Filter Weighing for Emission Determination

Fast Results for the Automotive Industry



High throughput

The automated process speeds up the weighing time of 60 filters down to 60 minutes while keeping the acclimatization time constant.



Smart filter handling

The innovative filter holder allows acclimatization, storage, transport and weighing all in one, without filter removal and any interruption.



Perfect workflow

The integrated warning system ensures safe loading and unloading of the magazine even during the weighing process.



Safe data management

The Windows® based software FilterControl facilitates filter coding with its barcode scanner and allows the data integration into your existing software system.



F-A747 Filter Robot

Reach norms with minimal effort

METTLER TOLEDO F-A747 Filter Robot supports the automotive industry in complying with the increasingly strict worldwide limits for Particulate Matter (PM), especially emitted by diesel engines.

F-A747 Filter Robot guarantees cutting-edge filter measurement performance for emission determination down to 0.1 µg in full compliance with today's and upcoming EU and US norms.

The automated weighing process and the filter control software solution simplify and accelerate your workflow as much as possible.

F-A747 Filter Robot offers a variety of settings, measurement parameters and reports according to your needs.

- · High throughput
- Easy handling of up to 60 filters
- Full compliance with today's EU and US norms
- Safe data management

METTLER TOLEDO F-A747 Filter Robot: the turnkey solution for worldwide automotive industry.



F-A747 Filter Robot

Technical Data

Filter robotic weighing	
Filter Diameter	47 mm
Robot magazine positions	60 + 3 positions
Reference filter positions	2 positions
External calibration weight	200 mg (Class E2)
Balance readability	0.1 μg
Repeatability with filter (sd)	0.25 μg
Repeatability with filter typical (sd)	0.15 μg
Repeatability stainless steel test weight	≤ 0.2 µg
Setting time	16 s
Built-in balance adjustment	automatic
Maximum load	2.1 g
Electrical weighing range	0 2.1 g
Linearity (electrical weighing range)	1 μg

Handling and safety	
Filter holder included	60 + 3 pieces
Transport case	60 pieces
Barcode reader, identification and coding	•
Filter lifter and tweezer	•
Action indication traffic light	•
Access door with auto start/stop	•
Light barrier control	•
Emergency power stop	•

Software	
Pre-set acclimatization time	0 24 h
Weighing after acclimatization	automatic
Multiple weighing of filters	1 – 10x
Pre-set calibration time	•
Online status and monitoring of filters	•
Interruption free handling technology	•
Controller with Windows® based software	included
Data management and export of data	report and export

Admissible environmental conditions	
Temperature (°C)	17 – 27
Max. temperature change (°C / 12 H)	± 0.5
Relative Humidity (%)	45 – 60

Dimensions	
Robot (W x D x H, cm)	169 x 103 x 186
Display unit (W x D x H, cm)	22.4 x 36.6 x 9.4
Robot weight (kg)	290

Regulations and compliancy	
Europe	Euro 4 – Euro 6
US / Canada	EPA – 40CFR86N / Tier 2
Japan	10-15 + 11 Mode / JC08H/C
China	SEPA IV (Euro 4)
India	Bharat Stage IV (Euro 4)
Brazil	PROCONVE L4 – L5

Accessories

Antistatic Ionisator in front of the magazine	11116995
Filter holder, per piece	11116993
Transport case with storage plates, per piece	11116994



The antistatic lonisator and grounded construction eliminate static loads.



The transport case with 2 storage plates can accomodate 60 filter holders.



Quality certificate ISO 9001 Environment certificate ISO 14001 Worldwide service



MarCom Greifensee

www.mt.com/filter_

For more information