

## PAMAS SVSS

**Particle size distribution analyzer for particles in suspension, solutions, dispersions and fluids**



### **Small Volume Syringe Size distribution System PAMAS SVSS**



#### **High resolution size distribution analysis**

- Population, volume and area distribution in one analysis
- Real time display during measurement
- Continually updated histogram display
- Sieve size analysis display
- Size ranges from 1 – 800  $\mu\text{m}$
- Large dynamic size range for all sensors (up to 1:400)
- High resolution with single particle measurement
- Measurement of small volumes down to 250  $\mu\text{l}$  ampules
- Simplest operation
- Highest particle concentrations up to 200,000 p/ml
- Up to 32 sizing classes

# Universal particle size distribution analyser

## Specific software solutions

### Single particle counting system using light blockage principle

A special manufactured sensor cell and the selection of sophisticated optical components guarantee high resolution and accuracy.



PAMAS SVSS stand alone system.

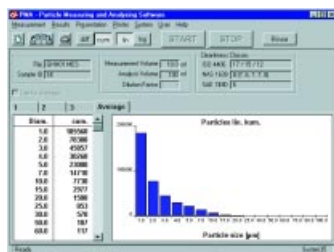
### Sampling

Each particle passing the sensor is detected and counted according to size. Up to 32 free adjustable size channels show a complete profile of the particle number-concentration and size-distribution. Even for the most critical applications, sensors for different size ranges from 1 µm - 800 µm are available.

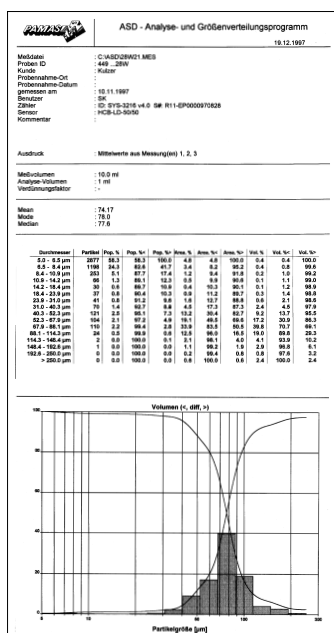
Preprogrammable processor controlled analysis allows automated multiple sampling and data report.

Besides the standard languages english, german, french, spanish, finnish and polish, the system can be programmed to any other language on request.

An accurate sample volume with 10 µl resolution is achieved with the SVSS gaining reproducible measurement results. Using interchangeable syringes, the SVSS is capable of sampling volumes from 50 µl-1 liter for low to medium viscous fluids.



Complete remote control using PAMAS PMA program with data storage in ASCII code.



Printout including all sample parameters, numerical and graphical presentation using PAMAS ASD software.

### Wide range of applications in product control and research

Population-, area-, and volume-distribution in one analysis (Q0, Q2, Q3 distribution). Free selectable sieve for analysis printout.

### Calibration of sensors

Standard calibration of sensors with latex spheres according to ANSI/NFPA T2.9.6R1-1990. ASTM F 658 - 80 or additional calibration.

### PAMAS SVSS

- Preadjustable and automated sampling routines
- Up to 32 free adjustable size channels
- Threshold adjustment with D/A-converter
- Size of sample container 250 µl - 2,000 ml
- Analysis volume: 100 µl - 1,000 ml
- Constant sample flow and exact volume control by a stepper motor actuated precision syringe
- Exchangeable syringes with 1 ml, 10 ml and 25 ml volume

### Alternative SBSS pressure system for higher viscosities up to 800 cStokes (20,000 cStokes with high pressure)



PAMAS SBSS system for high viscosities.

### Technical data

#### Counter:

- Backlit graphical LC-display with 320 x 240 pixel resolution.
- Data printout: 32 column built-in thermoprinter
- Data transfer: ASCII code using RS-232C port
- Power supply: 100 V, 120 V, 230 V, 240 V 50-60 Hz

#### Sensors:

##### HCBLD-50/50

Size range: 1 - 400 µm  
1 µm sensitivity (ISO-4402)  
4 µm sensitivity (ISO-11171)  
MPC: 24.000 p/ml at 25 ml/min

##### HCBLD-25/25

Size range: 1 - 200 µm  
1 µm sensitivity (ISO-4402)  
3 µm sensitivity (ISO-11171)  
MPC: 120.000 p/ml at 10ml/min

##### HCBLD-15/25

Size range: 1 - 100 µm  
1 µm sensitivity (ISO-4402)  
3 µm sensitivity (ISO-11171)  
MPC: 200.000 p/ml at 10ml/min

##### HCBLD-100

Size range: 2 - 800 µm  
MPC: 1.200 p/ml at 50 ml/min

Maximum particle concentration (MPC) for coincidence error less than 7.8% at defined flow rate (others can be selected)

All properties mentioned herein may change without being notified.

### PAMAS HEAD OFFICE

Dieselstraße 10  
D-71277 Rutesheim  
Phone +49 7152 9963-0  
Fax +49 7152 54862  
E-mail info@pamas.de

### PAMAS USA

6721 East 106th Street  
Tulsa, Oklahoma, USA 74133  
Phone +1 918 299 4019  
Fax +1 918 299 7410  
E-mail EdBielo@earthlink.net

### PAMAS FINLAND

JHC, Hirsalantie 11  
FIN, 02420 Jorvas  
Phone +358 9 299 6886  
Fax +358 9 299 6671  
E-mail esko.niiranen@pamas.inet.fi

### PAMAS BENELUX

Ravesteinstraat 33  
B-3191 Hever  
Phone +32-15 52 53 73  
Fax +32-15 52 53 75  
E-mail Paul.Pollmann@glo.be