute (internally controlled)

Viscosity at 22° C:
Depending on system pressure

Sensor specifications:
Particle sensor PAMAS HX
Maximum particle concentration:
24.000 particles per ml at 7.8 % coincidence

Calibration:
- Size range 4 to 70 µm(c) as per ISO 11171

- 8 size channels:
  4, 6, 10, 14, 21, 25, 38, 70 µm(c)
  according to cleanliness standards
  SAE AS 4059 and ISO 4406

Software:
PAMAS POV (PAMAS Online Visualisation):
Software for online visualisation of measuring results and for long-term trend monitoring

PAMAS PCT (PAMAS Component Test):
Software for online monitoring of parts cleanliness and for roll off cleanliness testing



PAMAS S50DP
with integrated dilution system

Applications:

- Sample fluids which cannot be analysed without prior dilution, e.g. highly contaminated or high viscous fluids or samples containing undissolved additives
- Fuel containing free water: Without prior dilution, free water in fuel would lead to false measurements. With the dilution device, the water drops in the fuel sample are dispersed in the added solvent and thus are not detected as particles during posterior online measurement

The PAMAS S50DP online particle counter offers an integrated dilution system to dilute the sample liquid directly online. For dilution, the system continuously adds a programmable amount of a low viscous solvent to the raw sample before online measurement.

Pressure range:
0 to 6 bar

Sensor specifications:
Particle sensor PAMAS HCB-LD-50/50
Maximum particle concentration:
24.000 particles per ml at 7.8 % coincidence

Calibration:

- Size range: 4 to 70 µm(c) according to ISO 11171
- 8 size channels:
  4, 6, 10, 14, 21, 25, 38 and 70 µm(c)
  according to cleanliness standards
  SAE AS 4059 and ISO 4406



PAMAS S50P Fuel
Fuel version

Application:
Online measurements of low viscous liquids

The particle counter is optimised for fuel analysis through structural alterations at the flow path.

Pressure:
0 to 6 bar

Flow rate:
25 ml per minute (internally controlled)

Viscosity at 22° C:
Depending on system pressure

Sensor specifications:
Particle sensor PAMAS HX
Maximum particle concentration:
24.000 particles per ml at 7.8 % coincidence

Calibration:
- Size range 4 to 70 µm(c) as per ISO 11171

- 8 size channels:
  4, 6, 10, 14, 21, 25, 38, 70 µm(c)
  according to cleanliness standards
  SAE AS 4059 and ISO 4406

Software:
PAMAS POV (PAMAS Online Visualisation):
Software for online visualisation of measuring results and for long-term trend monitoring

PAMAS PCT (PAMAS Component Test):
Software for online monitoring of parts cleanliness and for roll off cleanliness testing



PAMAS OLS4031
with 32 size channels

Application:
Online monitoring and data output for higher demand e.g. for monitoring facilities systems in the aircraft industry, for test rigs, for parts cleaning processes and for production test lines.

Technical data:
up to 32 free adjustable size channels

Sample inlet:
Low pressure mode (standard version):
from pressureless up to 6 bar

High pressure mode (on request):
from 3 to 420 bar

Viscosity at 22° C:
up to 200 cSt; pressurised up to 350 cSt

Calibration:
- 4 to 70 µm(c) according to ISO 11171
- 1 to 200 µm according to ISO 21501

Software:
PAMAS PMA (Particle Measuring and Analysing Software)



PAMAS OLS50P
for all sorts of liquids

Application:
all sorts of fluids

Pressure range:
pressureless or up to 6 bar

Sensor specifications:
Particle sensor PAMAS HCB-LD-50/50
Maximum particle concentration:
24.000 particles per ml at 7.8 % coincidence

Calibration:
4 to 70 µm(c) as per ISO 11171
or
2 to 100 µm as per ISO 4402
or
1 to 200 µm as per ISO 21501-3

Software:
PAMAS POV (PAMAS Online Visualisation):
Software for online visualisation of measuring results and for long-term trend monitoring

PAMAS PCT (PAMAS Component Test):
Software for online monitoring of parts cleanliness and for roll off cleanliness testing



PAMAS WaterViewer
for Water Applications

Application:
Online particle counter for low viscous liquids.

Enables water quality control measurements for potable water, waste water, industrial water, pool water, filter control.

