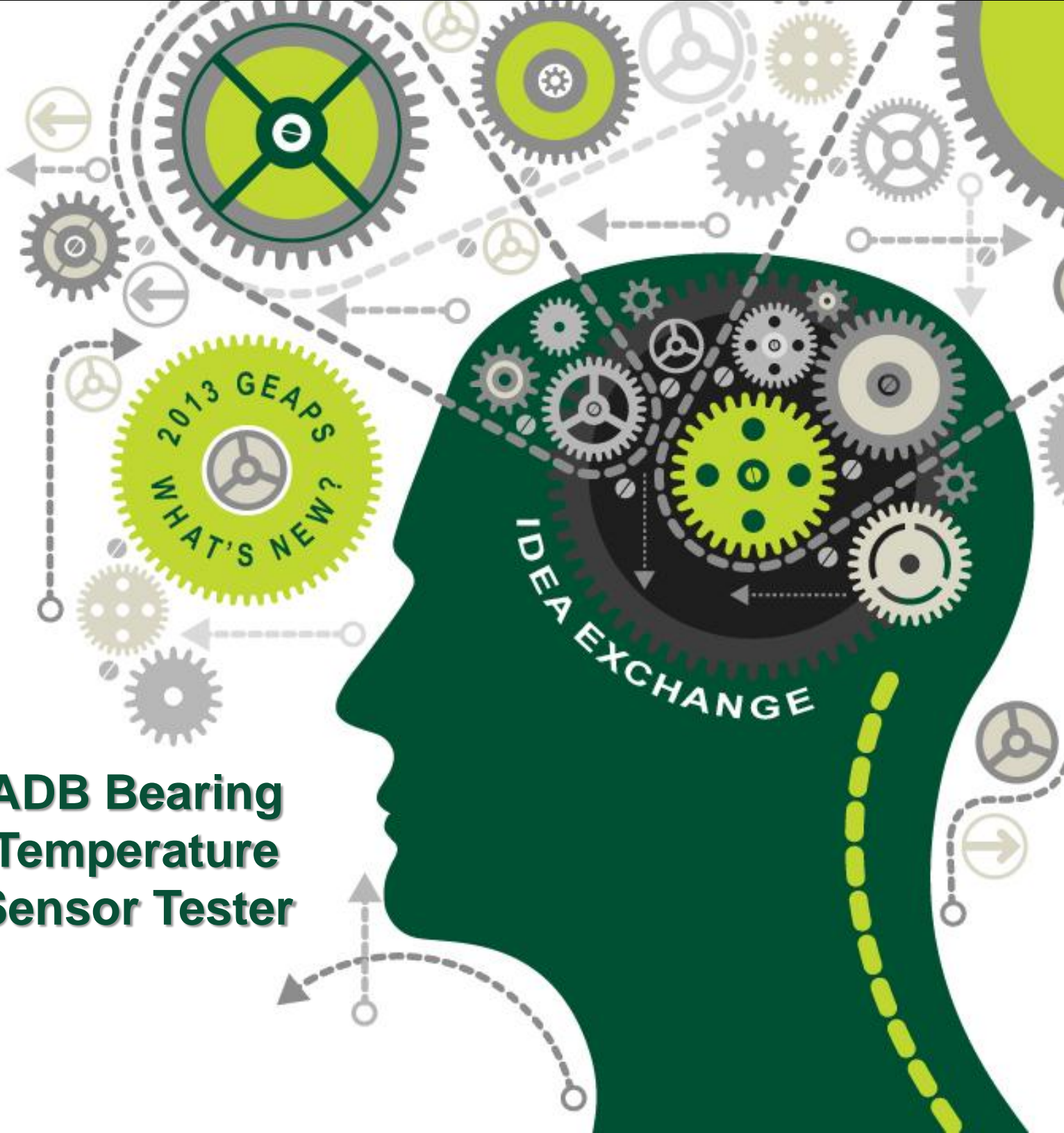




4B  
Components  
Limited

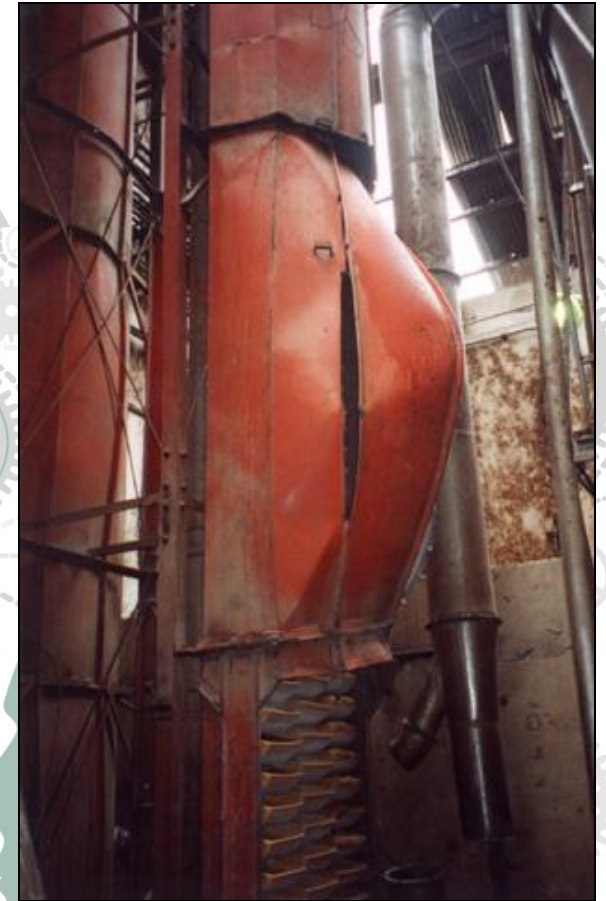
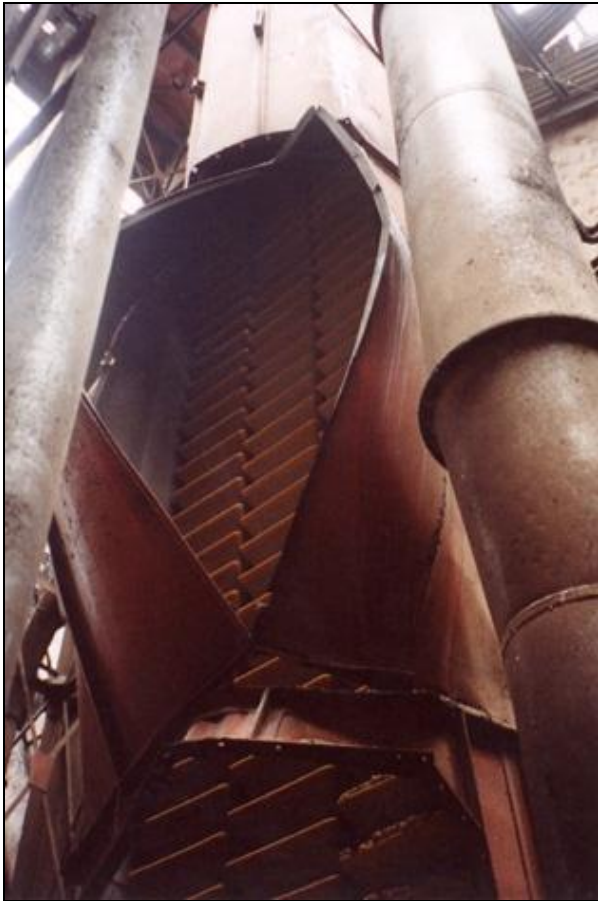


## ADB Bearing Temperature Sensor Tester

# Fires in the Grain Handling Industry

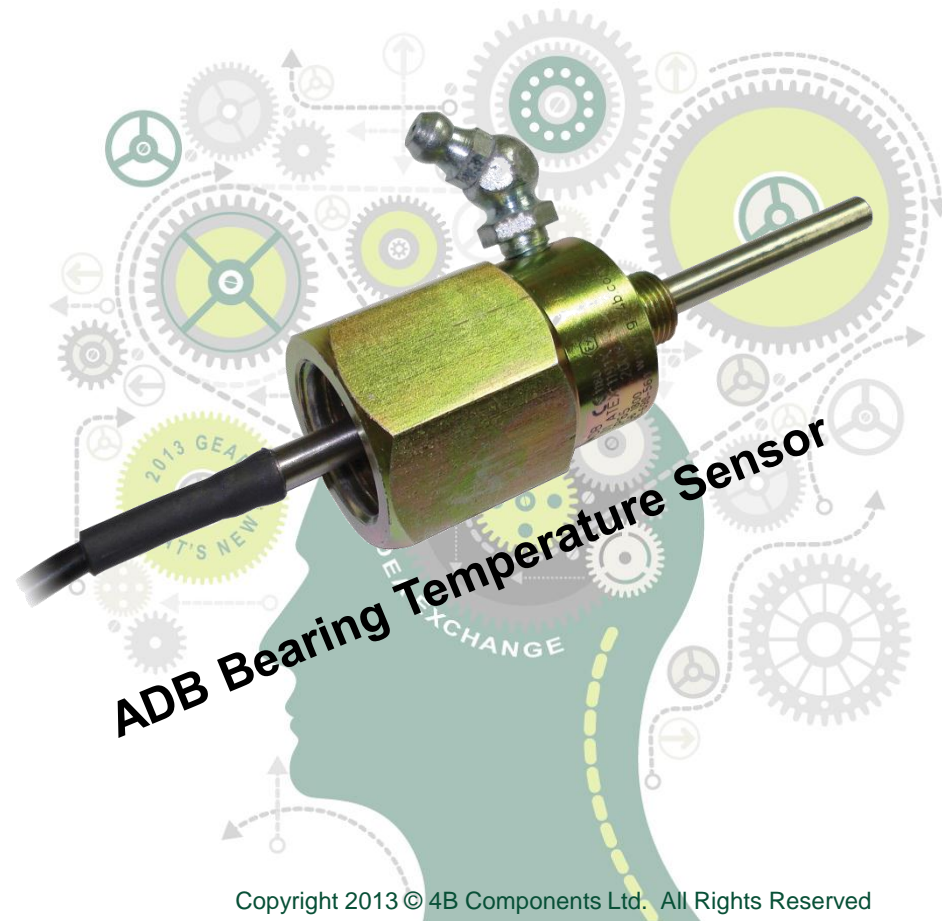
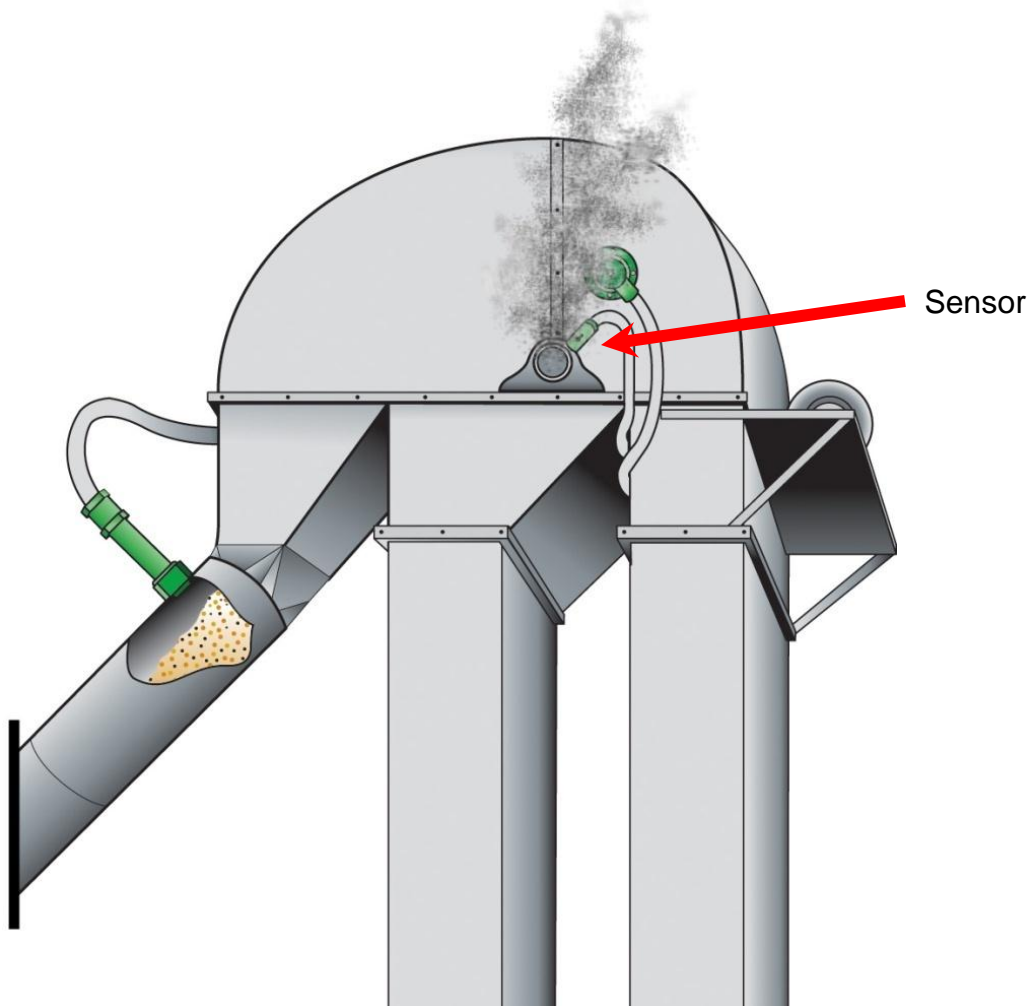


# Explosions in the Grain Handling Industry

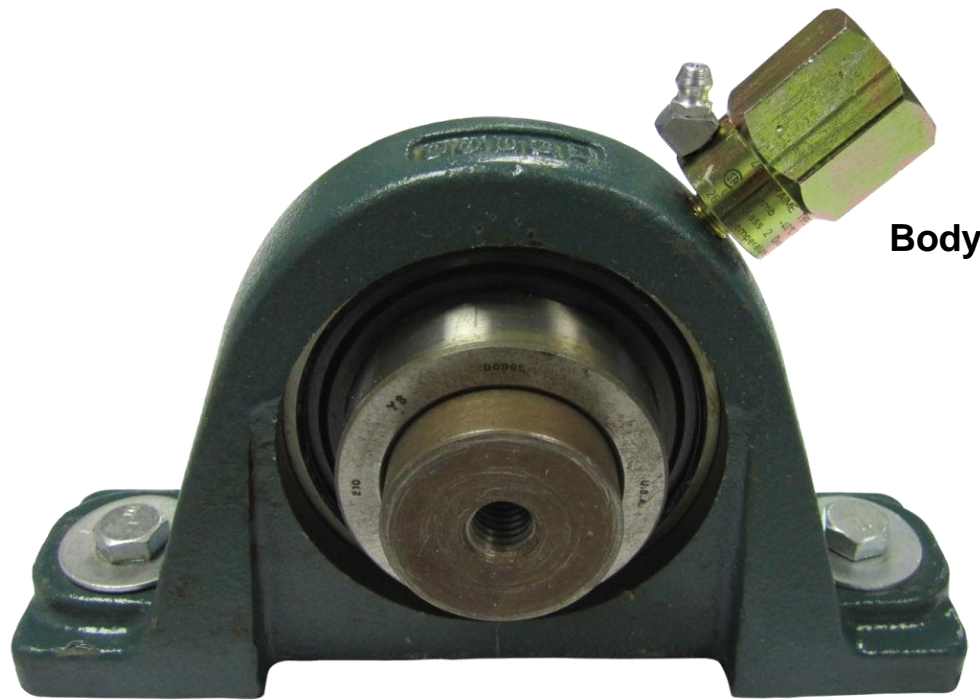


# Hot Bearings / Sensors

- ▶ Bearing failure is one of the leading causes of fires and explosions in the grain industry



# Sensor Body, Probe, Compression Fitting & Wrench



**Body**



**ADB Wrench**



**ADB Probe**

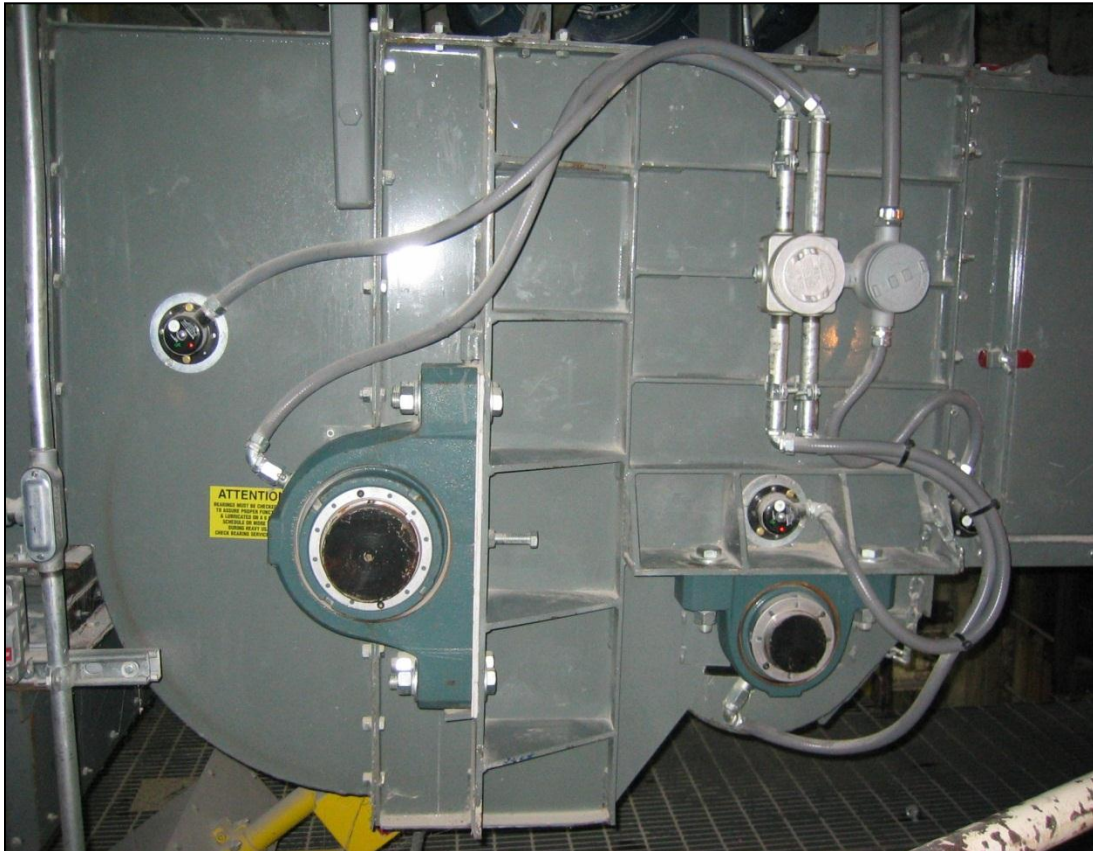


# Bearing Temperature Sensor Installed



# Hazard Monitoring System

- ▶ More and more facilities have installed or are considering the installation of bearing temperature monitoring systems to monitor not only critical bearings, but all bearings within the facility.



# “Historical” System Testing



**Simulated Test**



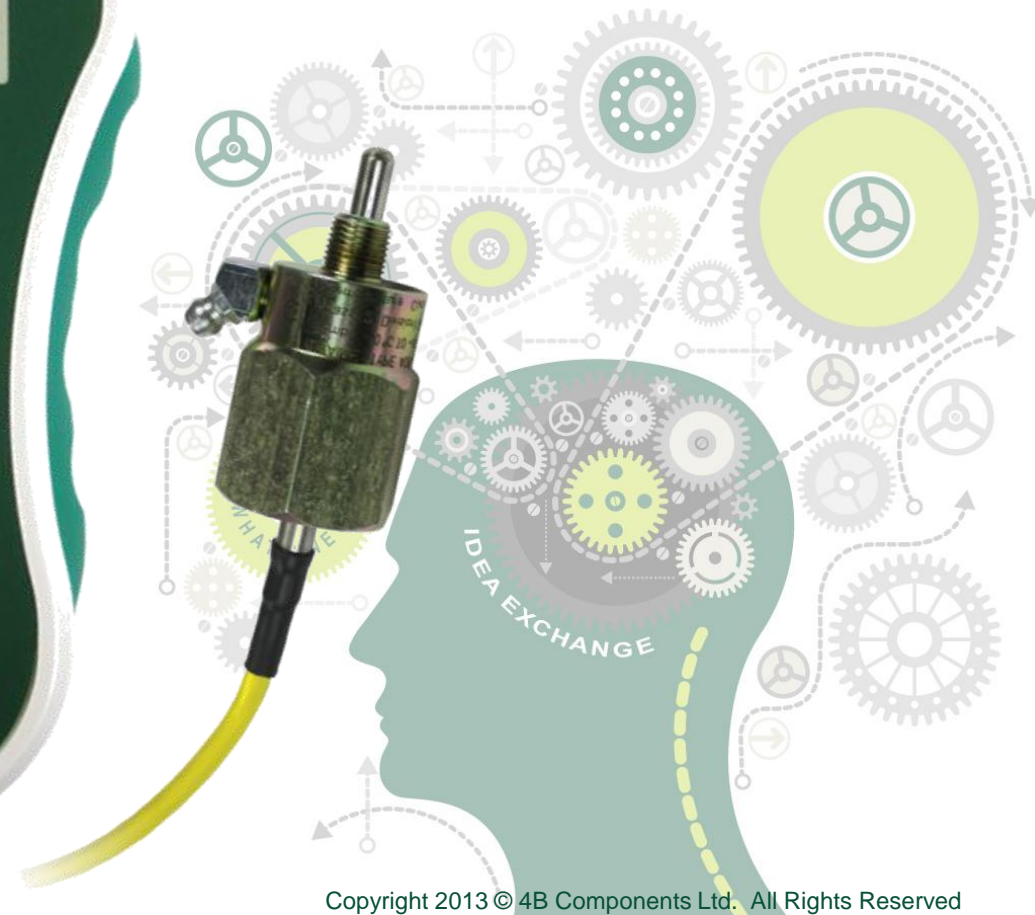
**Cold Spray Test**

**Shop/Lab Test**

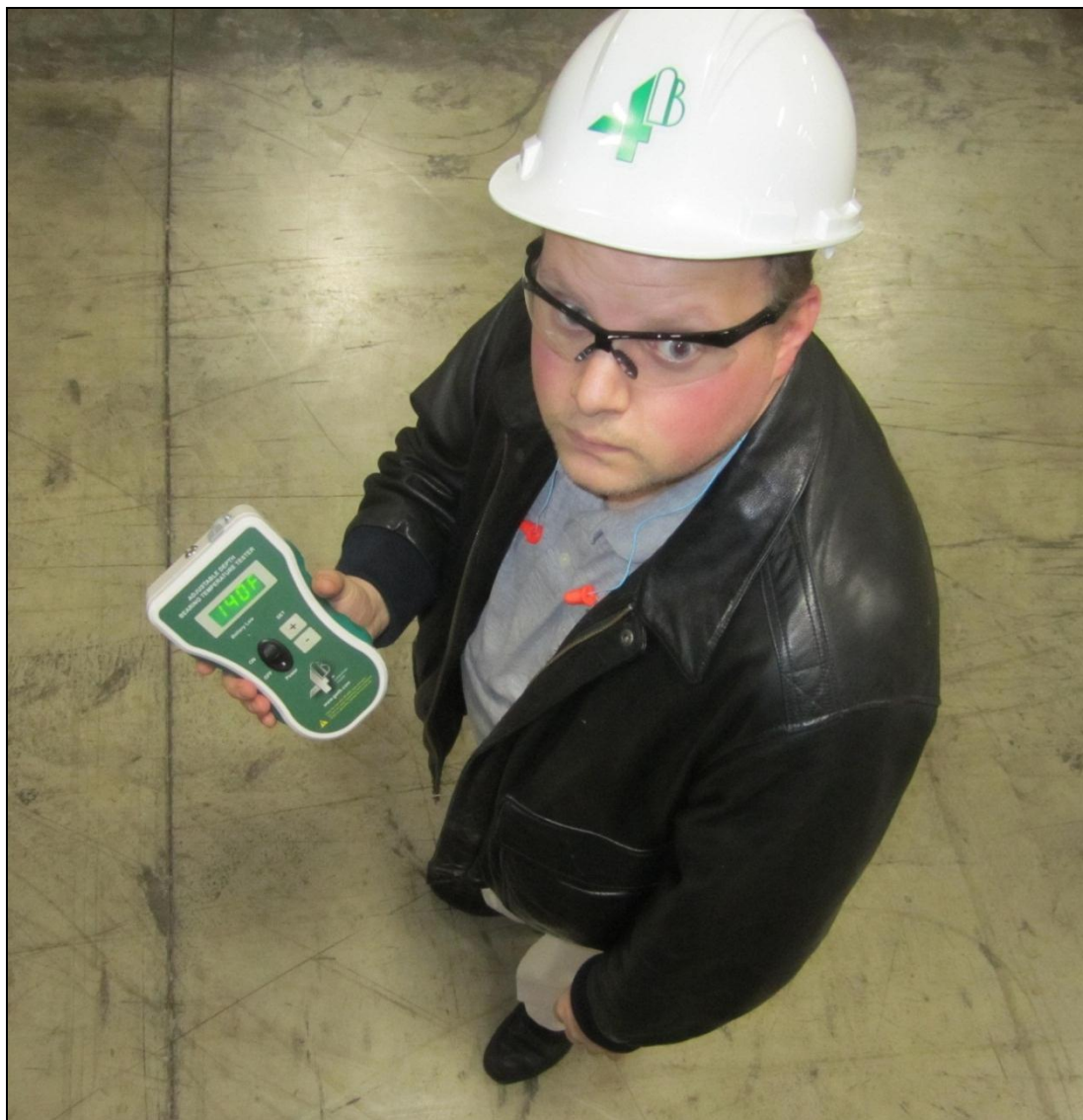




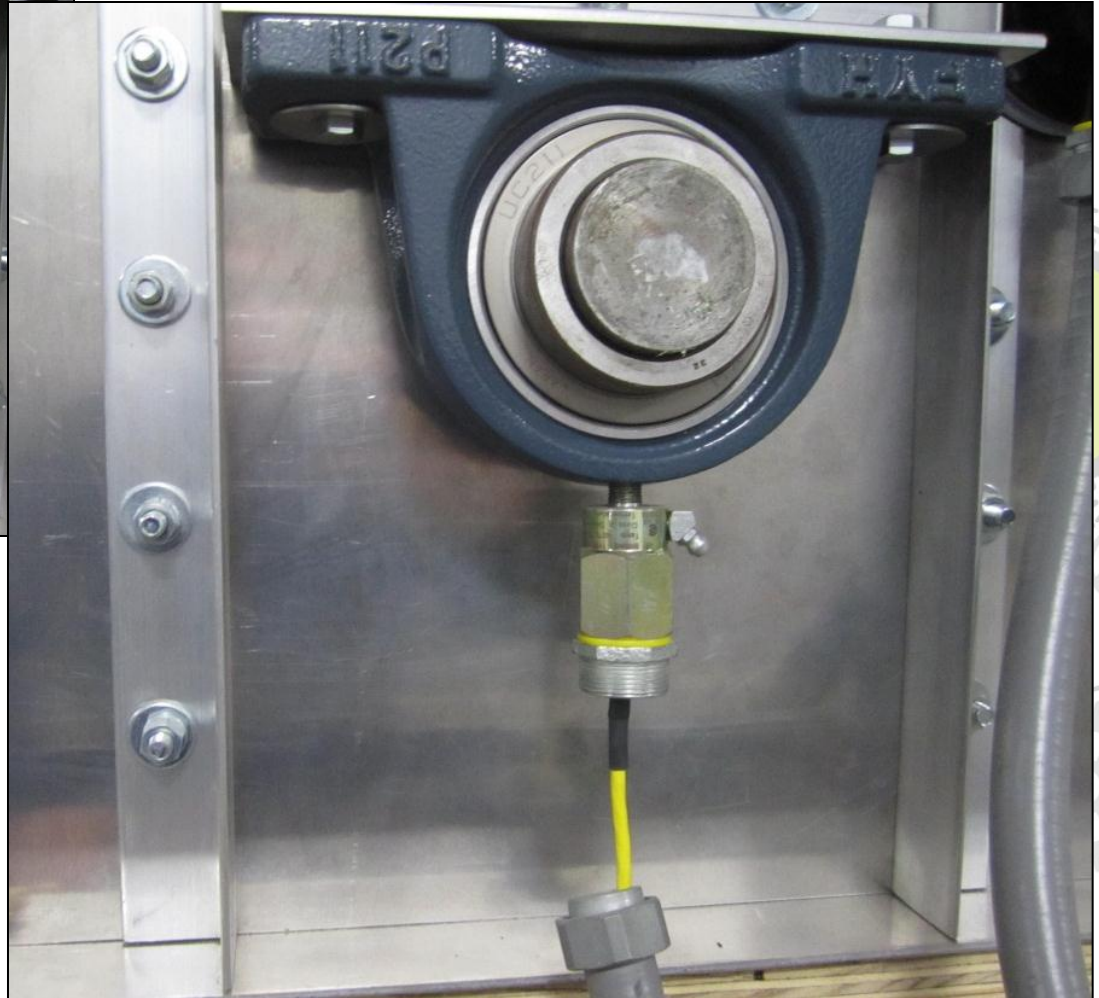
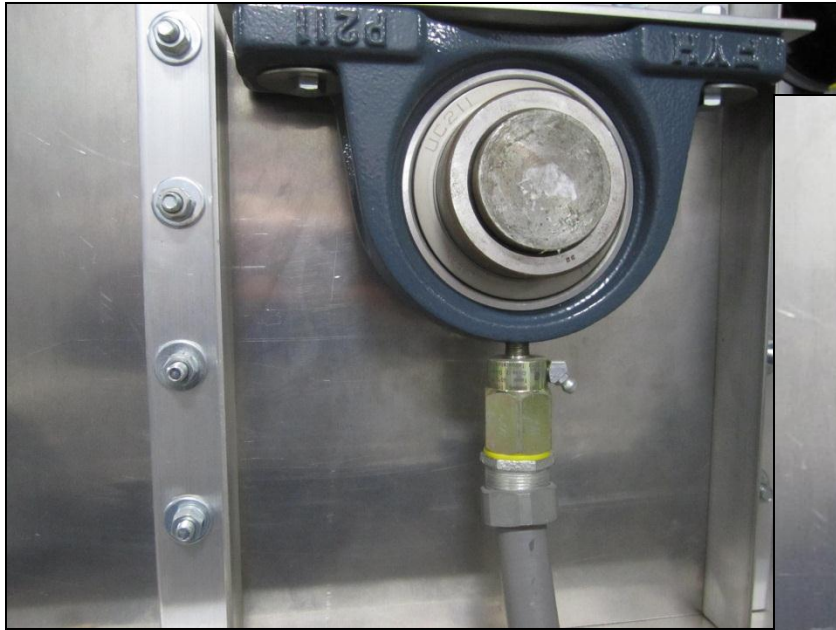
# “New” System Testing

