Questionnaire WMS II
Liebherr water content measurement system WMS II



**WMS II planar sensor P45-GD WMS II planar sensor P78-GD WMS II rod sensor P45-GD**

|  |  |  |  |
| --- | --- | --- | --- |
| **Company:**  |  | **Contact:** |  |
| **Street:** |  | **Post code, Town:** |  |
| **Phone:** |  | **E-Mail:** |  |
| **www.** |  | **Date:** |  |

 **Process and medium characteristics:**

|  |  |
| --- | --- |
| **MarkingMedium/Liquid:** |   [ ]  other emulsion:      Composition:       |
| **MarkingPowder & Bulk:** |  [ ]  Other Powder&Bulk:      Grain size:min:    mm max:    mm |
| **Medium/Material temperature** (°C) | min.:    norm.:     max.:     |
| **Ambient temperature** (°C) | min.:    norm.:     max.:     |
| **Pressure** (bar) | min.:    norm.:     max.:     |
| **Density (**kg/m³)**:**  | min.:     norm.:      max.:     Variation:   |
| **Viscosity** (Pas) | min.:    norm.:     max.:     |

**Measurement range
Water content/Moisture:**  min:      % water content/moisture max:      % water content/moisture

**Required accuracy:** +/-      % water content/moisture

Water saturation at: ca.     % water content

Rate of wear: [ ]  low [ ]  high

Adhesive strength: [ ]  low [ ]  high

Conductivity: [ ]  yes [ ]  no

Moisture reference (% water content):

**Installation Place / measurement point:**

**Sensor installation place**
**Emulsions:** [ ]  Tube size, :       mm, or    Inch “

 Wall thickness:       mm

 [ ]  Tank highness:       m

 :       m

 [ ]  Other installation site:

**Measuring field shaft sensor:** [ ]  front side [ ]  Option: lateral measuring field

**Retractable fitting** (only shaft sensor, up to pressure 6 bar,
material: 1.4571) desired: [ ]  yes [ ]  no

**Installation place
Powder &Bulk:** [ ]  Tube :       mm

 [ ]  Other

Process type: [ ]  Continuous operation [ ]  Batching operation (Starting signal 24 V)

Material layer on sensor: min:       mm max:       mm

**Material Sensor:**  other material:

**Distance measuring point (s) – PLC/Controll-system**, max:       m

**Number of measuring points:**

**Separate display necessary:** [ ]

**Certificates**: ATEX / UKEX:

EU-type examination certificate number: EPS 21 ATEX 1 140 X

 EPS 22 UKEX 1 159 X

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EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-11:2012,
EN 60079-26:2015, EN 60079-31:2014

******Gas EX-protection:**

 II 1/2 G Ex db/ia IIC T4 Ga/Gb

**Dust EX-protection:**

 II 1/2 D Ex tb/ia IIIC T135°C Da/Db

IECEx:

Certificate number: IECEx EPS 21.0047X

IEC 60079-0:2017 Edition: 7.0, IEC 60079-1:2014-06 Edition: 7.0,
 IEC 60079-11:2011 Edition: 6, IEC 60079-26:2014-10 Edition: 3.0,
 IEC 60079-31:2013 Edition: 2

**Gas EX-protection:**

Ex db/ia IIC T4 Ga/Gb

**Dust EX-protection:**

Ex tb/ia IIIC T135°C Da/Db

**Desired applicable device category:**

**Other local certificates necessary**: [ ]

Other:

**Process connection**: Pressure: 75 bar (16 bar with WMS II planar sensor P78-GD)

Threaded flange: ASME B16.5

Temperature class: 1500

Flange: DN 40 or 1 ½ Zoll

 Other process connection necessary:

**Output signal:** 4 - 20 mA, actively supplied from sensor

 power supply unit, max. load 500 Ω, resolution 16 bit

HART-Protocol

Power supply: 12 V DC (SELV/PELV)

Short description of the plant/description of the process cycle around the measuring point/ other information: