

Portable Particle Counter for aviation turbine fuels

IP 564, DEFSTAN 91-91 Jet Fuels

Product group(s): Fuel, Portable Tester

User group(s): Airports & Aviation, Aviation Fuel, Fuel, Jet, Jet Fuel, Kerosene, Turbine Fuel

Scope: This standard describes a method for determining the level of dispersed contamination in aviation kerosene fuels, specifically dirt particles and water droplets in the range from $>4\mu\text{m}$ to $>30\mu\text{m}$. This method relates specifically to aviation fuels but the equipment can be used on all fuels, petroleum and mineral based fluids.

The Particle Counter has been developed from existing technology for monitoring contamination in aviation turbine and other hydrocarbon fuels in acc. with Method IP 564.

In addition, the unit can also be used to monitor various fuels from existing sampling points in locations from refineries, pipelines, distribution terminals, airport fuel supply systems.

- portability
- easy handling
- short test times



Technical Data

Test time:	2 minutes
Flow Rate:	25-50 ml/min
Fluid Compatability:	hydrocarbon fuel, mineral oil
Repeatability/	as per or better than ISO 11 171
Accuracy:	
Principle of operation:	optical scanning analysis and measurements of actual particles and inference to water presence
Primary output:	$>4 / >6 / >14 / >21 / >25 / >30\mu\text{m}$ counts per ml
Secondary output: (diagnostic)	% volume distribution, via graphical display on handset and printout
Cleanroom standards:	ISO 7-22 in acc. with ISO 4406-1999
Data entry:	32 character two line dot matrix LCD, full alpha numeric entry
Data retrieval:	memory access gives test search facility
Calibration:	in acc. to ISO 11 171:1999, clause 6
Operating Temperature:	$+5^{\circ}\text{C}$ to $+80^{\circ}\text{C}$
Memory store:	300 test capacity
Computer interface:	via RS 232 connection @ 9600 baud rate (USB serial cable to RS 232 option available)
Laboratory sampling:	oil delivery unit - test portion sampling device
Portability:	battery pack and carrying case with wheels
Printer facility:	integral 16 column printer for hard copy data
Certification:	complies with all relevant EC declarations of conformity
Power requirements:	12 V DC, 6x 'D' cell or rechargeable batteries
Weight:	8 kg (13 kg incl. carrying case)
Power supply:	110-240 V, 50/60 Hz

Main Unit

13-3300 Portable Particle Counter for aviation turbine fuels



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Consisting of:

Portable Particle Counter with carrying case and test kit
Ready for use

Power supply: 110-240 V, 50/60 Hz, EU-plug

13-3301 Portable Particle Counter for aviation turbine fuels

Like 13-3300 but:

Power supply: 110-240 V, 50/60 Hz, US-plug

Options & Accessories

13-3311 Calibration Fluid

13-3312 Re-Calibration

Spare Parts

13-3305 Paper Roll, 5 pieces

13-3306 Waste Bottle

13-3307 Inlet Bottle Centralizer and Holder for waste bottle

13-3308 Suction Hose, 5 meter

13-3309 Viton Hose, 0.5 meter

13-3310 Fuse, 5 pieces

Order Guideline

Minimum equipment: 1x 13-3300
Spares (approx. 1 year): 1x 13-3305, 1x 13-3310, 1x 13-3311
Additional requirements: