

Nanoparticle Emission Testers

Models 3795 & 3795-HC

Solid Particle Measurements

Sampling from combustion sources is often challenging due to the presence of volatile material in the exhaust gas. Volatile components are extremely sensitive to sampling conditions and can grow existing particles and form new particles by nucleation. By oxidizing away volatile components and particles, the Nanoparticle Emissions Tester (NPET) 3795 measures only the remaining solid particles, using the same core technology as our research grade CPCs.

Portable and Accurate

The NPET 3795 helps you bring laboratory-grade particle counting to your worksite. The NPET features a sampling probe compatible with tailpipes, built-in 10:1 dilution, and a catalytic stripper to remove volatile particles. The results are comparable to type-approval solid particle number instruments.

The NPET can be used to characterize various emission sources, such as tailpipes (diesel or gasoline combustion engines), wood stoves, or biomass or waste conversion power plants. The NPET serves also as reference unit in the on-going research of in-use testing of vehicles.

Official Certification Testing

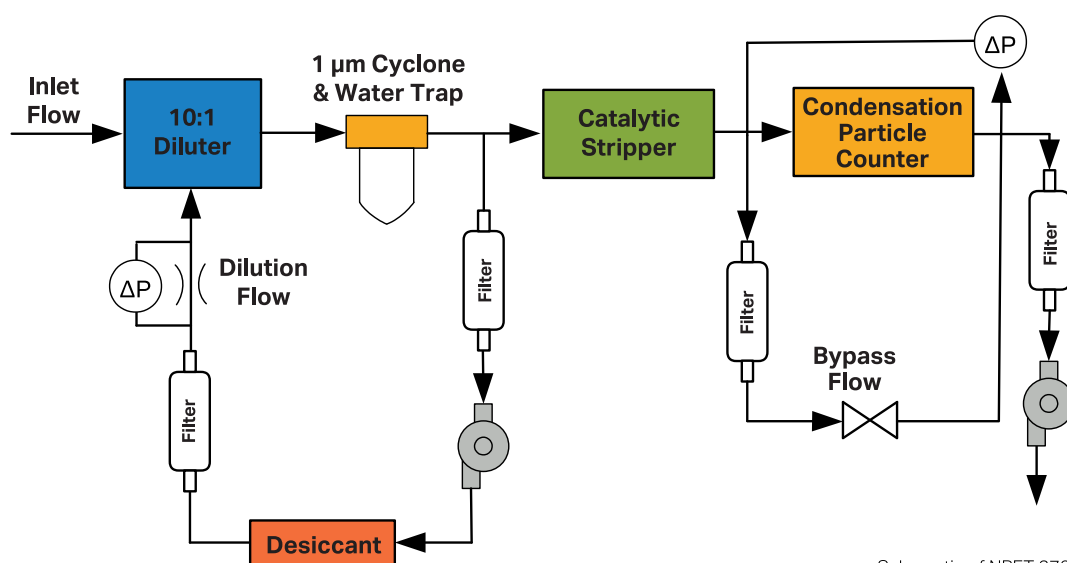
The NPET 3795 fully meets Swiss Regulation 941.242 for the periodic certification of diesel-powered machinery equipped with a DPF.

General Emission Testing

The High-Concentration NPET 3795-HC was developed to assist DPF manufacturers, engine developers and fleet managers to assess nanoparticle emissions and the efficiency of after-treatment systems, without needing to meet the requirements of the Swiss regulation. The 3795-HC has an additional 20:1 dilution stage, making this instrument capable of measuring raw exhaust emissions up to 100,000,000 particles/cm³.



3795 shown



Schematic of NPET 3795