

Technical Article

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Development of a no-nonsense Quality Management System

Suppose you could increase manufacturing efficiency & customer satisfaction, streamline employee training, reduce field service costs and give your marketing program a boost? What if you could get all this off the ground with less than a 30 hour time investment?

It can happen with the development of a no-nonsense *Quality Management System*. It's a lot more like common sense than rocket science, and you may be surprised at how much of a bona-fide quality system you already have in place.

Breaking It Down - start developing a quality program by breaking your operations down to smaller, easier to define areas, such as:

Work orders

Use to clearly define & communicate the information required by production to consistently provide the product the customer ordered.

Raw material & component inspections

Use to define criteria for the acceptability of components, determine acceptability as early in production as practical, and clearly define the steps to be taken when materials are unacceptable.

Equipment maintenance

Define & follow maintenance schedules to prevent equipment problems from interrupting production or forcing you to ship sub-standard product.

In-process quality inspections

Pictorial lists of GO / NO-GO examples, can be further broken down to define the quality of sub-assemblies like SIG, frames & sash, and packaging.

Final product inspections

Pictorial lists of GO / NO-GO examples used to define quality of your finished product, including who is notified and what is done not only to fix any discovered problems, but how to prevent recurrence.

Quality audit checks

All products should be inspected by each production employee as they work, but random & regular audits let employees know quality matters, and increases the employee's sense of responsibility for their work.

Customer complaints

Be determined not to let quality issues get out the door, when one does, consider not only how to fix it, but how can the quality management system be used to prevent recurrence.

Record keeping

Keep work order records and create documents to keep tabs on known quality issues, perhaps keeping statistics to determine which problems are most frequent and costly.

Define Quality and Put It In Writing – there are a finite number of Items that can go wrong in each area of production, put them in writing, clarify them with digital photos, laminate the lists and post them at the various workstations. Things like misaligned grids, short weather-strip, broken rollers, sloppy weld cleaning and everything else you and your team don't want to get out the door.

Get Production Employees Involved – your experienced production people know what can go wrong, GET THEIR INPUT! Try to instill a team spirit, post statistics to show improvement and boost moral. Perhaps offer incentives to meet quality goals (Friday pizza lunch?).

Define Operating Indicators & Communicate Progress – consider monthly quality meetings to report progress and allow employees to have input on how quality can be improved or made more consistent.

And finally... suppliers (particularly IG component manufacturers and extruders) can offer a wealth of assistance with quality control program development, seek and take advantage of their expertise!