Sample inlet:
- Standard system (pressure system): 0.5 to 4 bar;
- Suction system (grab sampling) or mixed system available on request

Product features:
- Automated sensor cleaning
- Fully automated operation
- Network options
- Analogue and digital devices

A standard Multiplexer Unit contains 1 to 8 measuring point inputs. By combining 2 or more multiplexer units, one PAMAS WaterViewer system is expandable to up to 32 measuring point inputs.



PAMAS 4132
for Single & Multi Pass filter tests

The PAMAS 4132 is used as a filter efficiency testing system or ß-ratio measuring system for Single & Multi Pass Filter test rigs. The standard system fits in the test rigs of filter manufacturers.

In case of a Single Pass Filter Test, the liquid passes the filter only once and then is deviated to the outflow. For ß-ratio-analyses, the Single Pass Filter Test is performed with two instruments. Two instruments - equipped with 32 size channels each - are also used for the Multi Pass Filter Test. This test rig with two particle counters allows simultaneous upstream and downstream measurements.

The particle counting system PAMAS 4132 analyses liquids of various viscosities (e.g. oil, fuel, water, etc.).

- The system is adaptable to any Multi Pass Test application and ß-ratio analysis.
- Please contact PAMAS for the product integration into your specific application.
- Please consult a PAMAS application specialist before quoting.



PAMAS FSA-2002
Floc Size Analyser

The PAMAS FSA-2002 Floc Size Analyser has been designed for coagulation and water treating systems. Water is often treated by adding flocculents. These flocculation agents are used to gather solid undissolved contaminants to particulate agglomerates. Before the process of filtration commences, the floc size and quantity is analysed using the PAMAS FSA-2002.

Precise information about the particle size helps to verify and to determine if the process of coagulation is complete or if further flocculation agents must be added.

Sensor specification:
Particle sensor PAMAS HCB-LD-900
Size range:
30 to 8,000 µm as per calibration standard ISO 21501
Maximum particle concentration:
10 P/ml at a 7.8 % coincidence



PAMAS HCB-LD
Light Extinction Sensors

- Measuring principle: Light Extinction technology
- Eight sensor models with different orifices are available
- Size ranges between 1 and 8000 µm
- Maximum particle concentrations up to 200.000 p/ml
- Calibration with certified ISO Medium Test Dust according to ISO 11171 or with monodisperse latex spheres according to ISO 21501



PAMAS SLS-25/25
Scattered Light Sensor

- works with Light Scattering Technology
- for contamination analysis of particle sizes down to 0.5 µm according to ISO 21501-2 or down to 1.5 µm(c) according to ISO 11171
- Sensor orifice: 250 µm x 250 µm
- Maximum particle concentration:
  13.000 particles per millilitre at a coincidence rate of 7,8%

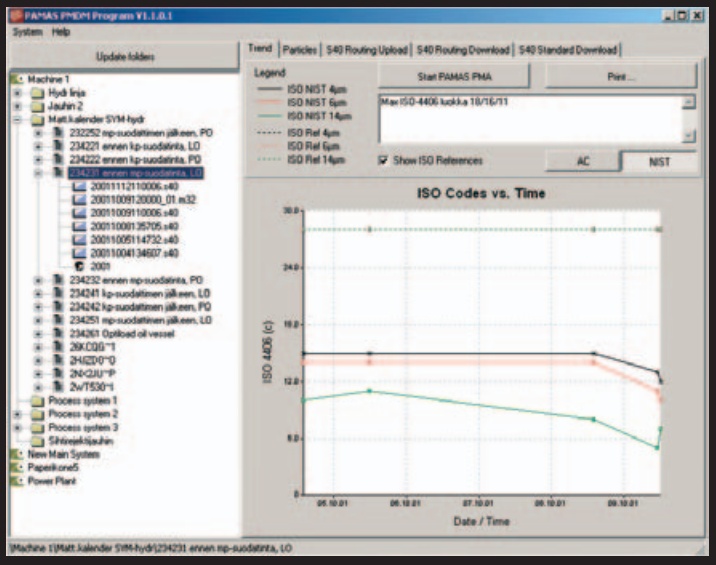


Overview on particle sensors

The first eight sensor types mentioned in this schedule work according to the principle of light extinction.

The last sensor PAMAS SLS-25/25 works with a scattered light (SLS for "Scattered Light Sensor").

