

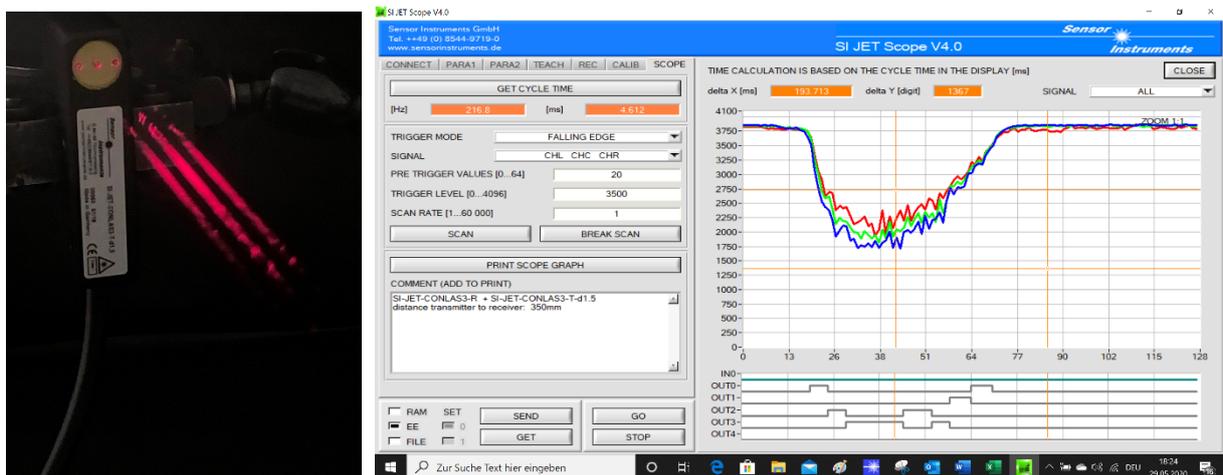
Press information from Sensor Instruments

April 2021

Inline spray jet control outside and inside the potentially explosive atmosphere!

07/04/2021. Sensor Instruments GmbH: Surface coatings are often applied by spraying. Ideally, objects should be coated homogeneously. Air pockets in the spraying medium, partial covering of the nozzle outlet apertures or an abrupt pressure fall in the spraying system can result in inhomogeneities in the spray cover and thus uneven coating of the workpiece. Timely recognition of deviation from the ideal spraying procedure can be performed via continual spray jet control. The spray jet control systems of the SI-JET series and the SPECTRO series from Sensor Instruments GmbH provide information about the spraying quantity, the length of interruptions and the spray jet symmetry.

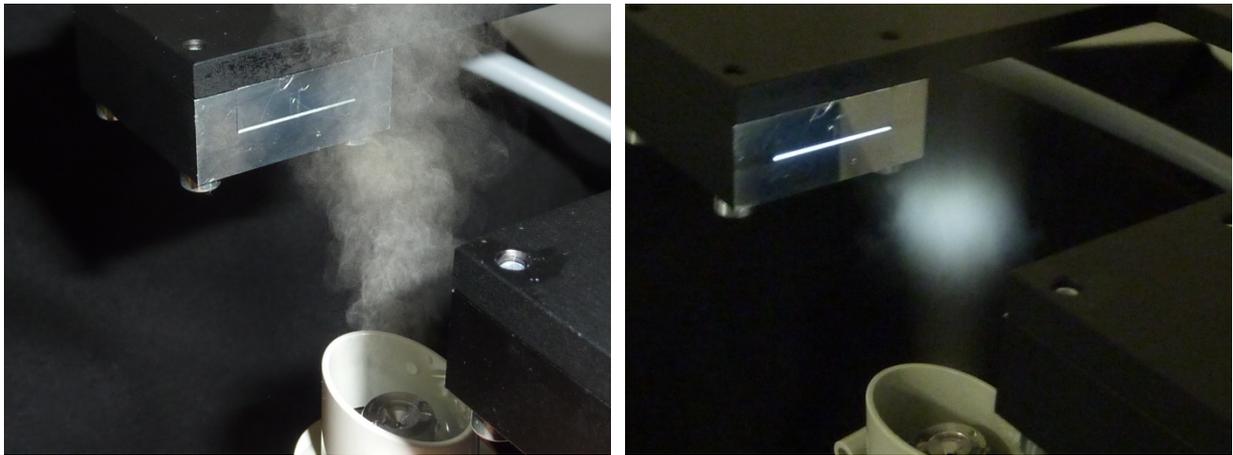
Three-jet systems (SI-JET-CONLAS3 and SI-JET3) two-jet systems (SPECTRO-2) one-jet systems (SPECTRO-1) and continuous light barriers (L-LAS-TB-...-SC) are available to perform the respective task. A high scan frequency (up to type 200kHz) permits control of pulsed spraying procedures up to measurement of individual spray droplets. A range of fiber optic systems (1, 2 and 3-jet systems) are available for use in potentially explosive atmospheres; a suitable fiber optic can be used to vary the distance between the channels. The aperture (light emission aperture) can be selected to match the control task. Optical attachments, including blowing air attachments supplement the product portfolio.



