

Establishment and provision of a test center for respiratory masks

With the outbreak of the corona pandemic (COVID-19), the need for protective equipment has increased immediately worldwide. On the one hand, this led to a shortage of the respiratory masks offered (with CE marking in accordance with EU Regulation 2016/425) and on the other hand, respiratory masks from Chinese productions (KN 95 standard) were offered. Due to this explosive increase in demand, not only bottlenecks occurred in the worldwide production of masks, but also in the technical testing of these masks for their protective effect.

In addition, the domestic protective mask production started, which also required so-called product tests in order to gain experience, and which should also be offered the possibility to provide your finished products with a CE marking so that they can be marketed throughout Europe.

Therefore the construction of the test laboratory in BEV began on March 20, 2020, and is in operation since March 28, 2020. In view of the acute and urgent situation, it is checked in a shortened procedure. The method is based on selected test points of the EN 149 standard. Based on the essential standard points of EN 149, the establishment of relevant test facilities (e.g. contains an artificial lung) for testing the inhalation and exhalation resistance, the use and temperature conditioning, as well as for the determination of the passage of the filter medium started with a test aerosol. The tested CPA masks correspond to device class FFP2 and are intended for use by medical personnel only. The testing process takes 2-3 days. The respirators come from China and from Austrian production.

Summarizing, BEV was not only able to build a completely new laboratory for testing respiratory masks within ten days we also could implement our outstanding knowledge of traceability and the handling of testing itself including a highly improved quality management system.