

# Dotson Dispatch

## Stress Testing When Environments Change



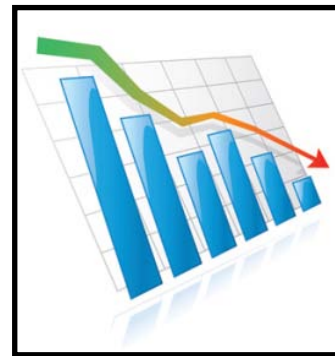
When iron is used in an extremely cold environment, it loses its ductility and becomes very brittle and is likely to break. Not good if the casting is a hub for a giant wind turbine.



Fortunately, there is a simple stress test for iron called the “Charpy Impact Test”. A small, cast iron sample is placed in the machine and a weight is swung down to break the sample. The force used is calculated and graphed. The test is repeated as samples are cooled to lower levels. The resulting graph then shows the precise “ductile to brittle transition temperature”.



With that data the metallurgist calculates the chemistry needed for the end use environment.



When the economic environment changes for the worse, many suppliers become very brittle and are likely to break. Wouldn't it be great if there was a Charpy test for suppliers to measure just how much economic stress they can survive.



Our company was started 133 years ago which gives us some experience in the economic stress test area. We believe that this six-point “Minnesota Supplier Stress Test” is a good way to assess just how close a company is to the breaking point. Purchasing managers, with this data, will be better able to position their suppliers for the win/win long term.



# Supplier Stress Test

Those who are working within an organization have an intuitive feeling about that health of their company. We see the little things that happen each day: the stress and/or confidence that is displayed by the managers as they walk through the facility; actions that are consistent or inconsistent with the talk; and, the subtle variations that the building and equipment is getting better or worse. The challenge is to determine the health of a customer or supplier when you don't have daily contact.

This "Minnesota Supplier Stress Test" (we made up the name) provides an insight into the long term viability of a supplier. The Dotson response for the six areas follows.

## 1. Financial Statements

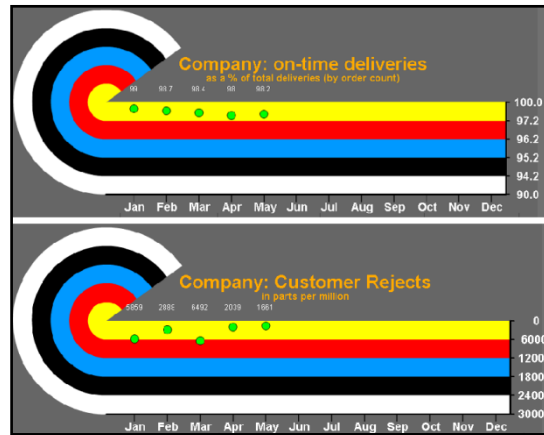
Just like the stress testing for the banks, the supplier balance sheet is the best indicator of how well a company will do if there is another severe shock to the economy. Look at the ratios and how they have changed through the years. Our auditors and our bank believe we have the financial strength to survive and grow. We are happy to supply financial information to any customer.

## 2. Investments

In the seven years since the 2001 recession, Dotson has invested 6% of our sales in the recapitalization of our foundry. In 2009, we will not invest in capital equipment but rather we will invest in our intellectual capital, our employees. As long as we are above the breakeven point, we will not have a major layoff. We are using this time for additional training and plant fix up projects.

## 3. Performance

As days and full weeks are taken out of the production schedule, on-time delivery suffers. This is especially true for short lead time orders. A disruption in the normal flow of processes may lead to quality problems. We are very proud that at Dotson this has not been the case. Year-to-date PPM reject rate is 3854 and on-time delivery is 98.5%. And, we have poured iron every week.



## 4. Customer Engagement

A big advantage of "extra" time is having groups of employees visit customers. Engineers see firsthand how to design better parts and production employees see the "real" reasons for certain quality specifications. Each week since the slowdown began, non-sales groups have visited our customers.



## 5. Bounce Back Ability

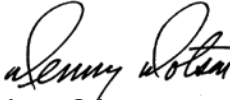
What will happen when production picks up? If a supplier has been on cash in advance for materials, will they have access to the cash needed to finance additional inventories and receivables? What will be the problems in hiring and training new employees? If investments haven't been made to improve the operations, will the company survive the pressure to pass on productivity improvement to the customers?

At Dotson, the decision to maintain the workforce gives us instance response to any pickup in orders. We have open credit lines with all of our suppliers and we are not using our bank operating lines. Our recapitalization projects and our commitment to lean operations have us in an excellent position to control costs.

## 6. Visit the Supplier

There is nothing better than an on-site visit. The activity, the changes, the conversations with production workers, the alignment to your needs and requirements...all of this is best understood with a personal visit. Web sites, photos and sales people won't do for this last part of the "Minnesota Supplier Stress Test". This is something the purchasing team has to do for themselves and we encourage a visit to our foundry at any time.

Transparency becomes vital for success as the velocity of change accelerates. We hope that this insight into Dotson helps in making long term win/win decisions.

  
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