

# Laserabschattung LSS

## Berührungsfreie Dickenmessung



The thickness of web will be calculated by the difference of distance from eddy current sensor to the roller and the web surface measured by the CCD camera from laser scan micrometer

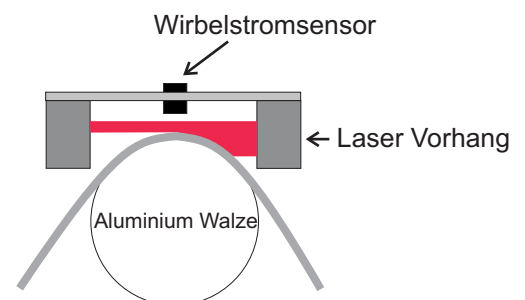
### Scanner with shadow sensor

### Specs

|                         |             |
|-------------------------|-------------|
| Messbereich             | 4mm         |
| Auflösung               | 1,3 $\mu$ m |
| Wiederholgenauigkeit    | +5 $\mu$ m  |
| Auflösung im Querprofil | 0,8mm       |
| Messspalt               | 5mm         |

berührungsfrei  
Linearität wird durch Spline kompensiert - kein Fehler

### Messprinzip Laser Abschattung



### Specs of Components

#### Laser scan micrometer

#### Specs

|                 |              |
|-----------------|--------------|
| Measuring range | 40mm         |
| Resolution      | 0,25 $\mu$ m |
| Linearity       | +3 $\mu$ m   |
| Repeatability   | +1 $\mu$ m   |
| Frequency       | 2300Hz       |

#### Eddy current sensor

#### Specs

|                 |             |
|-----------------|-------------|
| Measuring range | 6mm         |
| Resolution      | 0,3 $\mu$ m |
| Linearity       | 1,5 $\mu$ m |
| Repeatability   | 0,6 $\mu$ m |
| Frequency       | 25kHz       |