

# Quality Product = Less Downtime = Increased Profit

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**W**ell, 2009 is here and whichever way you look at it, this will be a year of changes. Our economy has changed, that's for sure, and chances are your company has had to change its spending, purchasing, or bottom line practices in order to keep pace. Manufacturing in particular has come under intense pressures from a variety of directions, and with a specific emphasis on value. ROI is on the mind of every person signing off on a purchase.

We all know what basically happens during a manufacturing process; various independent parts are delivered to a facility where people and machines work together to put the parts together in a way that results in the creation of something with a useful

purpose and carrying a value greater than the individual parts have by themselves. Tools are used during the manufacturing process to build the finished product quicker, better, tighter, etc.

Have you ever stopped to ask yourself why you use one particular tool instead of another? This might sound like a dumb question, but the answer is simple— one tool has better value for the job than another.

In the world of factory automation, this value consideration has never been more important than today. More specifically, variable frequency drives are controlling a growing number of AC motors in almost every type of environment and application imaginable. Consequently, the choice of which VFD manufacturer to select is also becoming a very important decision.

When selecting a supplier, product quality should obviously be a priority. Simply put, will the VFD do what it needs to do when you need it to do it? Or, will you be

constantly dealing with unscheduled production downtime because of failures and headaches? Product quality is the cornerstone of a smart, high-value purchase. Quality inspection during the final phase of production is not enough. Manufacturers dedicated to providing quality products will employ this approach from the initial design.

So from your perspective, everything that goes into the ultimate operation of the VFD needs to be considered. Beginning with its initial concepts, through component assem-

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bly, full-functional testing, and right up to where the unit gets placed into the shipping container before arriving at the requested location. Surpassing customer expectations must be the ultimate goal.

As the use of VFDs continues to grow, and their applications become more critical, cost should become less of a factor. The following concepts might serve as a potential guide for you in selecting a VFD supplier:

- An extensive installation base in the specific application being targeted.
- Proven leadership and knowledge in VFD and motor technology.
- A willingness to publish quality data based on years of proven service, such as MTBF (Mean Time Between Failure).
- The ability to produce documented and verified customer success stories.

### Basic ROI

Why is all this evaluation necessary? The realities of today's business environment

demand that the purchase of any product, and the associated support, be viewed from a long-term financial perspective. The lowest cost product is not low-cost to your business if it requires constant attention and maintenance.

Here's a basic example:

There is a production line where unscheduled downtime has been calculated to cost the company \$10,000 per hour. Did that VFD at an initial purchase price of \$550 less than the one from the proven, high-quality manufacturer really save as much as initially thought? The best maintenance/operator team in the industry may be able to identify a failed VFD, follow proper lock-out and tag-out practices, get a new unit from the spare parts crib, rewire and physically swap them out, and get the line back up and running in one hour.

Now, let's do some math. Even with the \$550 product savings, the company still lost \$9,450? But wait a minute, didn't we save a ton on that lower priced VFD? This is the real cost to the bottom line. The initial purchase price might in fact have been lower but the higher quality— and in this case, slightly higher priced VFD— provides a higher value to the company.

Remember, if the VFD doesn't fail, the line continues to produce your goods and your company is still making money. The hard-working operators and maintenance teams can tend to other important tasks in keeping utilization up and waste down. The fact is that intelligent purchases are critical to the economic growth and future of your company and result in greater efficiencies and utilization of your capital investments.

This is the time for tough, important questions to be asked. What applications are critical to the success of your process? If they are critical to the success and growth of your company, don't they need the highest quality products running them? **IMPO**