



CASE STUDY INDUSTRIAL ETHERNET

4B Components Limited
625 Erie Avenue
Morton, IL 61550

309-698-5611
go4b.com/usa

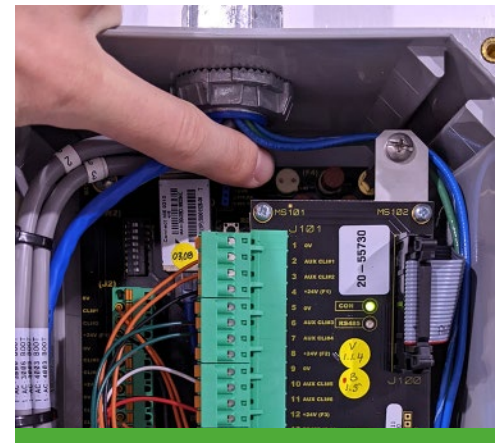


FLOUR MILLING | Best Way to Reduce Costs on Electrical Labor and Materials



FACILITY DETAILS

- Flour Mill
- Oakland, California
- 14,000 cwt. capacity mill
- 1 MM bu. wheat storage



CHALLENGE

- Install hazard monitoring sensors on 19 existing bucket elevators.
- Provide centralized monitoring of bearing temperature, belt alignment and under speed data so plant personnel have visibility of equipment status and can respond immediately to issues.
- Minimize installation cost of running numerous sensor cables.

OBSTACLES

- 19 elevator legs each had nine sensors that were spread throughout a large facility.
- Running that much wire would be incredibly expensive, both in labor and materials.

SOLUTION

4B Industrial Ethernet Node (IE-Node)

"To wire 171 sensors back to existing control panels would be incredibly expensive, versus taking a group of sensors with one Ethernet cable to the control box with the 4B product."

ENGINEER NOTE:

"The entire installation and commissioning took seven days – 19 bucket elevators with nine sensors on each with 11 nodes. The real money on a project is electricians and dropping lines and pulling wires. I designed the layout of the sensors, and I specified 4B because I like their Ethernet nodes. We're including them in another quote we're preparing now."

"The biggest difference between this product and other products was the decreased amount of work and labor for electricians. I'd say less than half the cost. That was a great success. We were able to achieve that."

Controls Engineer
Kice Industries Inc.



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PROJECT PARTS LISTS

Industrial Ethernet Nodes and Switches

Part	Description	Quantity
ETH-NODE2V4C	Industrial Ethernet Node 4-20 mA input, 24VDC power	11
ETH-NODE-AUXI-6AN	Industrial Ethernet Node Auxiliary 6 Input 4-20 mA Card	11
ETH-SWITCH1V4C-5P	Industrial Ethernet Switch, 5 Port (5 Usable), 24VDC	5

Bearing Temperature Sensors

Part	Description	Quantity
ADBMIL1V4C/D4	Adjustable Depth Milli-Temp 4-20 mA sensor 4" Depth	76

Belt Misalignment Monitoring

Part	Description	Quantity
KIT-RUB-8	KIT INCLUDES: RB2W4LR2, RBID3X9, ADBMIL1V4C/D2	76
RB2W4LR2	Rub Block 2 X 4 X 3/4 Brass with 1/4-20 on 3" Centers Mounting Holes	
RBID3X9	Rub-Block Inspection Door SS	
ADBMIL1V4C/D2	Adjustable Depth Milli-Temp 4-20 mA sensor 2" Depth	

Belt Speed Monitoring

Part	Description	Quantity
KIT-MILSP	KIT INCLUDES: MAG2000, MIL8001V4C, WG1-4B-4)	19
MAG2000	Mag-Con 2" Dia. (Patented)	
MIL8001V4C	Milli-Speed Switch (4-20 mA)	
WG1-4B-4	Whirligig 4 Pulse Per Rev	

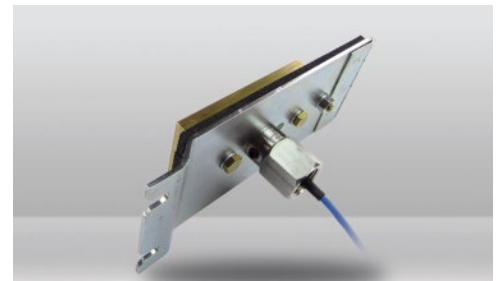
PARTS PICTURES



IE-Node



Milli-Temp Bearing Temp Sensor



Rub Block - Brass



Whirligig with Milli-Speed Switch