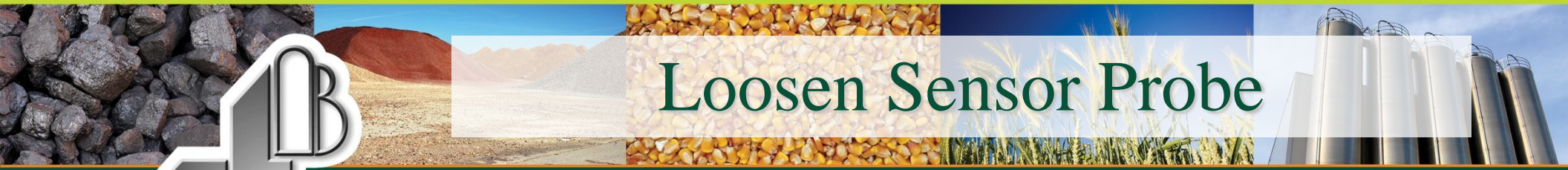


# Hand Held & Portable

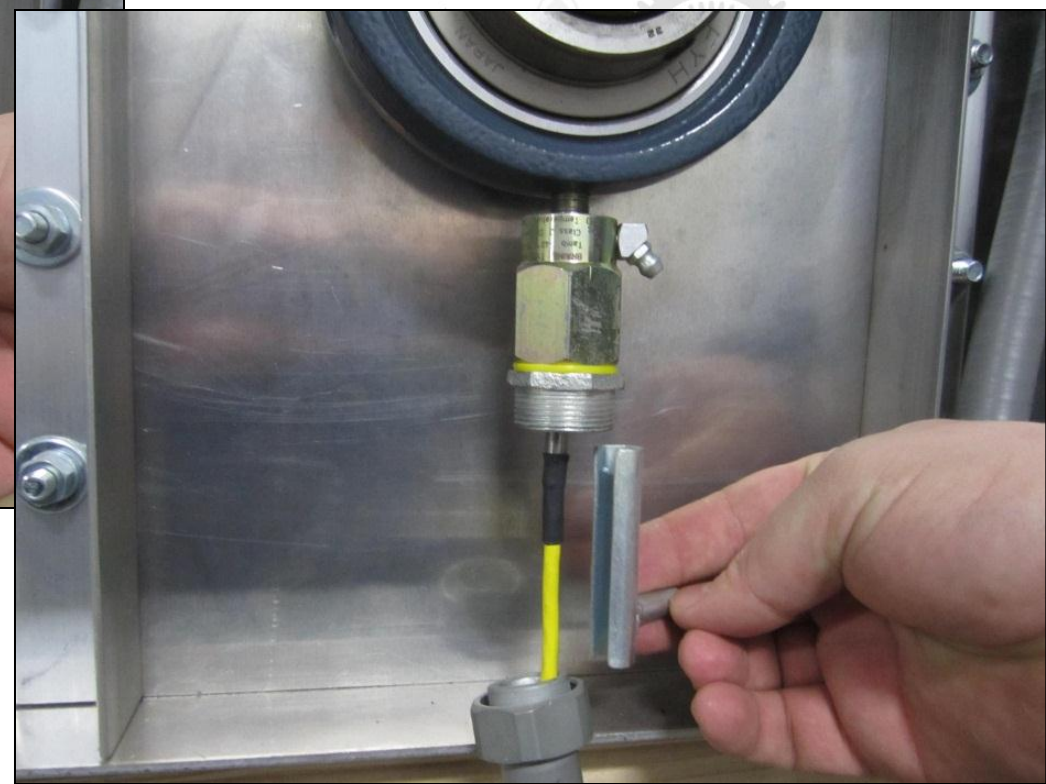
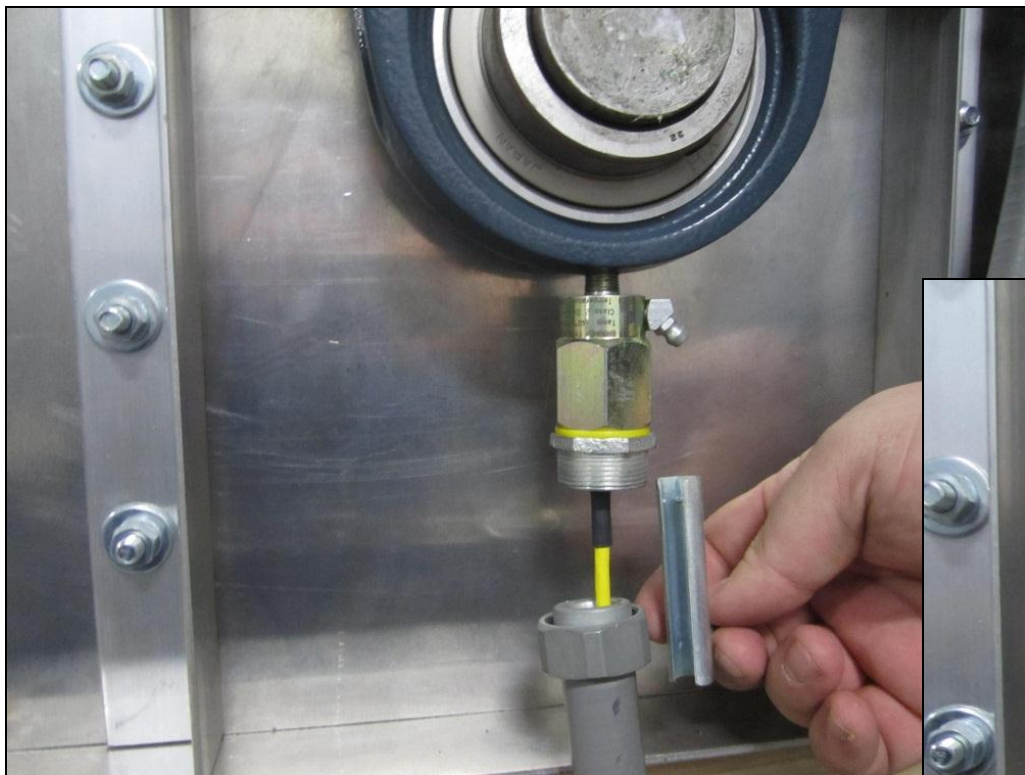


