

# Application-Report - Fan speed measurement + inspection Tachometer control



## Area of application:

SCHÖMA - Christoph Schöttler Maschinenfabrik – is a global leading manufacturer of tunnel locomotives and other rail vehicles. With proven and flexible components, tailor-made locomotives are developed and produced for almost all requirements, even for difficult application fields. The product portfolio includes vehicles in a weight class up to 80 tons and an engine power up to 700 KW.

## Task:

When measuring the wheel rotational speed, it is important to calibrate the tachometer or prove that the determined maximum speed is reached.

When measuring the ventilator rotational speed, it is crucial to balance and control the hydraulically driven ventilators.

On electrical ventilators, it is important to document the new status, in order to be able to analyse too high temperatures in the field at later times.

In both cases, the problem of recognizing the old reflector label by the service technician is a problem which sometimes occurs. They then would fix a second marker and mistakenly measure both labels. Due to the redundant measured value determination from tachometer and stroboscope functions, such measurement errors could be detected and avoided.



Source: Company Schöma Lokomotiven

## Solution/ Result:

Since with speed-controlled fan systems a continuous change in the number of revolutions occurs, a permanent readjustment of the stroboscope would be necessary. With the auto-sync laser function, the device automatically adjusts itself to the current speed by recognizing the reflective tape. This measurement task is hence solved optimally.



YouTube Video: wheel speed measurement with the tachometer function



[RT STROBE pocketLED LASER A4-3005](#)



YouTube Video: Application Company Schöma

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