



ANDRITZ GROUP

METRIS VIBE QUOTATION SUPPORT

JULY- 2024

ANDRITZ

ENGINEERED SUCCESS

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PURPOSE

- The purpose of this document is to provide additional quotation support for Metris Vibe projects
- In addition to this document, FB-AD is always ready to support directly
Contact: fb-automation@andritz.com

PACKAGES

Basic & Connect

Both packages come with Condition monitoring WebUX as a Service subscription

Basic



- **Manual data collection** via Mobile App
1. The user must go to the machine
 2. Connect with sensors via Metris Vibe App
 3. Download vibration data from the sensors (it is recommended to download data regularly)

Connect

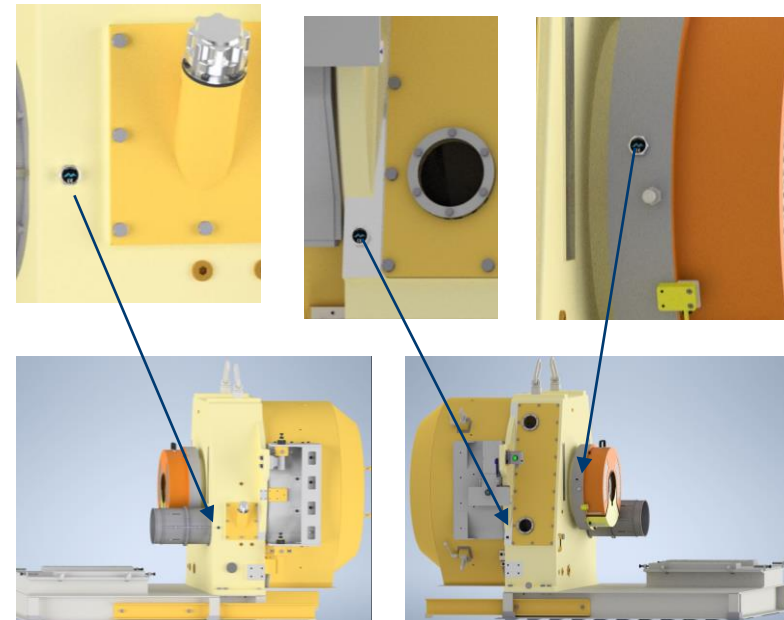


- **Inline data collection** via Bluetooth Gateways
1. The vibration data is automatically collected from sensors and uploaded to the Metris Cloud Service