Sensor type	Cell size in µm	Nominal flow rate in ml/min (millilitre per minute)	Maximum concentration of particles per millilitre (P/ml) including a coincidence rate of lower than 8 %	Flow rate range in ml/min(The flow rate infects the sensitivity of the sensors.)	Potential interval of detection in µm and µm(c)
PAMAS HCB-LD-15/25	150 x 250	10	200 000 P/ml	5 – 25	1 – 100 µm; 4 – 70 µm(c)
PAMAS HCB-LD-25/25	250 x 250	10 / 25	120 000 P/ml	5 – 50	1 – 200 µm; 4 – 70 µm(c)
PAMAS HCB-LD-50/50	500 x 500	25	24 000 P/ml	5 – 150	1 – 400 µm; 4 – 70 µm(c)
PAMAS HX	500 x 500	25	24 000 P/ml	5 – 50	4 – 70 µm(c)) [for oil only]
PAMAS HCB-LD-100	1 000 x 1 000	25	1 200 P/ml	25 – 500	5 – 800 µm; 5 – 150 µm(c)
PAMAS HCB-LD-250	2 500 x 2 500	200 / 500	180 P/ml	200 – 500	20 – 2000 µm; [oil calib. on request]
PAMAS HCB-LD-900	9 000 x 9 000	500	10 P/ml	500 – 2000	30 – 8000 µm; [oil calib. on request]
PAMAS HCB-25/25	250 x 250	10	24 000 P/ml	5 – 50	1.5 – 200 µm; 4 – 170 µm(c)
PAMAS SLS-25/25	250 x 250	10	13 000 P/ml	10	0.5 – 20 µm; 1.5 – 25 µm(c)

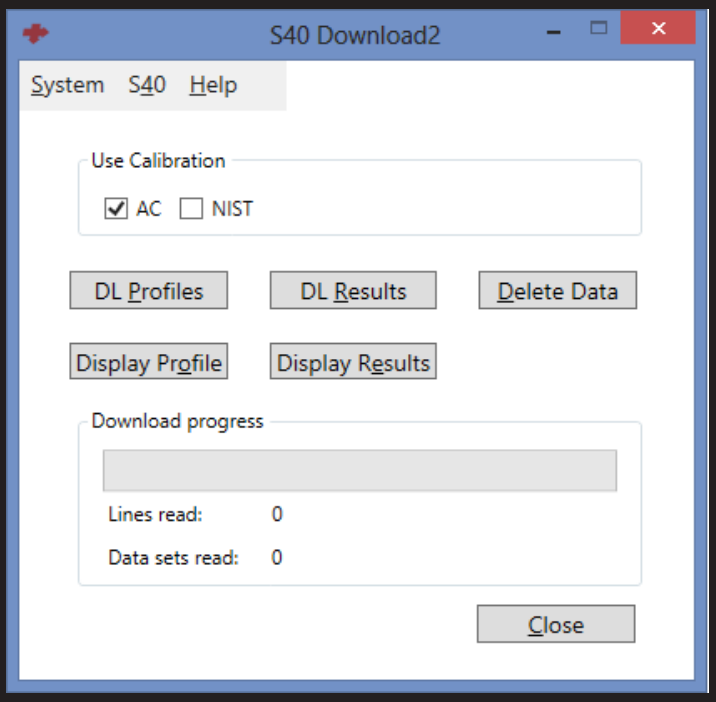


PAMAS CMDM
Condition Monitoring Data Management

The PAMAS CMDM software has been developed as an oil contamination control tool for preventive maintenance in hydraulic and lube oil systems.

Software features:

- Trend Monitoring: Recording and analysis of cleanliness trends
- Data management of measuring results coming from batch sampling or microscopic analysis
- Allows route based measuring
- Upgrades particle counter PAMAS S40 to a condition monitoring system
- Systematic cleanliness monitoring allows longer maintenance intervals

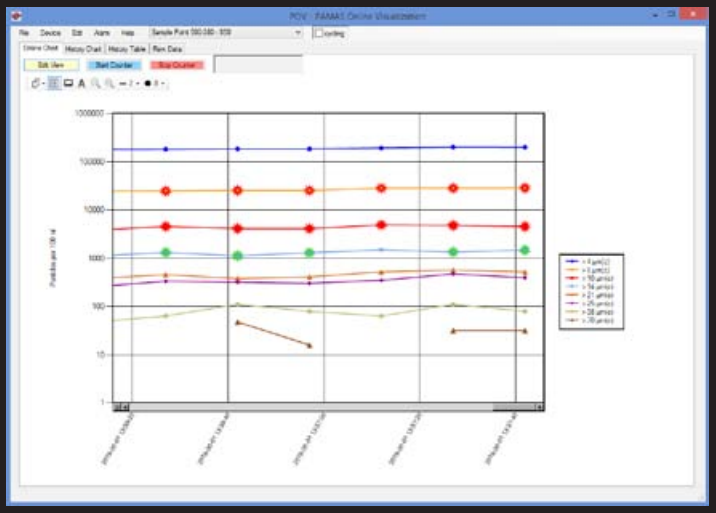


PAMAS Download-Software
Software for portable particle counters

With the aid of the software, measuring results can be transferred from the particle counter to a PC.

