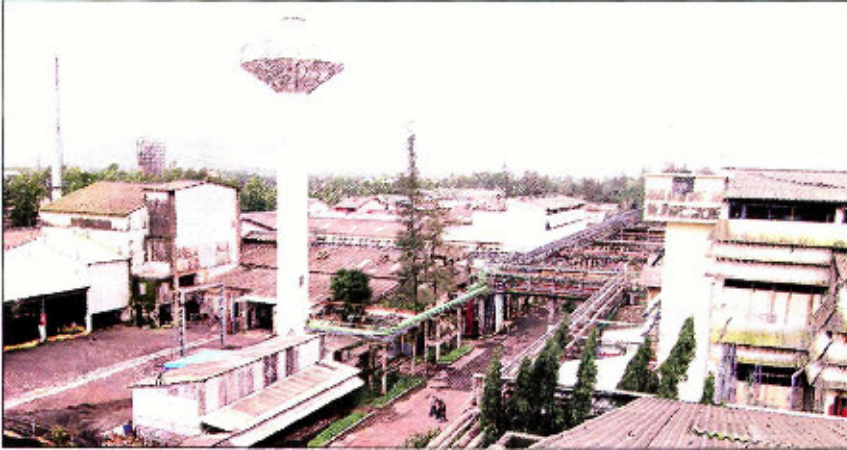


## For improved productivity

### Six Sigma deployment

## For improved productivity



The chemical industry in India has been on the fast track of growth. In order to keep pace with the changing times and increasing global competition, Indian chemical companies are adopting a number of practices to specifically enhance their quality and output. Sudarshan Chemical Industries Ltd, one of India's leading manufacturers of pigments and pesticides, partnered with BMG India, a global Six Sigma consulting firm, to boost performance excellence by reducing costs and lead times. A case study...

**S**udarshan Chemical Industries Ltd (SCIL) has been a leading player in the pigment and agrochemicals sector for over 50 years. The

company adheres to international standards and efficient practices in every aspect of operations. Its Pigment Division received the ISO 9001 certificate way back in 1993, and in fact was the first chemical company to have received this certification.

High quality standards are maintained at all levels in the company. While the production of pigments is carried out at its plants in Pune, Roha and Mahad; agrochemicals are produced at its Roha facility. Its vast range of products include organic and inorganic pigments, specialty pigments, intermediates and pesticides.

of concern. It was also felt that there was less control on RM and finish material (FM) inventory. Also, a dip in delivery performance was seen due to recurring problems and there was a tendency to jump on to solutions without proper analysis of the problem. It was found that there was an ambiguity in yield and utility consumption. Further, very little awareness prevailed when it came to understanding the consequences of action taken.

### BMG's mandate

To fight the Chinese competition and depleting profits at a faster rate, SCIL partnered with BMG for Six Sigma deployments. The primary focus of Six Sigma implementation was to achieve quality, cost reduction in RM and manufacturing. Other expected benefits included capacity enhancement without major investment and streamlining of processes, which would reduce RM, semi finish material (SFM) and FM inventory. The overall benefits expected were improvement in delivery performance, reduction in testing cost and lead time.

### Change management

The transition from an existing legacy system to an integrated system always necessitates a change in mindset of the organisation. Companies normally worry Great emphasis is placed on research and development activities. There are over 100 qualified scientists currently working in the laboratories owned by SCIL.

### Getting over lack of consistent quality and poor delivery performance

Chemical companies usually face problems related to quality and delivery. At SCIL too, lack of consistent quality within a cycle, and variation in raw material (RM) quality were the major areas

that any change they make will only exacerbate existing problems and reward them with complex and difficult outcomes. But, Sudarshan Chemicals decided to take the plunge. With a strong deployment strategy & lightning response to resolve the softer issues, SCIL management overcame the initial hurdles and finally convinced the employees in general that Six Sigma methodologies would help in identifying bigger

opportunities, speedy implementation and good recognition.

### Methodology

In 2004, BMG took over the deployment strategy, black belt training and project mentoring for SCIL. It started with the BMG team helping on freezing the deployment strategy before starting the Six Sigma training, which made the entire journey quite easy. A proper scoping of the project changed the mindsets of people to accept tougher targets. Each training session was followed by simultaneous applications on live projects and was accompanied by phase-wise review that helped in maintaining focus.

### Benefits

SCIL experienced a good progress in yield improvement, capacity enhancement and manufacturing cost reduction projects. While yield improvement progressed by 2 per cent,



**B J Rathi**  
chairman, SCIL

At Sudarshan, we started Six Sigma initiative in 2004 as a pilot project in the Pigment Division and took services of BMG, the world leader in Six Sigma consulting, for training and mentoring. So far, we have completed 22 projects. We are also spreading this initiative across the organisation and extending the base of Six Sigma in the Pigment Division

the utility cost reduction has gone up by 10 per cent. While the cycle time was reduced by 50 per cent, there has been a 20 per cent increase in capacity and delivery performance. A 50 per cent reduction in inventory was also noted as a result of the deployment.

The quantitative goals resulted in more efficient business process, improved productivity, reduced costs, accelerated transaction time, optimised workflow and

reduction in errors. In terms of quality, there was a marked improvement in customer service, quality control and working conditions. Measured systems were established and a positive change was felt in the thinking culture. The process controls were enhanced along with customer satisfaction. In addition, employees too felt a higher level of involvement in the functioning of the company.