NUMBER OF SENSORS PER MACHINE TYPE

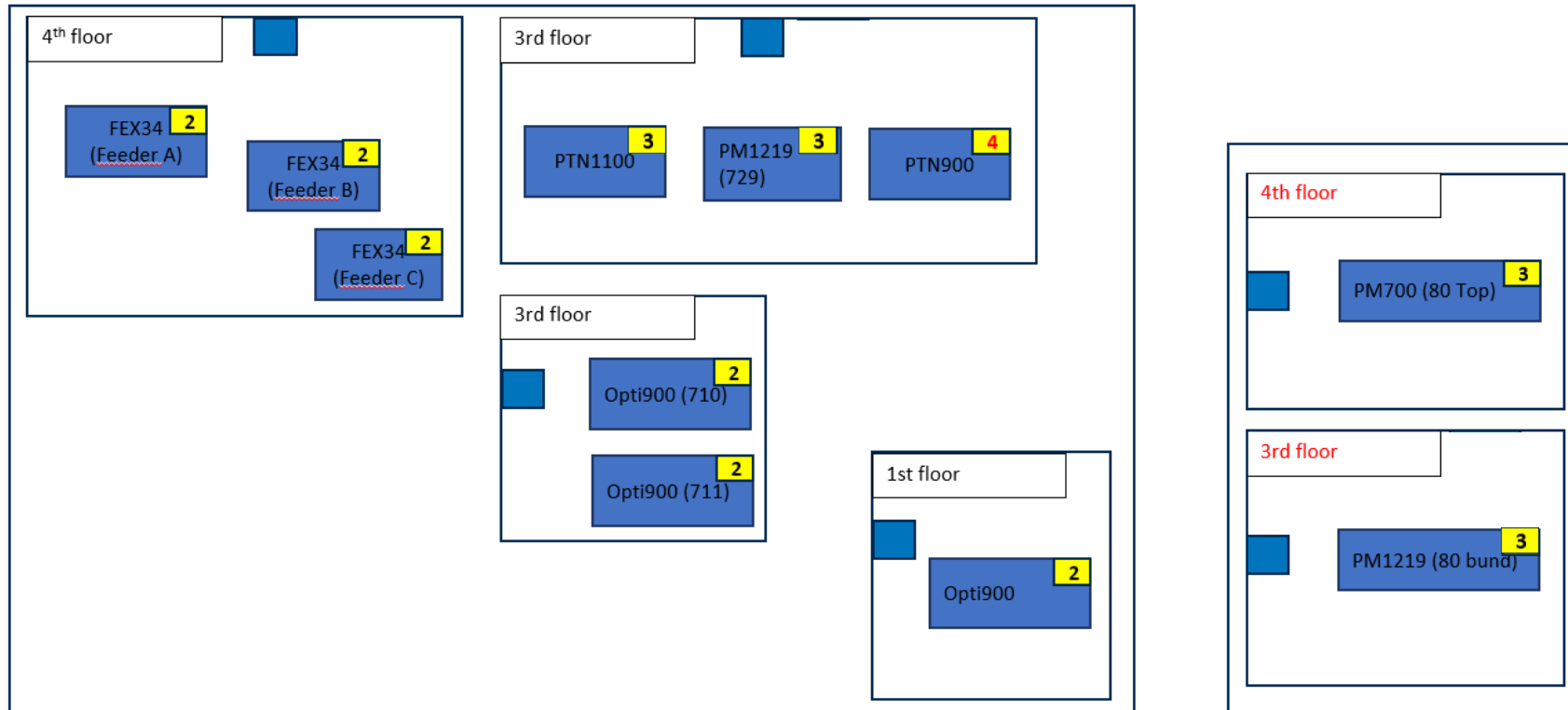
| Machine_Model | # Main Sensors | Main Sensors Locations | # Optional Sensors | Optional SensorsLocations |
|---------------|----------------|--|--------------------|--|
| Feedmax_G7 | 3 | 1.- Pinion_Shaft | 1 | 1.- Main_Motor_DE |
| Feedmax_G9 | | 2.- Main_Shaft_Rear | | |
| Feedmax_G12 | | 3.- Main_Bearing_Front | | |
| PM615W /XW | | | | |
| PM30-5 | 3 | 1.- Pinion_Shaft | 1 | 1.- Main_Motor_DE |
| PM30-6 | | 3.- Main_Bearing_Front | | |
| Paladin_800 | 5 | 1.- Pinion_Shaft_Left_DE | 2 | 1.- Motor_Left_DE |
| Paladin_2000 | | 2.- Pinion_Shaft_Right_DE | | 2.- Motor_Right_DE |
| Paladin_3000 | | 3.- Main_Shaft_Rear | | |
| OPT500 | 2 | 1.- Bearing_Front_NDE 2.- Bearing_Rear_DE | 1 | 1.- Main_Motor_DE |
| OPT700 | | | | |
| OPT900 | | | | |
| OPT1201 | | | | |
| MULTI630B | | | | |
| MULTI800B | | | | |
| MULTI1000B | | | | |
| MULTI1400C | | | | |
| FEX34 | 2 | 1.- Bearing_Housing_NDE 2.- Bearing_Housing_DE | 1 | 1.- Main_Motor_DE |
| EX0618 | 2 | 1.- Bearing_Housing_DE 2.- Bearing_Housing_NDE | 3 | 1.- Main_Motor_DE |
| EX0621 | | | | 2.- Feeder_Motor_DE (if incl.) |
| EX1021 | | | | 3.- Knife_Motor_DE |
| EX1250 | 4 | 1.- Main_Gear_DE 2.- Main_Gear_NDE 3.- Pinion_Shaft 4.- Screw_bearing | 3 | 1.- Main_Motor_DE 2.- Feeder_Motor_DE 3.- Knife_Motor_DE |
| ExTS718 | 3 | 1.- Gearbox_NDE 2.- Gearbox_DE 3.- Gearbow_Center | 3 | 1.- Main_Motor_DE 2.- Feeder_Motor_DE 3.- Knife_Motor_DE |
| ExTS616 | 3 | 1.- Gearbox_NDE 2.- Gearbox_DE 3.- Gearbow_Center | 3 | 1.- Main_Motor_DE 2.- Feeder_Motor_DE 3.- Knife_Motor_DE |