The data are transferred at first into a text file, which can then be converted into the required format (e.g. Excel or PDF).

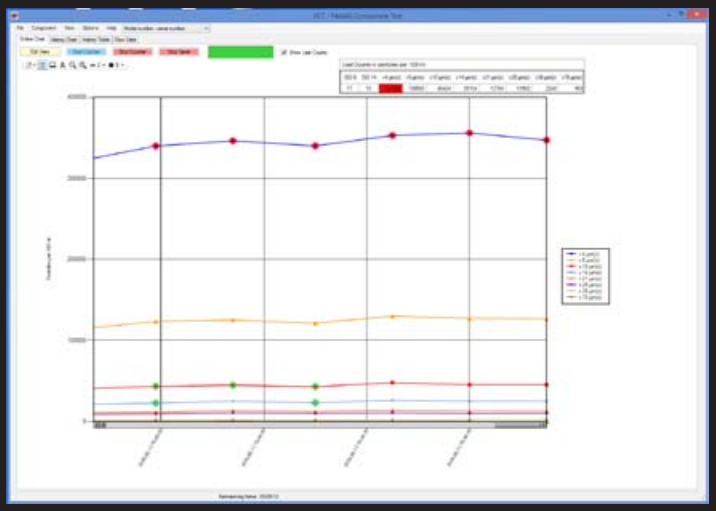
Output of measuring results:
The programme indicates the measuring parameters that had been selected during measurement on the display of the portable particle counting device (selectable parameters are e.g. the type of calibration, the measuring profi le, the number of size channels or the cleanliness standards).



PAMAS POV
PAMAS Online Visualization

Software for online visualisation of particle measuring results and for long-term condition monitoring

Output of measuring results:
The results are displayed on charts and tables and can be printed and exported. The results are assigned to certain sample points. Historical results can also be loaded, printed and exported.

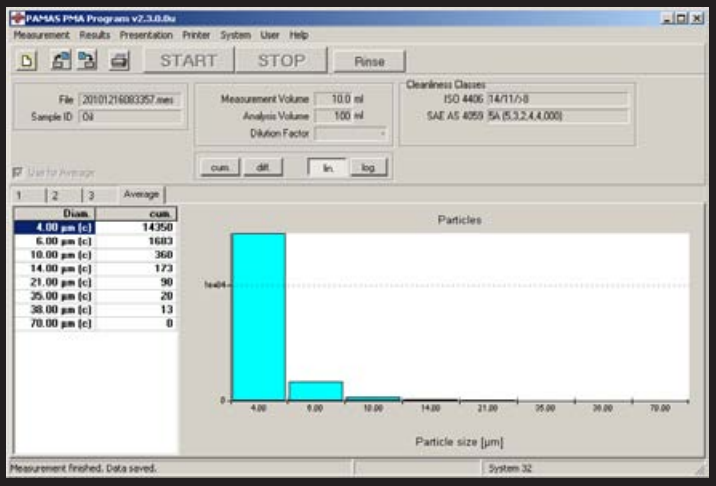


PAMAS PCT
PAMAS Component Test

The PAMAS PCT software enables online cleanliness tests of manufactured components in machinery engineering applications (test rigs).

Output of results:
- Particle counts according to ISO codes over time
- Raw data of single measurements
- Data storage in single measurement files

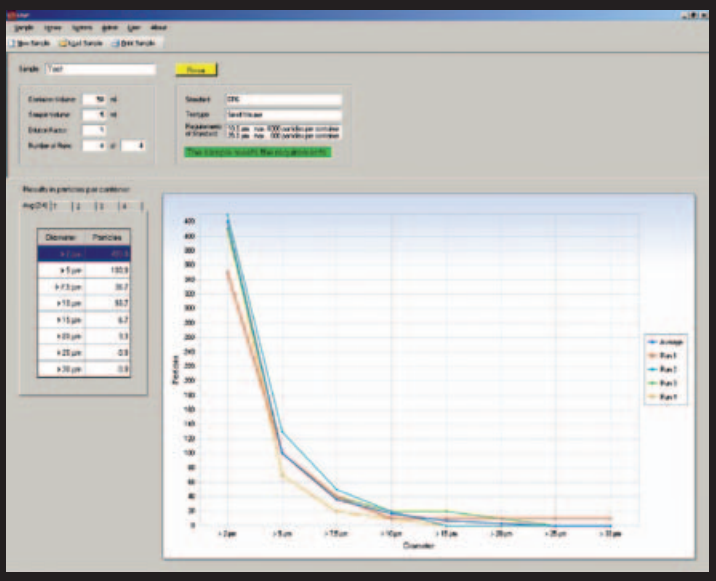
Additional feature:
Definition of cleanliness limits