# Loosen the Sealtite





# Loosen Sensor Probe



# Insert Sensor Probe into Tester



# Heating the Sensor Probe



# Trip Temperature



# Alarm and Shutdown of Equipment



**STOP!**






# Auto Recording of Test


- ▶ When the HazardMon system that is being tested, incorporates automatic alarm and shutdown recording such as eView, there is a time/date record of the test.




- Real Time System Information From Any Web Enabled Device
- Password Protected Network
- Send Alert Email Notifications



Powered by  
HazardMon.com



**F500 eView -**  
Remote System Status Application for the  
T500 Elite Hotbus™ Hazard Monitoring System

**4B Components Ltd.**  
Morton, IL - USA 

24 Hour Technical Support: (309) 698-5611

Live View
System Settings
Set Sensor Names
Network Settings
Set Email List
Support

**F500 Unit Name: ANY PLANT USA**

System State				
Network #	Network Name	T500 Status	Number of Active Nodes / Blocks	Activity Counter
T500-1	LOAD OUT	Alarm	32 / 2	159
T500-2		Inactive	0 / 0	0
T500-3		Inactive	0 / 0	0
T500-4		Inactive	0 / 0	0

Detailed Node Information							
Node #	Net #	Node Type	Sen #	T500 Sen#	Sensor Name	Sensor State	Sensor Value
▼ 1	T500-1	SN2					
○			1.1	1	WET LEG SPEED	Stopped	0 PPM
○			1.2	2	DRY LEG SPEED	Stopped	0 PPM
▼ 2	T500-1	TN4					
○			2.1	5	WETLEG HEAD W BRG	OK	82 °F
○			2.2	6	WETLEG HEAD E BRG	OK	82 °F
○			2.3	7	WETLEG HEAD W TS	OK	Contact Closed (ON)
○			2.4	8	WETLEG HEAD E TS	OK	Contact Closed (ON)
○			2.5		Ambient	OK	86 °F
▼ 3	T500-1	TN4					
○			3.1	9	WETLEG BOOT W BRG	Alarm	145 °F
○			3.2	10	WETLEG BOOT E BRG	OK	106 °F

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# Typical Controls for Hazard Monitoring



