

Waste Reduction and Quality: A Matched Set

Waste reduction and quality may seem to be independent variables in a business. After all, some product specifications may require certain materials or processes be used to maintain minimum quality standards, and some wastes from those processes seem inevitable. In many cases, it is the result of internal standards and the expectation that any tampering with tried and proven materials or processes risks a sacrifice in quality.

Many companies have demonstrated that quality management programs can result in parallel improvements in product quality and waste reduction. For example, an industrial valve manufacturer used conventional solvent-based coatings in finishing its products with time tested materials and processes. There was reluctance to change specifications on something that gave a superior product finish. However, the coatings often resulted in blemishes that had to be refinished. About 7 percent of the valves had to be redone. At the same time, the processes and materials generated a costly hazardous waste.

At first, proposed changes in materials and process were rejected. However, a team of production and engineering personnel conducted a detailed analysis of water-based coatings to reduce the hazardous waste problem. The evaluation of alternative materials included an assessment of the durability and gloss finish of the coating. The result was a higher quality coating, a less than one percent refinishing rate, and nearly complete elimination of hazardous waste.

In recent years ISO 9000 has made business news as a quality management system. Now ISO 14000 has entered the scene as a parallel environmental management system. Both systems involve the implementation of management systems and protocols that foster improvements in quality and environmental performance, respectively. Both systems have implications that affect competitiveness or even acceptance in global markets.

For more information on waste reduction and quality opportunities, contact your SBDC office, Business Agent, or County Extension Office.