PAMAS PMA
Particle Measuring and Analysing Software

Main function:
Software for operation, for parameter setting, for data storage and for the analysis of measurement results

Output of measuring results:
numerical and graphical report of cumulative and differential particle counts in compliance with the cleanliness standards ISO 4406, NAS 1638, SAE AS 4059, GJB 420 and GOST 17216



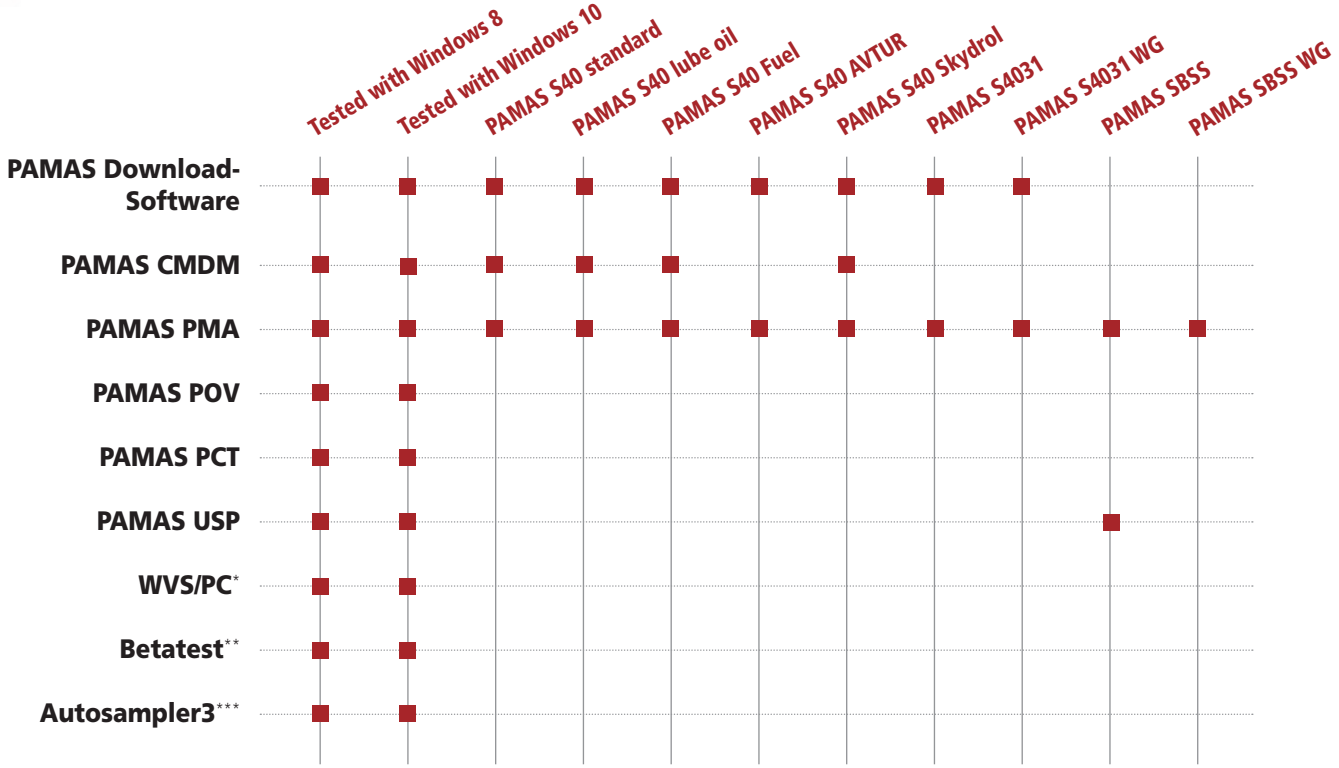
PAMAS USP
Pharmaceutical procedural software

