



1. Frequency control of turbo charger wheels

The frequency of turbo charger wheels should be controlled. At this, one of the blades of the wheel is coated with a fluorescent transparent lacquer. For this purpose, a contrast fluorescence sensor type **SPECTRO-1-FIO-UV** in connection with an optical fiber type **R-S-A3.0-(3.0)-1200-Y-22°/67°-UV**, an external lightning source type **ELS-UV-1P** and an optical frontend type **KL-52-XL-A3.0** are used. The distance from the frontend to the blades of the turbo charger wheel is approximately 80mm and the spot size at this distance is around 5mm in diameter. The fluorescent blade can be proper detected, even at high speed condition as shown in the screen shots.