**Watchdog™ Elite**  
Single Machine  
Hazard Monitor



**T500 Hotbus™**  
Multi Machine  
Hazard Monitor

# Typical Controls for Hazard Monitoring

Alarm Summary

HotBus Status by Node

Watch Dog Counter 203

Node #1 Receiving Leg Boot	Node #2 Receiving Leg Head	Node #3 Shipping Leg Boot	Node #4 Shipping Leg Boot
Ambient: 88 °F	Ambient: 91 °F	Ambient: 88 °F	Ambient: 100 °F
S01-North Temp: 81 °F	S05-North Temp: 100 °F	S09-West Temp: 79 °F	S13-West Temp: 97 °F
S02-South Temp: 81 °F	S06-South Temp: 90 °F	S10-East Temp: 81 °F	S14-East Temp: 82 °F
S01-North Rub: OK	S07-North Rub: OK	S11-West Rub: OK	S15-West Rub: OK
S04-South Rub: OK	S08-South Rub: OK	S12-East Rub: OK	S16-East Rub: OK
Node #5 Shipping Belt Tail	Node #6 Shipping Belt Head	Node #7 Shipping Belt Snub Pulley	Node #8 Old Side Wet Leg Boot
Ambient: 88 °F	Ambient: 91 °F	Ambient: 88 °F	Ambient: 88 °F
S17-North Temp: 81 °F	S21-North Temp: 84 °F	S25-North Temp: 86 °F	S29-North Temp: 81 °F
S18-South Temp: 81 °F	S22-South Temp: 86 °F	S26-South Temp: 86 °F	S30-South Temp: 81 °F
S19-North Rub: OK	S23-North Rub: OK	S25-North Rub: OK	S31-North Rub: OK
S20-South Rub: OK	S24-South Rub: OK	S26-South Rub: OK	S32-South Rub: OK
Node #9 Old Side Wet Dry Leg Knees	Node #10 Old Side Wet Leg Head	Node #11 Old Side Dry Leg Boot	Node #12 Old Side Dry Leg Head
Ambient: 88 °F	Ambient: 90 °F	Ambient: 90 °F	Ambient: 91 °F
S33-WL North Temp: 84 °F	S37-North Temp: 90 °F	S41-West Temp: 82 °F	S45-West Temp: 91 °F
S34-WL South Temp: 86 °F	S38-South Temp: 95 °F	S42-East Temp: 81 °F	S46-East Temp: 82 °F
S35-OL West Temp:	S39-North Rub: OK	S43-West Rub: OK	S47-West Rub: OK
S36-OL East Temp:	S40-South Rub: OK	S44-East Rub: OK	S48-East Rub: OK
Node #13 New Side Wet Leg Boot	Node #14 New Side Wet Leg Head	Node #15 New Side Dry Leg Boot	Node #16 New Side Dry Leg Head
Ambient: 108 °F	Ambient: 106 °F	Ambient: 91 °F	Ambient: 90 °F
S49-West Temp: 97 °F	S53-West Temp: 95 °F	S57-East Temp: 81 °F	S61-East Temp: 81 °F
S50-East Temp: 81 °F	S54-East Temp: 86 °F	S58-West Temp: 82 °F	S62-West Temp: 86 °F
S51-West Rub: OK	S55-West Rub: OK	S59-East Rub: OK	S63-East Rub: OK
S52-East Rub: OK	S56-East Rub: OK	S60-West Rub: OK	S64-West Rub: OK

Exit to Previous Screen

Overview

PLC System

# Summary

- ▶ Benefits of ADB Bearing Sensor Temperature Tester
  - Fully Tests System:
    - Sensor, Wiring, Alarms and Controls
  - No Wiring to Disconnect or Re-Install
  - Portable Hand Held Unit
    - Quick and Easy to Use



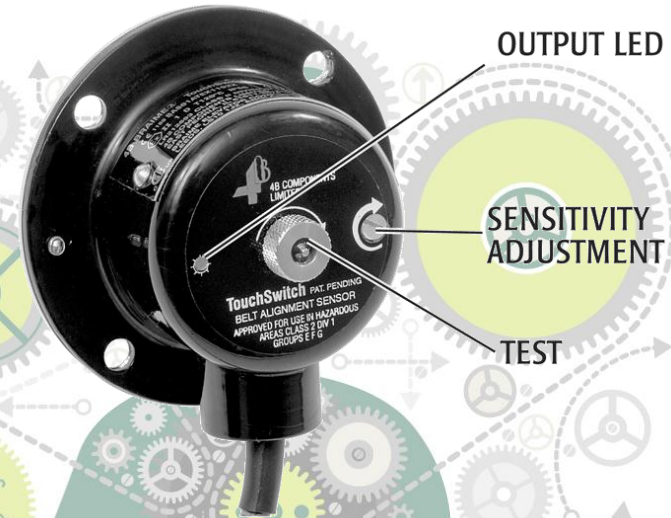
# Testing Full HazardMon System



ADB Tester - Bearing Sensor Testing



SpeedMaster™ - Underspeed Testing



Touchswitch - Belt Misalignment Monitoring & Testing



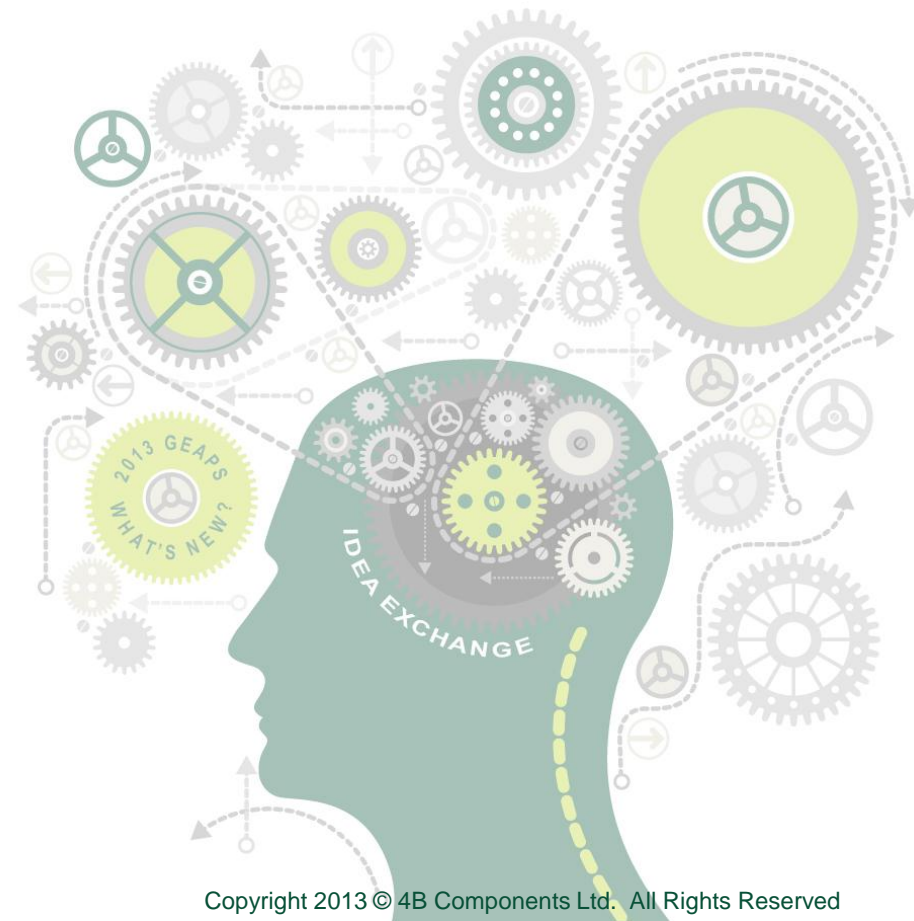
Thank You!

For More Information,  
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