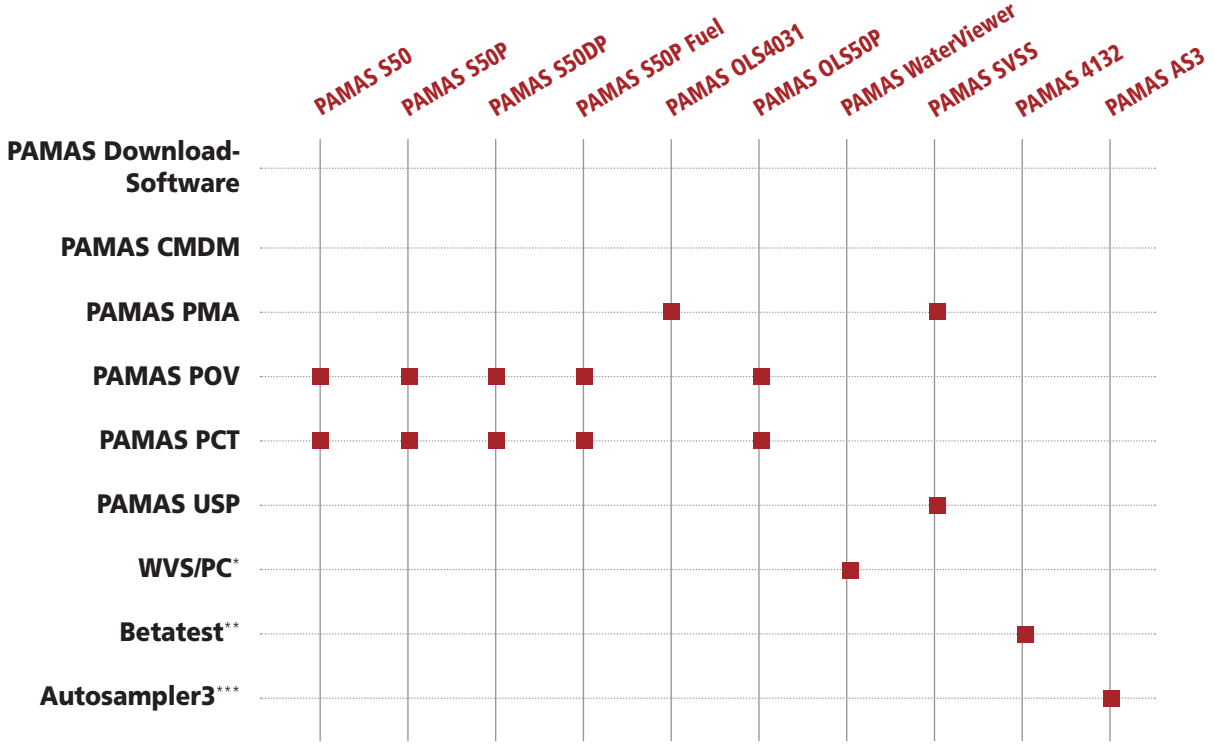
Measurements according to United States Pharmacopeia USP <787> (Subvisible Particulate Matter in Therapeutic Protein Injections), USP <788> (Particulate Matter in Injections), USP <789> (Particulate Matter in Ophthalmic Solutions) and to other national pharmacopeias, like EP, JP, KP, BP, IPC, etc.

Output of results:
Numerical and graphical display of particle counts according to pharmaceutical standards

Additional features:
- 21 CFR Part 11 conform
- Automatic backup of database
- Sensor calibration
- In-house standards

Compatibility of PAMAS instruments and software tools





* WVS/PC (WaterViewerSystem for PC) = Software for PAMAS WaterViewer
** Betatest = Software for PAMAS 4132
*** Autosampler3 = Software for PAMAS AS3

PAMAS
Partikelmess- und Analysesysteme



EXPERTS IN FLUID PARTICLE COUNTING

PAMAS headquarters in Germany:
Dieselstraße 10
D-71277 Rutesheim
Phone +49 71 52 99 63-0
Fax +49 71 52 99 63-32
E-mail info@pamas.de
Web www.pamas.de

PAMAS subsidiaries worldwide:

PAMAS BENELUX
Mechelen / Belgium

PAMAS FRANCE
Saint-Julien-en-Born / France

PAMAS HISPANIA
Algorta / Spain

PAMAS INDIA
Bangalore / India
Sonepath / India

PAMAS LATIN AMERICA
Curitiba / Brazil

PAMAS UK
Cheshire / UK

PAMAS USA
Tulsa / Oklahoma
Houston / Texas

Design and production: www.its-orange.de

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