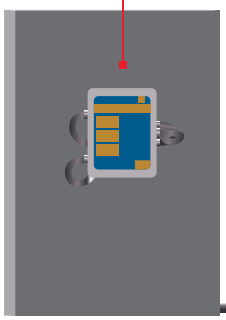
M-Jet Grain Elevator Hazard Monitoring

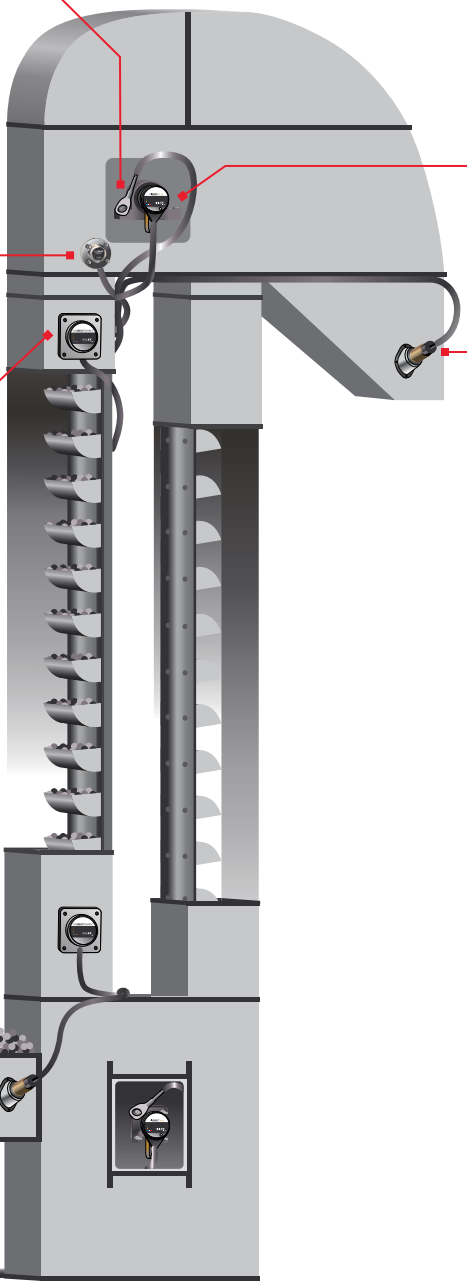
Bearing temperature sensor

Belt alignment detector with contact

Belt alignment detector without contact

Hazard monitoring





Rotation under speed swich

Level & choke sensor

The **M-JET SYSTEM** is a modern and dynamic safety monitoring system. We have designed a complete system to ensure the protection and safety of your personnel and equipment.

The **M-JET SYSTEM** includes a complete range of hazard monitoring and safety equipment sensors, and is designed to protect up to **120 individual conveyors**. This capacity offers the most economical conveyor system hazard monitoring system available.

M-JET has the capability to accurately monitor, manage and analyze productivity, operating conditions and hot-spots that could lead to additional equipment damage, costly repairs and explosion hazard. Real-Time electronic data is instantly **available 24/7** and can be accessed anywhere in the world via laptop, tablet or mobile phone.

M-JET SYSTEMS

The world's most advanced hazard monitoring system

THE SMART WAY TO MANAGE YOUR SAFETY SYSTEM

The **M-JET Safety Monitoring System** ensures complete control and real time data that is necessary to avoid unneeded maintenance and explosion hazard. **Data Reports** include dangers associated with speed control, misalignment, level & choke control, bearing and motor temperatures. **M-JET SYSTEMS** is specifically designed as an early warning system to alert facilities to potential sources of explosion ignition

Think Safety Smart. Think M-Jet to protect your employees and your facility.

THE SMART WAY TO MANAGE YOUR CONVEYOR SYSTEMS :

- Under speed due to belt slip on the pulley. To check comparing with the nominal speed.
- Bearing temperature using sensor PT100 or NTC.
- Belt misalignment using sensors with or without contact.
- Material jam in conveyor entry or exit using capacitive sensor.
- Chain elongation measured by inductive sensor and targets.
- Motor power measurement with specific electrical consumption.
- Shaft position measured by sensor 4-20mA.

THE OPERATING CONTROL OF THE SYSTEM IS ACHIEVED BY OUTPUT RELAYS :

- Directly on the power relay of the motor.
- By the global PLC of the facilities.

VERIFYING THE CONVEYOR OPERATION CAN BE ACHIEVED BY :

- On computer screen by internal website (directly with laptop or by Network LAN).
- By message on the email box (events and maintenance operation plan).

M-JET SYSTEMS ELECTRONIC CONNECTIVITY VIA INTERNET OR FACILITY NETWORK :

- Remote monitoring up to 120 conveyors from the same display unit
- Unified viewing of data in real time
- Graphic display of historical data
- Alarm notification by sending email
- Viewing of alarms
- Support tools to manage preventive maintenance

VIGILEX® stif

M-JET SYSTEMS®

Type	Name	Place	Status	Speed	Cpt/Day	Cpt/General
	EL02	Place 2	**Alarm**	-	**8h**	**1850h**
	TB01	Place 1	Pre-Alarm	1,8 m/s	7h	1575h
	EL01	Place 1	Ok	2,4 m/s	5h	1125h
	EL03	Place 3	Ok	2,8 m/s	3h	925h
	EL04	Place 4	Inactif	-	-	125h

Elevator EL02 — Place STIF USA — 25 mach 2018 15h31 **Status : Alarm**

Dashboard | Temperature graph | Alarm graph | Alarm analysis | Maintenance | Param. M-JET.COM

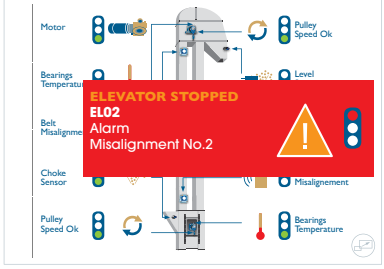
Access to graphics

UNDER SPEED		
Speed	000	rpm
Under speed	10	%
No.2	-	
No.1	Ok	

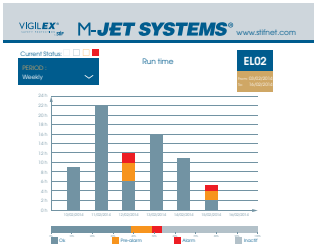
MISALIGNMENT	
No.4	Ok
No.3	Ok
No.2	Alarm
No.1	Ok

TEMPERATURE	
T° Max	80 °C
No.4	65 °C
No.3	68 °C
No.2	58 °C
No.1	56 °C
T° Max	90 °C
motor	73 °C

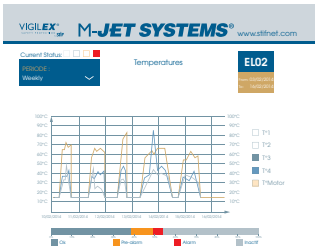
LEVEL & CHOKE	
No.2	Ok
No.1	Ok



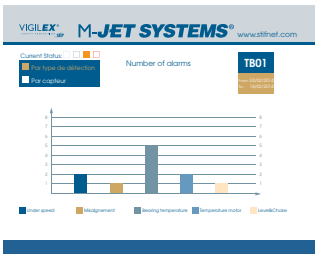
jetmonitoringsystem.com
is available on all your mobile devices



