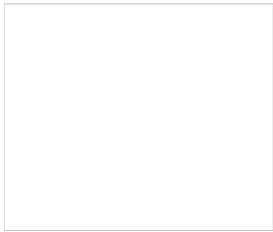


ISO 16890 – TROX HELPS DEVELOP A NEW FILTER STANDARD

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Fine dust consists of the tiniest solid and liquid particles, which are grouped into different particle size fractions. Particulate matter consists of particles that can be inhaled since they have a diameter of only up to 10 µm (PM10). Particles from 3 to 10 µm are deposited in the nose and throat.



Particles of about 2.5 µm (PM2.5) are respirable. Particles that are smaller than 1 µm (PM1) enter the alveoli and eventually the bloodstream.

The increase of particulate matter pollution and the shortcomings of existing standards have eventually led to the development of the new ISO 16890 standard. EN 779 was last updated in 2012. It describes a test procedure, where the efficiency of particulate filters is tested only with a uniform particle size, namely 0.4 µm. Based on the result, particulate filters were grouped into classes from M5 to F9.

The new international ISO 16890 standard defines four new filter groups, and filter efficiency is measured with three different particle fractions, namely PM1, PM2.5 and PM10.

- › ISO Coarse (assessment of the separation of ISO A2 dust)
- › ISO PM10: Particles ≤ 10 µm
- › ISO PM2.5: Particles ≤ 2.5 µm
- › ISO PM1: Particles ≤ 1 µm

ISO 16890 also describes the test procedures to determine the principal characteristics of air filters, and it will replace EN 779 after a transition period of 18 months in mid-2018.

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The new classification allows for a better assessment of fine dust filters and for adapting them to specific applications. ISO 16890 was developed by WG 3 of ISO TC 142, the international standardisation committee of which TROX is also a member.

TROX develops and manufactures high-quality filters that combine maximum air cleanliness with maximum energy efficiency. Whether business or leisure time – the focus is always on people and their health.

Our new flyer, 'ISO 16890 – The new standard for coarse dust and fine dust filters', contains all you need to know. [Find out more here.](#)

TROX is leading in the development, manufacture and sale of components, units and systems for the ventilation and air conditioning of rooms. With 27 subsidiary companies in 27 countries on 5 continents, 14 production facilities, and importers and representatives, TROX is present in over 70 countries. Founded in 1951, global market leader TROX, whose international head office is in Germany, generated in 2016 with 3,700 employees around the globe revenues of nearly €500 million.



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