

Wide Range Dry Powder Dust Mass Calibration Tower Model #7.850

General

These towers are designed to feed larger aerosol particle into dust monitors. This is particularly important when the monitors must meet the inhalable or the PM_{10} values, since these are particle sizes which drop out fast and are therefore hard to enter into the monitor. Therefore this is best achieved by a vertical "drop down" solution, as developed with our powder disperser #7.850. This tower assures highly precise and stable dust generation and long term operation.

This aerosol powder is then transported into the top of the tower and there equally distributed. The connected four spectrometers are assuring equal mass distribution.

One of these connected spectrometers is "reference" unit, the other three units shall be calibrated automatically by an external computer to the same mass distribution curve.

GRIMM Calibration Method

To compare the obtained results from each of the test candidates, a "Mother" reference unit is added to the system. All results obtained from the candidates are compared by a computer program against these values to assure proper correlation. The candidate values are automatically reset, until all instruments show the same values. The correlation value is factory set, therefore all units are set normally for an acceptance limit of less than +/- 3 % difference.

Specification

Tower length:	120 cm (50")
Power supply:	compressed air
Material:	stainless steel
Sampling control:	automatic
Test outlets:	4 outlets
Dust feeding:	automatic
Dust bag:	½ kg (5 oz)
System control:	via external PC
Cleaning system:	integrated
Logic control:	32-bit program
Mass:	14 kg

Accessories

#7855	0.5 kg polydispere ISO 12103 dust
#7855	0.5 kg polydispere dolomit dust



The #7.850 tower connected with four spectrometers.
There is still the combination of a tower and two environmental spectrometers.