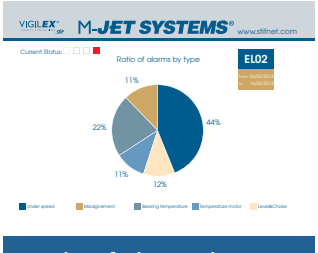
Run time



Temperatures



Number of alarms



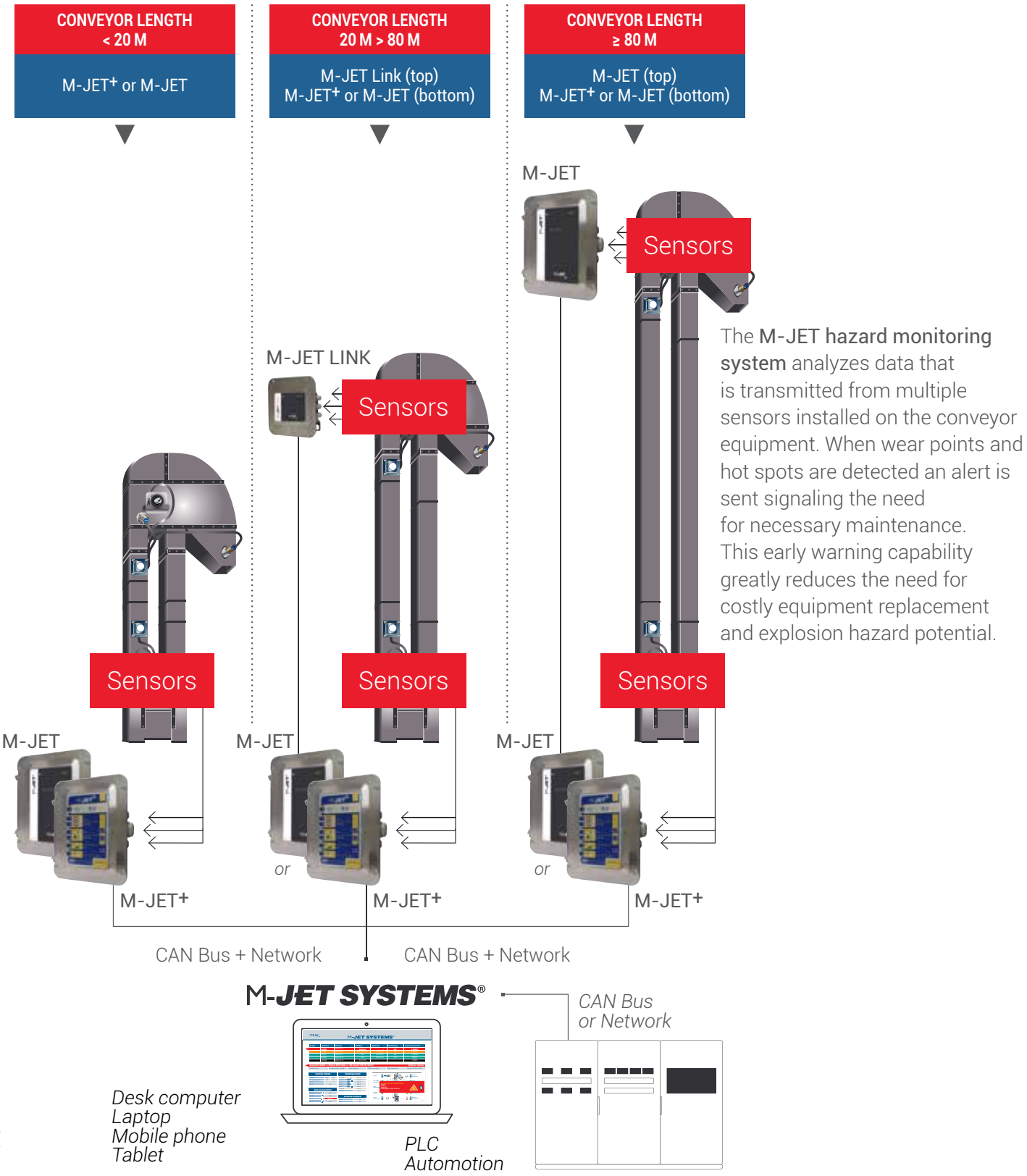
Ratio of alarms by type

HISTORIC DATA ANALYSIS :

ONLY BY COMPUTER, DIRECTLY WITH LAPTOP OR BY NETWORK LAN

- History of defects: **M-JET SYSTEMS can save 10,000 events**.
- History of setting modification: Save the **10,000 last setting modifications**.
- History of daily running time of the equipment :
  - **M-JET SYSTEMS** saves production time during the last 4,000 days of use.
  - **M-JET SYSTEMS** records temperatures 24 times per day during the last 365 days of use.
- All the history can be downloaded in csv format.

M-JET SYSTEMS



The **M-JET hazard monitoring system** analyzes data that is transmitted from multiple sensors installed on the conveyor equipment. When wear points and hot spots are detected an alert is sent signaling the need for necessary maintenance. This early warning capability greatly reduces the need for costly equipment replacement and explosion hazard potential.

CONNECTION BOX

M-JET LINK

Connection Box

HAZARD MONITORING

M-JET

Hazard Monitoring
without display

Or

M-JET+

Hazard monitoring
with display

Or

SENSOR COMPONENTS

BELT ALIGNMENT SENSORS

1 Vigibelt Touch

Belt alignment detector
by contact

2 Vigibelt CDM 80 C

Belt alignment detector
without contact

SPEED SENSOR

3 Vigiro IP26

Speed
rotation sensor

TEMPERATURE

4 Vigitherm GST 100

Bearing Temperature sensor

LEVEL & CHOKE

5 Vigimat DNC 30

Level & choke sensor