WHITE PAPER

The Importance of Spare Parts

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Imagine it is 4:30 on a Friday afternoon. The year's peak season has gone smoothly: orders are shipping on time, customers are satisfied, and then... breakdown. After the operation spends two hours addressing the problem, you realize that the parts necessary to replace a broken drive are not in stock. Frantic calls are made to all local supply houses, but it becomes apparent that the new drive will not be available until late Monday afternoon. The result could be as devastating as broken service levels agreements, high labor costs to attempt a workaround, and most importantly lost customers.

The Real Value

The value of any spare part is not what is spent on the cost of the actual component. What matters is the dramatic savings in time and money from having the part available. Is it worthwhile to save a few hundred dollars on a part that will cost you thousands of dollars in lost time?

Consider this scenario to understand the implications of cost in lost time:

Theoretical cost:
Conveyor system down for 8 hours on a Friday with 50 associates working.

50 employees
@ **$13.50** per hour
x **8** hours
$5,400.00

While the theoretical cost shows the financial impact of having spare parts available, it doesn't begin to demonstrate how eight hours of lost time can cripple an operation.

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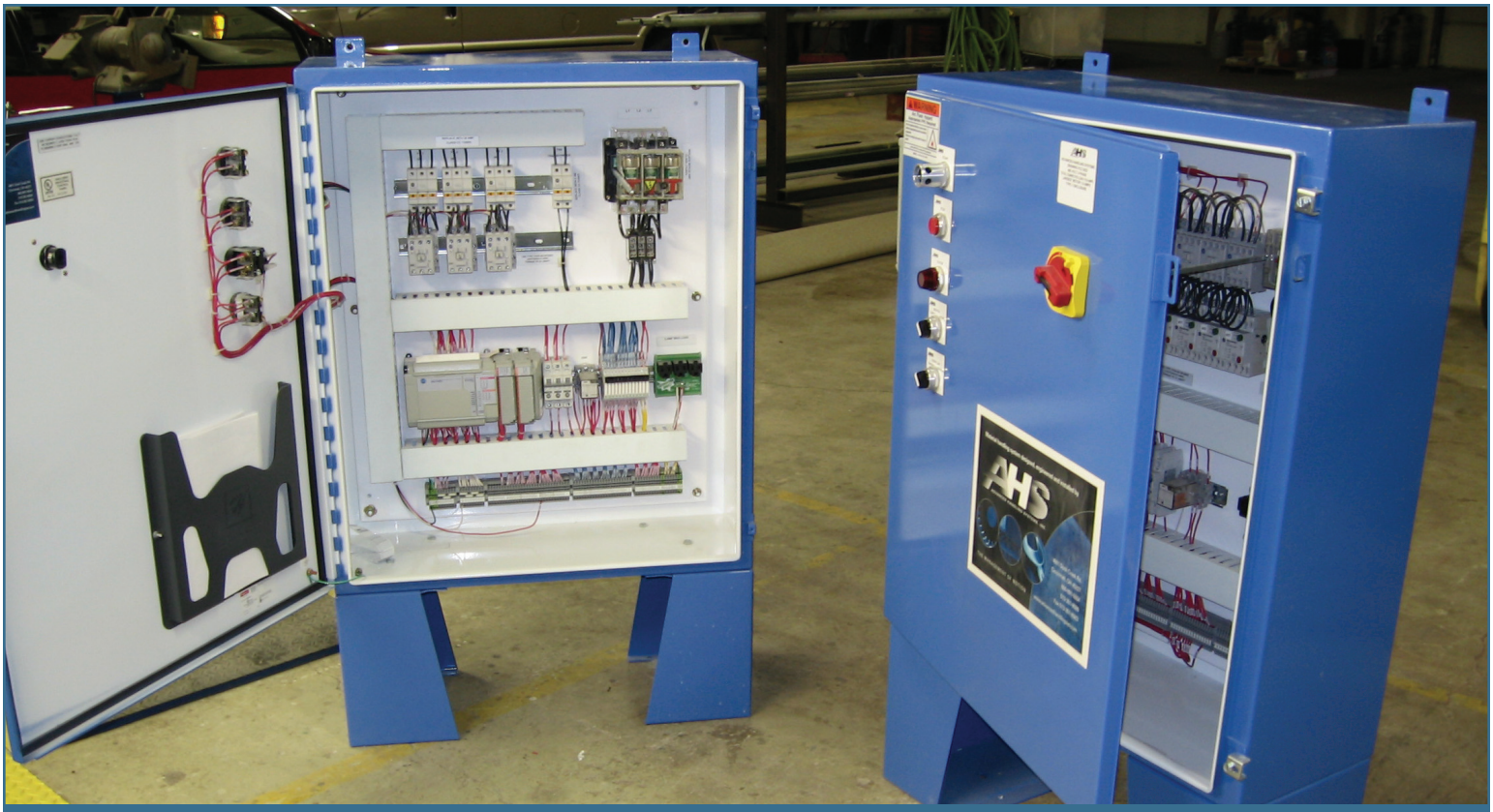
Have a Plan

Ideally, every piece of equipment would have a replacement part sitting on the shelf with a highly trained maintenance staff ready to repair any part at a moment's notice. Due to capital budgeting and financial constraints, this is not always a realistic situation. For the most proactive preparation and to avoid emergencies, AHS Material Handling Engineering recommends categorizing parts into the following system that dictates a process for maintaining spares:

Type A Parts — These parts are absolutely necessary to have on the shelf at all times. Failure of this component will result in a shutdown of a process inside of a facility. They could fail without warning and generally have a long lead time for replacement. Examples of Type A parts include:

- Scanner components
- PLC modules
- Conveyor drive motors
- Pulleys
- Electrical panel components
- Any other items which can only be sourced from the conveyor manufacturer



Type B Parts — These parts should be kept on the shelf at all times if possible. Failure of this component will result in a shutdown of a process inside of a facility. However, a replacement part should be available within eight hours or less. Examples of Type B parts include:

- Belting
- Local electrical devices
- Motors
- Reducers
- Timing chains

Type C Parts — It is recommended that these parts be kept in inventory. Failure of this component will not result in the shutdown of the facility. Replacement parts are readily available at local supply houses. Examples of Type C parts include:

- Roller chain
- Common hardware
- Wear strips
- Guarding

Protect Your Operations

Don't subject your operation to lost hours in downtime. Create or redefine your list of spare parts and be sure to understand the lead times for each individual component. Determine the maximum allowable time any piece of equipment can be down. If the result is minimal time, take the necessary steps to stock the relevant spare parts. You will realize the real value in the bottom line.

Matt Witte

As a Project Manager for the Material Handling Engineering Services group of AHS, Matt Witte works with clients to manage their projects including coordination of the project schedule and project budget. Before his time at AHS, Matt's experience included working for UPS Supply Chain Solutions as the Facility Engineering Supervisor. He graduated from the University of Cincinnati with a degree in Mechanical Engineering.

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