Example positioning on FeedMax



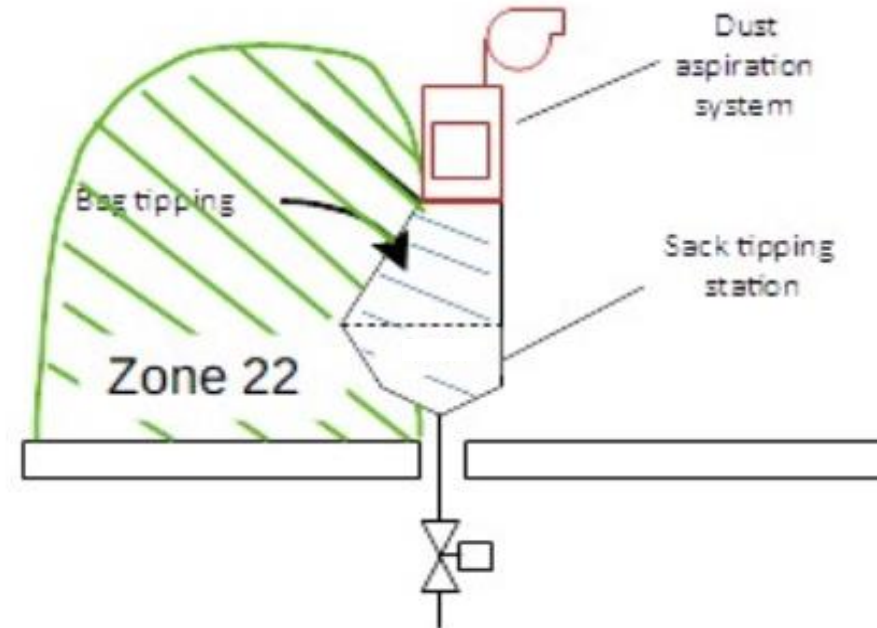
NUMBER OF GATEWAYS REQUIRED

- One Gateway coverage is approx. 150 m² room (actual coverage depends on local conditions)
- Always include a Gateway for each room where the Equipment is installed
- Each Gateway connects with up to 20 Metris Vibe sensors
- The connectivity capabilities of the Sensors, **at perfect conditions**, is up to 40 meters



Example Installation
(6 rooms with 6 gateways)

GATEWAY PLACEMENT OUTSIDE ATEX ZONE



Placement of the Bluetooth Gateway shall be outside of any ATEX Zones as the Gateway is not ATEX compliant

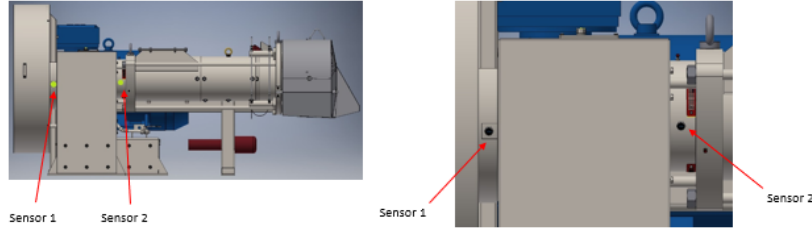

DATA REQUIREMENT FOR NON-ANDRITZ EQUIPMENT

Minimum requirements:

1. Main Motor speed
2. Execution type (Belt or Gear drive)
3. RPM of rotating shafts
 1. Can be measured with Tachometer
4. Photo of
 1. The Equipment from different angles
 2. The Machine plate
 3. The Motor plate

Note:

- Sensors and Gateways will be configured based on this required data
- Customer can supply the needed data or Andritz can provide a quote for a visit onsite to retrieve this data

| | | | | | |
|--|--|--------------------------------------|-----------------------------------|------------|-----------------------|
| Template date: 22-09-2021 | | Machine Installation Datasheet (MID) | | ANDRITZ | |
| Template author: Tomas Sabo | | | | | |
| Document date: | | | | | |
| Document author: | | | | | |
| VIBRATION ANALYSIS | | | | | |
| Equip. Part number | | Equip. Name | FEX34 (Feeder A) | | |
| Project WBS | | | | | |
| AC MOTOR | | | | | |
| FRAME SIZE: | POWER (KW): | 315 | NOMINAL SPEED (rpm): | 1495 | VARIABLE SPEED DRIVE: |
| INSULATION CLASS: | CURRENT (A): | | BEARING HDE: | | BEARING DE: |
| | | VOLTAGE: | | | |
| POWER TRANSMISSION ELEMENT | | | | | |
| V-BELT | TYPE: | SPC 4760 | | | |
| BELT TRANSMISSION | | | BEARINGS | | |
| Drive Pulley | V-BELT PULLEY TL6060 T2 - SPC 336 X 10 | | Roller bearing | Drive end: | SKF 22230 CC/W33 |
| Driven Pulley | V-BELT PULLEY TL6060 T10 - SPC 1260 X 10 | | Thrust roller bearing | Drive end: | SKF 29338 E |
| Ratio | 0,268 | | | | |
| PHOTO/DRAWING | | | | | |
|  | | | | | |
| Sensor Direction/Orientation | | | | | |
|  | | | | | |
| List Installed Sensors | | | | | |
| nsor 1 (FeederA_MV) | Serial Number: | | Direction - orientation setting | | |
| | B0873 | | x: axial, | | |
| | Equipment Bearing: | | y: *horizontal | | |
| | SKF 22230 CC/W33 , SKF29338 E | | z: vertical | | |
| | Coupled to main drive? <input checked="" type="checkbox"/> | | Speed tag OPC connectivity | | |
| If yes, speed ratio to main drive: 0,268 | | OPC address: | Username: | | |
| If no, rot. speed or speed tag | | OPC IP address: | Password: | | |
| nsor 2 (FeederA_MV) | Serial Number: | | Direction - orientation setting | | |
| | B1624 | | x: axial, | | |
| | Equipment Bearing: | | y: *horizontal | | |
| | SKF 22230 CC/W33 | | z: vertical | | |
| | Coupled to main drive? <input checked="" type="checkbox"/> | | Speed tag OPC connectivity | | |
| If yes, speed ratio to main drive: 0,268 | | OPC address: | Username: | | |
| If no, rot. speed or speed tag | | OPC IP address: | Password: | | |

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