

PAMAS PCT

Software for online measurement of components

Programme for the cleanliness control of components

Application:

Software for the cleanliness control of components whose operating fluid is analysed with the online particle counters PAMAS S50, PAMAS S50P Fuel and PAMAS OLS50P

Software features:

- Definition: PAMAS Component Test
- For the use of the online particle counters PAMAS S50, PAMAS S50P Fuel and PAMAS OLS50P
- Main function: Software for component cleanliness control
- Output of measuring results: numerical and graphical report of cumulative particle counts in compliance with the cleanliness standards ISO 4406 and SAE AS 4059
- Additional function: alarm according to predetermined threshold settings
- Operating system: compatible to Microsoft Windows® 10 and 11



PAMAS PCT

Software for contamination analysis of components



The software **PAMAS PCT** is used in test rigs to monitor the cleanliness of components. These include for instance hydraulic systems whose hoses are flushed with a cleaning fluid. The software **PAMAS PCT** is used in combination with the online particle counters PAMAS S50 and PAMAS S50P. With the help of this method, it can be tested whether the analysed component is clean and ready for use or if the flushing eventually needs to be repeated.

Before measurement, the user defines the component (e.g. with the serial number) and optionally sets the cleanliness limits which shall be achieved. The measuring results are displayed in a table and a chart. As soon as the defined cleanliness limits are achieved, the monitor shows a visual signal. The results can be printed and exported. Historical measuring results of formerly analysed components can also be reloaded, printed and exported.

Unlike the trend analysing software PAMAS POV, the software **PAMAS PCT** is able to analyse several components consecutively. The programme does not focus on condition monitoring over a longer period of time, but on the cleanliness control of components.



You can define a minimum and/or maximum value for each row. (Counts per analysis volume.)
If the last particle counts are below/above these values, they are marked in green/red, but only if the checkbox is activated!

Curve	Raise Alarm	Minimum Value	Maximum Value
ISO 4 µm(c)	<input type="checkbox"/>		
ISO 6 µm(c)	<input checked="" type="checkbox"/>		18
ISO 14 µm(c)	<input checked="" type="checkbox"/>	10	16
SAE Code cpc 4 µm(c)	<input checked="" type="checkbox"/>	7	10
SAE Code cpc 6 µm(c)	<input type="checkbox"/>		
SAE Code cpc 14 µm(c)	<input type="checkbox"/>		
SAE Code cpc 21 µm(c)	<input type="checkbox"/>		
SAE Code cpc 38 µm(c)	<input type="checkbox"/>		
SAE Code cpc 70 µm(c)	<input type="checkbox"/>		
SAE Class cpc	<input type="checkbox"/>		
> 4 µm(c)	<input checked="" type="checkbox"/>	275000	280000
> 6 µm(c)	<input type="checkbox"/>		
> 10 µm(c)	<input checked="" type="checkbox"/>	45000	50000
> 14 µm(c)	<input checked="" type="checkbox"/>	25000	
> 21 µm(c)	<input checked="" type="checkbox"/>		17000
> 25 µm(c)	<input type="checkbox"/>		
> 38 µm(c)	<input type="checkbox"/>		
> 70 µm(c)	<input type="checkbox"/>		

To set up the alarm function, a minimum and maximum value is defined for each individual size channel. If a measurement value is below the minimum (above the maximum), the according section in the chart is coloured in green (red). The alarm is raised only for previously determined threshold values.

What shall be displayed:

- ☐ Particle numbers / 100 ml
- ☒ ISO-Codes
- ☐ SAE-Codes
- ☐ SAE-Code short

Time Interval

Show the last ...

- ☐ minute
- ☒ hour
- ☐ day

Scaling of the Y-axis

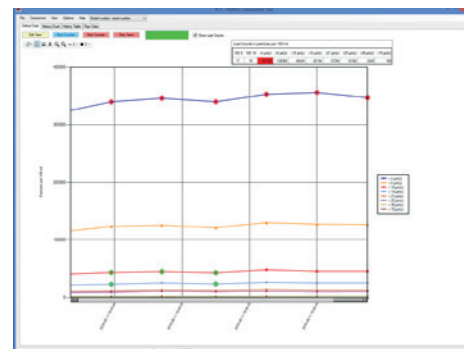
- ☒ linear
- ☐ logarithmic
- ☒ automatic scaling

Minimum: Maximum:

Average calculation

- ☐ Use average calculation ...
- ... summarizing every measurements.

The display of measuring results can be pre-configured according to user-specific needs. Four parameters can be set up: Cleanliness class code, Time Interval, Scaling of the Y-axis, Average calculation.



In the chart, measurement values that are below the pre-defined minimum limit are coloured in green. Red coloured measurement values are above the pre-defined maximum limit. The button „Stop Save“ allows to interrupt the measurement and to export the results into a previously selected data file.

Model:

Serial Number:

Operator:

Comment:

Analysis Volume:

Counter:

Serial Port:

The „Options“ menu allows to define default component values, so e.g. serial number, name of operator, analysis volume or cleanliness limits do not need to be re-entered all the time. When a new file is created, the entries are already completed with the default component values. In case needed, the values can then be overwritten in the new file for the individual measurement.