

SATURDAY | NOVEMBER 29 | 2014

Manufacturing needs a quality boost



CHANDRAJIT
BANERJEE

Strong and clear standards, identifying specific criteria for compliance towards Zero Defect & Zero Effect need to be developed across diverse fields

A SIGNIFICANT innovation of the 'Make In India' call by Prime Minister Narendra Modi, given on August 15, was the addition of 'Zero Defect, Zero Effect'. This translates into a manufacturing mission that is high on quality as also environmentally sustainable. In fact, the two goals are complementary—a nation's development is sustainable only when the producers of products and services deliver highest levels of quality, at lowest cost, most efficiently, with minimum environmental impact and most responsible use of resources.

'Quality' is a holistic concept that goes beyond production of high-class goods and services to encompass entire processes and systems at the firm level and at the national level to maximise outcome, efficiency and productivity at minimal cost. It extends to long-term business strategies for organisational excellence and success and can be extrapolated to include efficient supply chains. Inculcating a culture of quality in the country so as to meet the objectives of Zero Defect, Zero Effect requires a mindset change among the policy-makers and industry alike in order to enhance national competitiveness in the global marketplace and succeed in manufacturing transformation.

India today has a large number of winners and recipients of internationally-acclaimed awards for business excellence. According to CII data, there are 21 awardees of the renowned Deming Prize and 238 Total Productivity Maintenance (TPM) awardees of the Japan Institute of Plant Maintenance (JIPM). Firms have also worked towards obtaining international energy and green ratings, certifications covering quality, energy and environment, and other well-known business excellence standards.

This drive for excellence has enabled gains in productivity, quality, costs, operational efficiencies and conservation of critical natural resources. In training programmes conducted by CII on Quality Management Systems, we have seen production in participating firms going up by 50%, quality levels increasing by 80%, cost of manufacturing coming down by 5-8%, and cost of maintenance being slashed by 30-50%. A huge positive outcome has been zero accidents, zero breakdowns and zero defects in the companies which have gone through the TPM process. The high point is raised morale of employees as staff at all levels is involved in kaizen or continuous

improvement and innovation as well as in aligning to enterprise goals. Such quality interventions have helped enhance the image of Indian manufacturing and many of our companies have emerged as top-five producers of their product categories in the world. While this is a no mean achievement, there is still a long way to go for universal coverage in terms of scale and numbers of manufacturing enterprises.

A comprehensive initiative for expanding quality attainments would aim to transform

The success of Make In India will depend on the competitiveness of Indian enterprises. Zero Defect, Zero Effect should thus be developed as an additional mission in partnership with industry to support and assist companies

methodologies, processes and systems across the value chain. It would revitalise the use of manufacturing tools and techniques while building a strong brand for India and its products and services, focusing both on the customer as well as on society as a whole. The endeavour of Zero Defect, with a focus on the customer, would act towards zero non-conformance and non-compliance. On the other hand, Zero Waste, Zero Effect, with a societal focus, would focus on zero air pollution, zero liquid discharge, zero solid waste and zero

wastage of natural resources. This would converge the Make In India mission with the Swachh Bharat Abhiyan and stress minimising waste at the industry level.

Strong and clear standards, identifying specific criteria for compliance towards Zero Defect and Zero Effect, need to be developed across diverse fields. Each criterion would be in the form of graded improvements that would be demonstrable with the highest grade corresponding to world-class maturity assessment criteria, and should include both enablers and results. This would help Indian industry to measure itself against global benchmarks and seek to evolve to its desired levels of quality.

A range of areas need to be addressed to make industry competitive and quality-compliant. The use and adoption of proven and time-tested quality tools and techniques, green technologies, management systems, excellence models, fundamental concepts and innovative approaches, and coordinated and time-bound processes using a defined roadmap with clear outcomes will be some of strategies that Indian industry would need to deploy. Industry would need support in terms of training, consultancy and advisory services that would assist firms in adopting these proven methodologies. Multiple modes including awareness dissemination, personalised interventions, audits, assessments and cluster mode would be required to achieve the twin goals and build necessary internal capacities and capabilities for vibrant and sustainable enterprises.

CII's Institute of Quality is the initiator of India's first maturity assessment criteria ever on Zero Defect, Zero Effect, termed as the ZED Maturity Assessment Criteria. Evolved with the collaboration of the Quality Council of India, this would bring out a ZED framework with a maturity matrix to guide industry to commence and advance on quality attainments. Benchmarks would be established across focus sectors and products, which would enable India's 1.1 million MSMEs to reference themselves. Besides CII Institute of Quality, other CII Centres of Excellence who will be actively participating in this ZED movement would include CII-Avantha Centre for Competitiveness for SMEs, CII-ITC Centre of Excellence for Sustainable Development, CII-Sohrabji Godrej Green Business Centre, CII-Triveni Water Institute, CII-Naoroji Godrej Centre of Excellence and CII Andhra Pradesh Technology Development and Promotion Centre.

The success of the Make In India mission would depend heavily on the competitiveness of Indian enterprises, particularly MSMEs. Zero Defect, Zero Effect should thus be developed as an additional mission in partnership with industry to support and assist companies.

The author is director general, CII

ROHINI PHORE