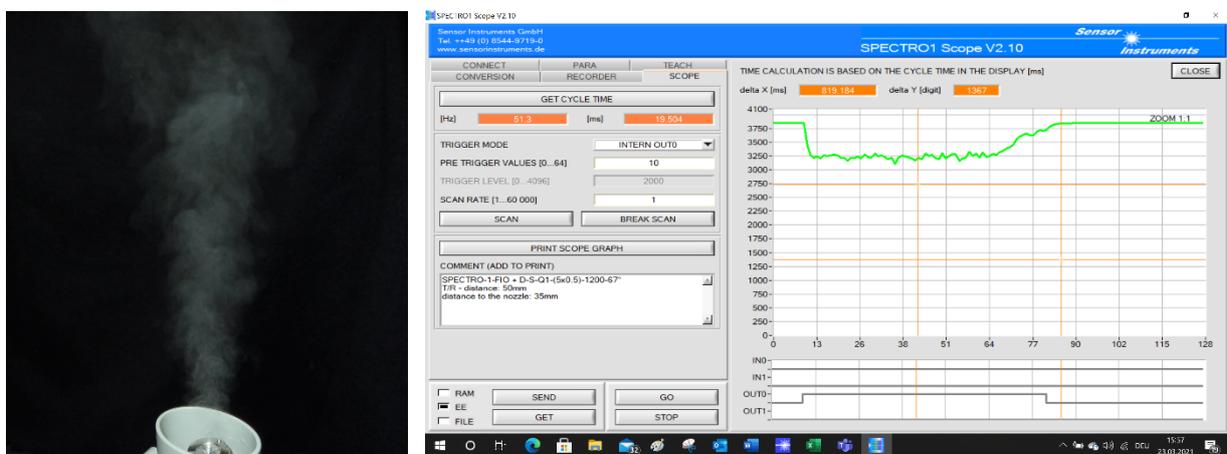
Three-jet laser spray jet system SI-JET-CONLAS3 for ascertaining the spray density and spraying symmetry



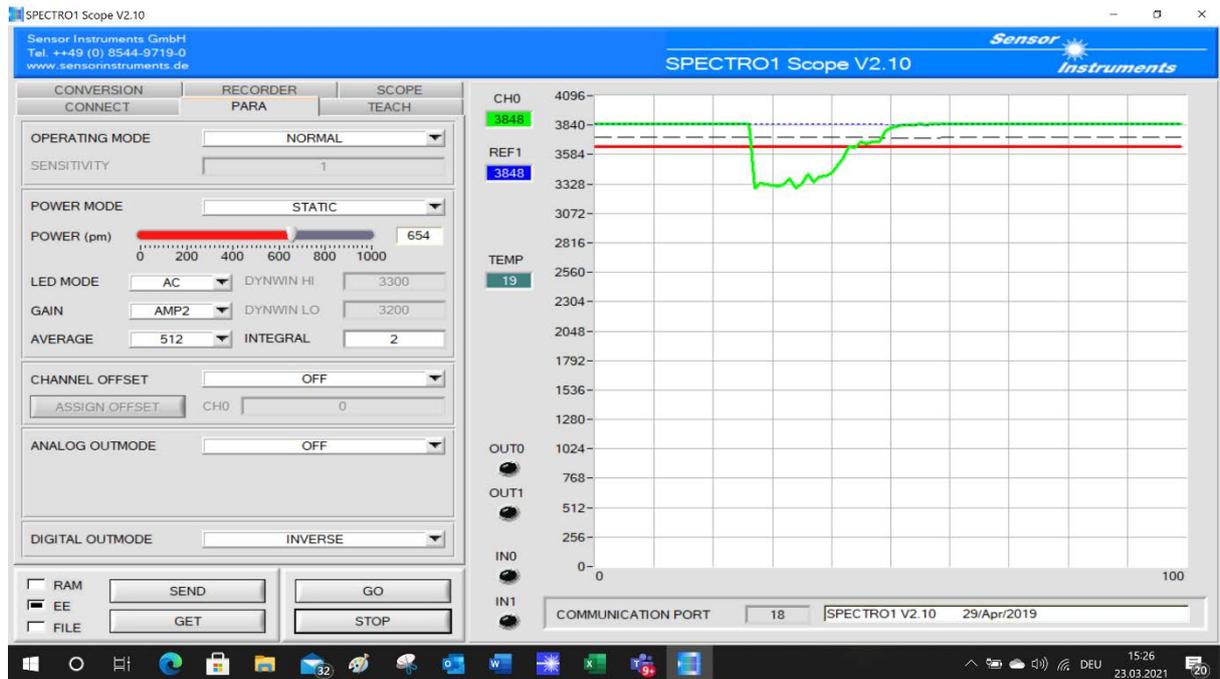
Pulsed spraying procedure (burst of 7 pulses)



Controlling a nebulizer spray jet in a potentially explosive atmosphere using a fiber optic cross section converter



Typical signal course during a spraying procedure



Parametrization of the sensor using the SPECTRO1 Scope V2.10 Windows® - software

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