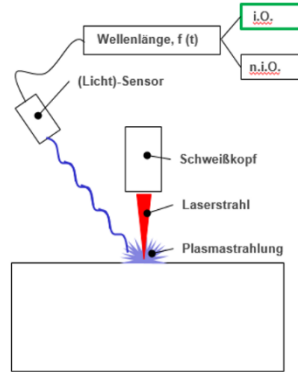


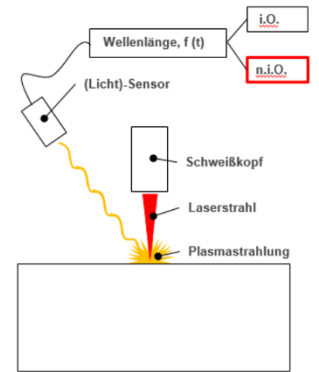


1. Laser welding process control

During the laser welding the color as well as the intensity of the emitted light, caused by the laser welding, should be controlled. For this purpose, a color sensor type **SPECTRO-3-FIO-MSM-ANA-DL** in connection with an optical fiber type **R-S-A3.0-(3.0)-1200-67°-FLX** and an optical frontend type **KL-M18-KG3-A3.0** with an air blow unit type **ABL-M18-10** in front, is used. At this, the distance from the frontend to the welding spot is approximately 300mm and the detecting range at this distance is around 30mm in diameter. The color as well as the intensity of the emitted light, caused by laser welding, can be proper controlled, as shown in the screen shots.



Tiefschweißung mit spezifischem „bläulichen“ Plasma



Keine Tiefschweißung (z.B. Wärmeleitschweißung) mit veränderter emittierter Wellenlänge in der Schweißzone

