





The experimental studies within NANoREG confirmed the findings of other studies that face seal leakage, and not filter penetration, is a key parameter to be considered.

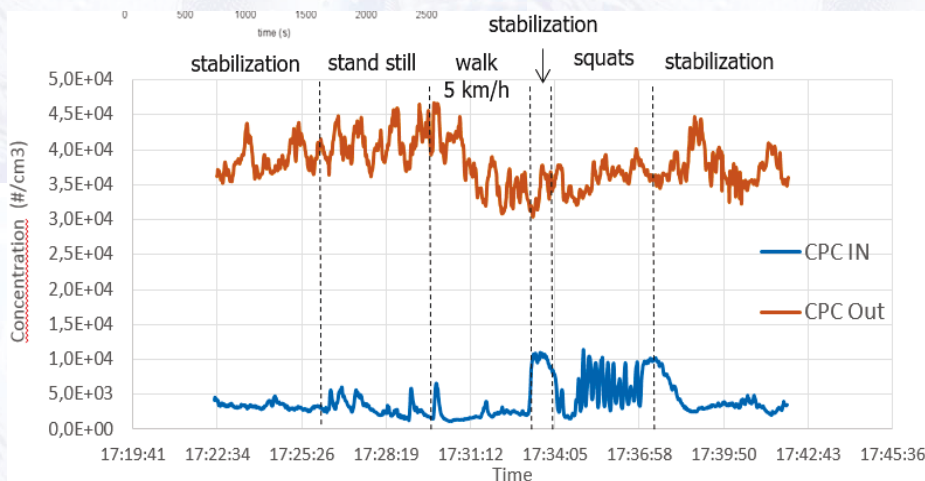


Figure: Particle number concentrations inside the suit and in the chamber along the exercises during a generic test of a suit.

In general terms, the results of the study conducted revealed that an adequate protection of the human health and the environment against NMs can be achieved by means of the combination of administrative controls, local exhaust ventilation systems and personal protective equipment. Notwithstanding, a proper risk evaluation by expertise staff should be conducted to evaluate the risk in the workplace.

Based on the results of the testing programme and considering data from relevant guidelines and scientific publications, recommendations have been defined with respect to the selection of personnel protective equipment following the sequence below:

1. Identification and assessment of the route of exposure, physical state and mode of use of the nanomaterials
2. Definition of the type of RMM following the STOP principle, selecting collective controls in a first place and specific PPE according with the characteristics of the nanomaterial and route of exposure. Deliverable 3.9 presents a diagram of decision to assist stakeholders on the choice of proper measures.



Left Static test (Clothes). Right Dynamic test with volunteers

The results of the testing activities are compiled in a library of nano-specific Risk Management Measures (RMM) and designed to provide small and medium sized enterprises (SMEs), large companies, and other relevant stakeholders with an easy to use tool to select proper measures to achieve a high level of protection of the human health and the environment. The library follows the structure of the RMM library developed under the scope of the REACH implementation project 3.2, which provides insight into the efficiency of technical control measures in the workplace.

The data generated on the effectiveness of common RMMs for different exposure situations will allow regulators and industry to make appropriate choices in risk management decisions and measurements for specific exposure situations. Moreover, the development of standard procedures for RMM effectiveness testing will allow the regulatory bodies to define new performance requirement to ensure a high level of protection for the human health and the environment.

For more details about NANoREG please visit the official website [www.nanoreg.eu](http://www.nanoreg.eu).

