

WiSE

 Wire Surveillance Equipment


Purpose

WiSE is wire monitoring system designed to continuously monitor the wire drawing process. It measures three signals, **vibrations, wire temperature** and **wire surface brightness**. The system both monitors and collects these signals.

WiSE consists of a server unit and at least one sensor units.

WiSE can be used for (not exclusively):

- Live monitoring of the wire drawing process
- Activate alarms when the process is outside of user defined thresholds
- Optimization of the wire drawing process

| WiSE Sensor type | | WiSE | WiSE XL |
|-------------------------------------|--|-------------------------|-------------------|
| Wire diameter range | Wire diameter | 2 - 8 mm | 8 – 19 (30) mm |
| Performance | | | |
| Measurements | 3 values/signal is stored every second (15 datapoints/second per unit) | | |
| Vibrations | Sampling frequency | 200 Hz | |
| Wire brightness | Sampling frequency | 30 Hz | |
| | Number of cameras | 3 | |
| | Measurement range | 0 – 254 a.u. | |
| | Repeatability | ± 5% | |
| Wire temperature | Temperature range | 0 – 350°C | |
| | Measurement accuracy | ± 2°C | |
| Environment and general data | | | |
| Dimensions | Width x Length x Height | 29 x 82 x 82 mm | 29 x 108 x 108 mm |
| | Hole diameter | 16 mm | 39 mm |
| | Weight | 220 g | 300 g |
| Temperature | Operational temperature | 0 - 40°C | |
| Connections | | | |
| Power | | From server | |
| | Connector type | GX16 6-pin | |
| Dry compressed air | Input pressure | 2-7 bar | |
| | Connector type | For 4 mm pneumatic hose | |
| Communications | Ethernet | Only to server | |
| | Wi-Fi (optional) | Only to server | |

| WiSE Server | | |
|--------------------------------------|--|--------------------------------|
| Interface | | |
| GUI | Web based graphical user interface | |
| Data output | .csv file can be downloaded for every production run | |
| Continuous digital output (optional) | | |
| | API | |
| | Possibilities to connect to PLC | |
| Environment and general data | | |
| Dimensions | Width x Length x Height | 115 x 55 x 100 mm |
| | Weight | 1000 g |
| Temperature | Operational temperature | 0 - 40°C |
| Connections | | |
| Power | | 9 – 30 v, minimum 36 w |
| | Connector type | DC-plug 5.5 x 2.1 mm |
| Communications | Wi-Fi (optional) | To sensors |
| | | For PC to connect to GUI |
| | Ethernet | To sensors |
| | | For PC to connect to GUI |
| | | To internet for remote support |

Schematic drawing of WiSE-sensor

