Cautionary Tales

Part XII External Forces

There are very many external forces at work in the spring industry, many of which individual spring manufacturers are relatively powerless to influence. These include

- Availability of raw materials, and duties levied on their supply
- Range of springmaking equipment available
- Financial budget and squeezed margins
- Trade restrictions
- Product Liability Laws and other legislation
- Assessment of the environmental impact of your business
- Exchange rates
- Quality Assurance Systems

It is clear that the spring industry is constrained by external forces to a very large extent, and can rarely play a pro-active role in determining its own future. The UK steel industry recently lamented a similar state of affairs in their sector, but asserted that the areas where positive actions could be taken, despite apparently overwhelming external forces, were

- Improved sales performance
- Adopt lean manufacturing techniques
- Reduce supply chain costs
- Improve service levels
- Develop superior skills and talents

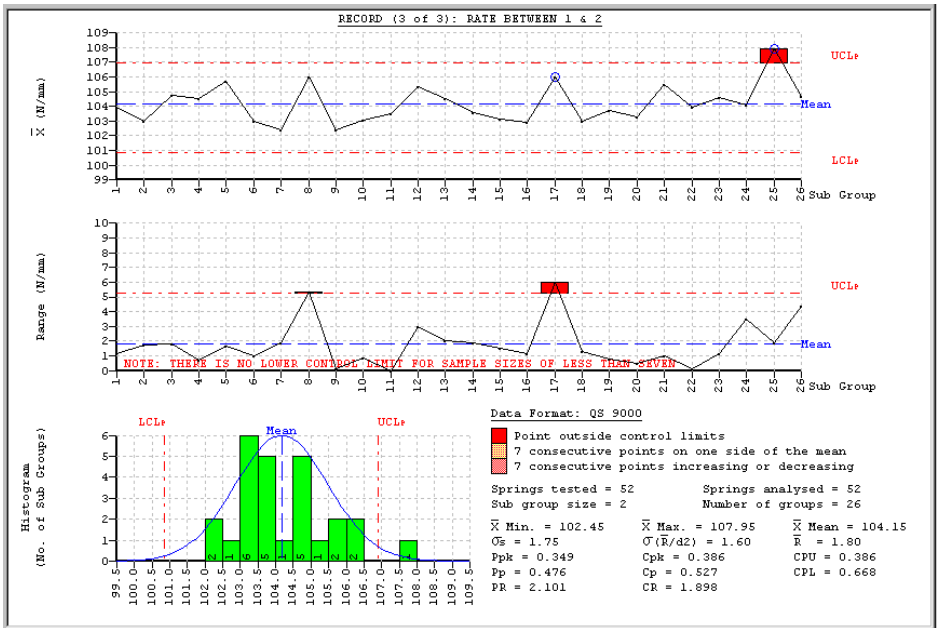
The spring industry and the steel industry have common framework in which they trade, but it is more difficult for the spring industry because, throughout the world, it is largely made up of many small companies that are isolated between their raw material suppliers and customers who are mostly medium or large companies.

Quality Assurance Systems are necessary for all spring manufacturers and this is the subject of this cautionary tale. The majority of spring manufacturers around the world are registered to ISO 9002, ISO 9001, QS 9000 or an Aerospace system, and all would argue that they have systems in place that assures their customers of the quality of their products. Of these QA Systems ISO 9002:1994 is the most widely used, but it has been superseded by ISO 9001:2000. There is a grace period of three years in which companies have to update their quality systems to this new standard, the main changes of which are quoted to be

"The main changes in the revised ISO 9000 standards are the increased focus on top management commitment, emphasis on the process approach within the organization, continual improvement together with enhancing satisfaction for customers and other interested parties."

Do not underestimate the impact of this new standard on your every day working practices – these changes do not, at first sight, appear to be too

demanding. The top management commitment is doubtless already in place. The process approach, on the other hand, means that measuring the final product is no longer sufficient. It is necessary to measure the quality from each process, and having measured it, there is an obligation to take on a commitment to continual improvement of the process quality parameters. SPC will mean statistical process control, as was always intended, and statistical product control, as practiced by most spring manufacturers, may not be good enough to satisfy the independent quality inspectors who register your QA system.



Is this SPC data on your product sufficient, or is it needed for each process?

Another change is that the distinction between ISO 9001:1994 and ISO 9002:1994 has been eliminated and so the design aspects of 9001 will have to be incorporated in some way into your quality system before independent registration to ISO 9001:2000 is possible.

Full implementation of your quality system to ISO 9001:2000 is not mandatory until the end of 1993, but the advice of this cautionary tale is that updating of your quality procedures may not be as easy as you had hoped. Asking questions now of your independent inspectors about what you need to do to comply with the new standard would be time well spent.

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