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Product information GMD 06

The GMD 06 is an automatic sampling device for gravimetric dust measurements. These measurements are used as reference measuring method for the calibration of dust measuring devices (in Germany according to DIN VDI 2066).

Characteristics and function

The GMD 06 is able to record independently all parameters being necessary for the dust measurement (e.g. humidity of the measuring gas, velocity in the stack as well as temperature and pressure).

The GMD 06 sucks off automatically a partial gas flow from the stack in isocinetic way and under control of the exhaust gas parameters.

This partial gas flow is sucked through a filter where the dust contained is precipitated. After the measurement the filter is conditioned and weighed.



GMD 06

When the weighed filter mass has been entered manually the GMD 06 calculates the dust content of the sample in operational and standard state.

Highlights of the device:

- Compact system consisting of probe and control unit, simple use
- Variable possibilities of use since the probe can be adjusted to customer requirements
- On-site diagnosis of the measuring values by highly-resolving graphic display
- Excellent price-performance ratio



Procedure of measurement

1. Measurement of absolute humidity in the exhaust gas with humidity probe
2. Measurement of the exhaust gas velocity with the combined probe for differential pressure p , gas velocity and temperature
3. Selection of the dust probe as result of the velocity measurement
4. Connection of dust probe with tube and insertion of the filter element
5. Start of measurement by pressing the button and wait for the end of measurement - the exhaust and sample parameters are automatically saved
6. Enter the dust mass determined after the the filter has been weighed.
7. The result of the dust sampling is automatically calculated - output of values e.g. By means of integrated printer respectively via interface.

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# FLUE DUST SAMPLE KEWUKU *
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No: 040-001#  DATE: 2005-09-23 13:12
Ba(kPa)= 101.32  Kp   = 0.040
Xsw(%)= 01.74   Nidu  = 1.231
Pt(kPa)= +00.13  Ts (.C)= 024
Ps(kPa)= +00.01  Pd (Pa)= 0170
Pr(kPa)= -05.34  Tr (.C)= +25
Da (m) = 1.000   Fa (m2)= 0.785
Us(m/s)= 13.96   TrackRate = 0.976
Qs(m3/h)=0039462  Qsrd(m3/h)=0035628
d (mm) = 06.0    SunTime= 01m20s
V (L) = 0031.0   Vnd (L)= 0026.8
Cnd(kg/m3)=03725.3  Csg(kg) = 00100.0
PFSL(kg/h)=0132.73
O2(%)= 11.9   a' = 02.32
Knd(kg/m3)=04002.4 ( a=1.8 )
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** TIANHONG TH880-IV REPORT **
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Example print out

General technical data

Case:	portable set (control unit integrated)
Media temperature:	max. 400 °C
Ambient temperature:	-20 ... +50 °C
Dew point difference:	min. +5 K
Power supply:	230 VAC / 50 Hz, 200 W
Data storage:	125 samples

Measuring variables

Dynamic pressure:	0 ... 1.500 Pa
Static pressure:	-30 ... 10 kPa
Barometric pressure:	-30 ... 10 kPa
Flow (sampling):	10 ... 50 l/min
Temperature (before flow meter):	0 ... 99 °C
Temperature (exhaust gas):	0 ... 400 °C
Humidity:	0 ... 40 Vol%
Response time:	< 8 sec