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FAILURE IS NOT AN OPTION

Chain Wear Monitor for Automotive



**Remote Mounted Display
Highly Precise Measurements**



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CATS
Conveyor Alert System

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Lasers are programmed to measure set distances between the links of the chain. This data is stored in the control box and a new cycle of data begins once the chain has completed its cycle. The recording of information can be perpetual. As long as the conveyor is running, the chain wear monitor is capturing useful data.

The CATS Benefits for Automotive

- **Universal Fit.** It is designed to operate inside any automotive factory in the world, independent of any existing control systems, on almost any chain design.
- **Efficient.** No dedicated computer is required to monitor your conveyor.
- **Flexible.** Data is stored internally and can be accessed multiple ways based on your needs. Data retrieval options include:
 - Through your existing network;
 - By removing the internal USB thumb drive;
 - By cell phone or tablet as you walk across your shop floor via a WiFi connection (optional feature);
 - Through the internet when equipped with a cellular modem.
- **Constant Attention.** The CATS system monitors your chain for wear 24 hours per day, 7 days a week, 365 days per year. If the chain is moving, we are collecting and logging data.
- **Accurate.** Measurements are accurate within 0.02".
- **Simple to Use.** All data is interpreted through an Excel spreadsheet (via a macro). The user adjusts the parameters of the report to flag links for inspection or replacement to any range they are comfortable with.
- **Easy to Operate.** Touch screen interface is standard.
- **Remote Monitoring Available.** We monitor your conveyor for you.



Over time as the pins wear, the distance measured by the lasers will increase. When this occurs, the data output will indicate which links to check. In extreme circumstances, links will appear as red on the Excel spread sheet output. Red indicates the chain should be immediately replaced to avoid a costly breakdown.

Multiple means for storage including USB data stick, mobile device, or a desktop computer.



	A	B	C	D	E	F	H	I	J	K	M	N	O	P	R
1	Chain Type:	X-458 Chain	List of All Links:			Links to be Inspected:			Links to be Replaced:						
2	File Date:	5/4/2017 16:58	Link #	Length	Wear	Link #	Length	Wear	Link #	Length	Wear				
3	Base File Date:	N/A	1	8.074	0.074	1160	8.191	0.1908	870	8.191	0.1914				
4	Total # of Links:	1276	2	8.045	0.045										
5	Good Links:	1274	3	8.057	0.057										
6	Inspect Links:	1	4	8.037	0.037										
7	Replace Links:	1	5	8.092	0.092										
8	Ideal Length:	10208.000	6	8.041	0.041										
9	Actual Length:	10284.416	7	8.011	0.011										
10	Replacement Length:	10451.716	8	8.159	0.159										
11	Percent Wear:	0.75	9	8.071	0.071										
12	MIN Wear:	-0.027	10	8.049	0.049										
13	MAX Wear:	0.191	11	8.007	0.007										
14	AVG Wear:	0.060	12	8.081	0.081										
15	Wear Change:	N/A	13	8.083	0.083										
16	Percent Change:	N/A	14	8.065	0.065										

To read the data no special software is needed. A simple spreadsheet program will suffice.

What kind of chain does it work on?

The Frost Chain wear monitor is currently installed in many plants, mostly on typical X-type conveyor chain. It is compatible with almost any type chain. A picture or drawing of your installed chain allows Frost to easily determine if there are any issues with compatibility.

Why do I need this?

As we like to say "failure is not an option." Proper utilization of the data generated by the CATS system will help prevent any catastrophic chain failures before they happen, leading to less down time and more profit for your company.

Can I buy one and set it up myself without training?

Every conveyor system is different. Our on-site installers are vital to helping you get the most out of your investment. Not only will they help your maintenance department set the unit up, but they also provide training on the use of the equipment and interpretation of the output while they are at your location.

What is the lead time?

Typical lead times are two and a half weeks for the hardware. Timing of the installation is dependent on our installer's schedules and are determined at the time of purchase.

What are the requirements?

The CATS system requires a couple of things; first that the chain is moving at a steady rate most of the time. Second the chain should be clean, or mostly clean of debris.

Customer Requirements

- Power—Dedicated 110V 10A plug.
- Computer—Any device capable of running Microsoft (or equivalent) Excel 2003 or newer with the ability to run macros.
- Provide and install safety guards if needed.
- Provide and install all necessary conduit if needed.