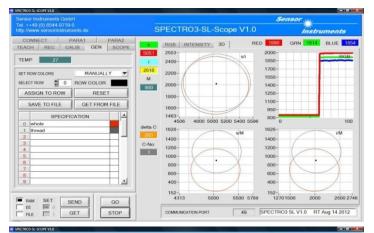
Application - News N°405 SPECTRO-3 series

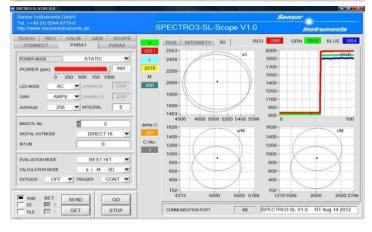
Instruments

1. Presence control of an inside thread at a gear wheel

The presence of an inside thread at a gear wheel should be controlled. For this purpose a color sensor type **SPECTRO-3-FIO-SL** in connection with an optical fiber type **R-S-R2.1-(6x1)-1200-67°** and an optical frontend type **KL-8-R2.1** are used. The distance from the frontend to the thread is approximately 15mm and the spot size at this distance is around 10mm x 2mm. Furthermore, the frontend is arranged under an angle of 45° to the vertical axis. The thread can be proper detected and distinguished from a hole as shown in the screen shots.













2. Presence control of a hole at a gear wheel

The presence of a hole at a gear wheel should be controlled. Furthermore it should be controlled, whether the hole is blocked from e.g. a drill bit. For this purpose a color sensor type **SPECTRO-3-FIO-SL** in connection with an optical fiber **R-S-A2.0-2.5-1200-67°** and an optical front end type **KL-3** are used. The distance from the optical front end to the gear wheel surface is approximately 11mm and the spot size at this distance is around 1.5mm. The hole can be detected properly as shown in the screen shots.

