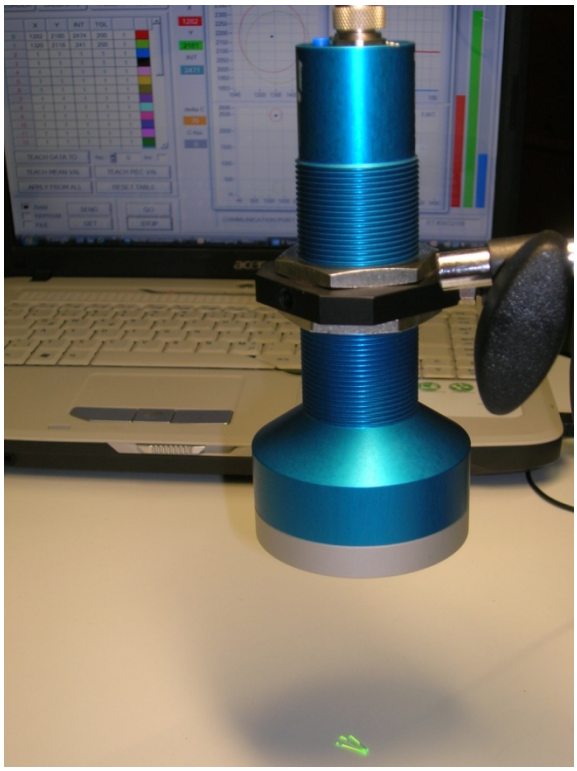
1. Color differentiation of fluorescent liquids and marks

Available fluorescent sensors so far detect only the intensity of a fluorescent object but not the color. Furthermore these sensors have a problem to detect very weak fluorescent objects or fluorescent objects at a distance more than 80 mm and additionally they are sensitive against ambient light. Concerning the application “leak detection on welding lines of white goods” where a robot equipped with a spray nozzle sprays yellow fluorescent liquid in a sheet metal casing of a dish washer and a fluorescent color sensor type **SPECTRO-3-80-UV** is guided along the welding lines at the outer face. In case of presence of a leak fluorescent liquid reaches the outer face and will be detected from the fluorescent color sensor. At the same time there are at the outer face of the sheet metal casing residue of oil. Oil has the property to fluorescent in the blue range if UV light is used. Conventional fluorescent sensors cannot distinguish between the blue fluorescence of oil and the yellow fluorescence of the fluorescent liquid. Due to the fact that the color sensor **SPECTRO-3-80-UV** allows distinguishing between fluorescent blue and fluorescent yellow, a proper detection of the yellow fluorescent liquid will not be influenced.



In another application the fluorescent sensor **SPECTRO-3-30-UV** must distinguish between different fluorescent colors from color marks. These color marks will be used in the printing industry for register control tasks. Due to the high rate of feed a high scan frequency is requested. The **SPECTRO-3 series** comes with a scan frequency of 40 kHz and a switching frequency of 25 kHz which is more than sufficient for this application area.