

## **PAMAS AS 2**

# **Fully Automated Oil Contamination Batch Sampling Analysis**



### **PAMAS Oil contamination Batch Autosampler AS 2 with integrated conveying belt**

- Fully automated analysis
- Up to 400 samples/day
- Data presentation according to customers needs
- Handling viscosities up to 200 cStokes
- Excellent reproducibility
- Free programmable time saving flushing cycles
- Automatic preparation of flushing liquid
- Adaptable to any application
- High resolution sensor HCB-LD-50/50
- Sensor sensitivity:  
1 $\mu$ m ISO 4402  
4 $\mu$ m(c) ISO 11171
- Automated sample agitation

# Autosampling systems for almost every application



PAMAS oil contamination batch autosamplers are designed to handle unattended sample analysis for up to several hundred samples per day. The systems are fully automated with data presentation according to customers needs.

Adaption to existing data software possible. Free selectable bottle sizes give utmost flexibility to adapt to almost every application. Both autosampling systems are connected to standard 32 bit computer systems.

## Calibration of sensors

Sensor calibration check can be performed by operator. Standard calibration of the sensors is performed according to ISO 4402 or ISO 11171. Sensor resolution test according to ISO 11171.

Option: calibration with latex spheres according to ANSI/NFPA T2.9.6R1-1990 and ASTM F 658-80.

**Volumetric cell design of PAMAS sensors guarantees highest accuracy, resolution and best statistical information.**



PAMAS tray robot AS.1.

SampleID	T	ISO (2,5,15)	NAS (5,15,25,50,100)	VF	2 µm	5 µm	10 µm	15 µm	20 µm	25 µm	50 µm	100 µm
sample1	M	(10, 17, 55)	>12 (0, 5, 15, 12, >12)	5.0	170430	79169	4890	25050	20930	16030	7880	3220
	M	(10, 17, 55)	>12 (0, 5, 10, 12, >12)	5.0	119140	72950	49520	29900	25070	15150	7950	2900
	M	(10, 17, 55)	>12 (0, 5, 10, 12, >12)	5.0	102980	80230	63560	31410	22170	13030	7050	2000
	P	(10, 17, 55)	>12 (0, 5, 10, 12, >12)	5.0	105270	83600	65400	31770	22310	15740	8190	2800
sample2	M	(10, 17, 55)	>12 (0, 5, 10, 12, >12)	5.0	191125	81905	4480	21620	22540	14785	7920	2815
	M	(10, 17, 55)	>12 (0, 5, 11, 12, >12)	5.0	200480	76810	43110	30580	24040	15590	7270	2600
	M	(10, 17, 55)	>12 (0, 5, 10, 12, >12)	5.0	105060	73000	49070	31770	23400	15090	8060	2770
	P	(10, 17, 55)	>12 (0, 5, 10, 12, >12)	5.0	101130	73600	49350	32000	25070	14710	7580	3220
sample3	M	(10, 17, 55)	>12 (0, 5, 10, 12, >12)	5.0	18345	73000	48300	31925	24095	15160	7270	2995
	M	(10, 17, 55)	>12 (0, 5, 11, 12, >12)	5.0	185560	79550	49870	27840	22310	16030	7880	2830
	M	(10, 17, 55)	>12 (0, 5, 10, 12, >12)	5.0	190500	73600	49300	29900	25540	14710	8190	2900
	P	(10, 17, 55)	>12 (0, 5, 10, 12, >12)	5.0	200480	71530	45600	31170	23090	13770	7420	2630
sample4	M	(10, 17, 55)	>12 (0, 5, 10, 12, >12)	5.0	183780	78300	42650	30070	25070	13390	7110	2800
	M	(10, 17, 55)	>12 (0, 5, 10, 12, >12)	5.0	191930	73000	40110	27540	21620	15160	8190	2920
	M	(10, 17, 55)	>12 (0, 5, 11, 12, >12)	5.0	130720	76500	40560	30660	22640	15740	7270	2860
	P	(10, 17, 55)	>12 (0, 5, 11, 12, >12)	5.0	172570	72110	45800	30200	24380	15740	7340	2920
sample5	M	(10, 17, 55)	>12 (0, 5, 11, 12, >12)	5.0	171645	71325	44250	30410	23900	15740	7385	3040
	M	(10, 17, 55)	>12 (0, 5, 10, 12, >12)	5.0	202280	83070	43560	27230	20780	13070	7420	3160
	M	(10, 17, 55)	>12 (0, 5, 10, 12, >12)	5.0	190980	76200	41200	30000	24390	16090	8100	2800
	P	(10, 17, 55)	>12 (0, 5, 11, 12, >12)	5.0	190480	79160	44020	27840	21390	15090	7270	2830
A	M	(10, 17, 55)	>12 (0, 5, 10, 12, >12)	5.0	191400	79160	45270	29900	21050	14050	7380	2710
	A	(10, 17, 55)	>12 (0, 5, 10, 12, >12)	5.0	182760	78370	40620	29900	22085	15740	7910	2815

Display of autosampler analysis results.

## Technical data

### Counter PAMAS-OLS:

- Particle counts in 8 channels
- Data transfer: 8 bit ASCII code, RS-232C port
- Power supply: 110 V, 115 V, 220 V, 240 V, 50-60 Hz AC

### PAMAS Volumetric Sensor: HCB-LD-50/50

Dynamic size range:

- 4 - 70 µm(c) (ISO 11171:1999)
- 1 - 100 µm (ISO 4402:1991)
- 1 - 400 µm (ANSI/NFPA)

Max. particle concentration 24,000 p/ml at 25 ml/min

### Software:

Autosampling software adapted to customers needs. Running on Windows® NT/2000/XP.

### Temperature:

Fluid Temperature: 0-90°C

### Relative humidity:

0-95%, non condensing

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