

## Setting New Benchmarks: Improving “First Time Right” and Reducing Rejections by 1/3<sup>rd</sup> within six months at a leading Auto Ancillary Manufacturer.



### Riding a high wave...

The Indian Automobile sector is doing really well for the last couple of years. The sales of automobiles have grown in double digits pushing up the demand in the entire supply chain. The future also looks promising, with a growing middle class and steady GDP growth. These positive developments have spelt good news for the auto ancillary industry, whose performance has started improving.

However, when everything seems to be looking just right for the auto ancillary industry to ride high on profitable growth, there are some formidable challenges that are associated with growth:

- ❑ Increasing throughput and ROI from existing capacity by elevating the bottleneck
- ❑ Manufacturing the components to exact quality standards, with nil or minimum rejections
- ❑ Containing the costs when the input prices, especially steel prices, are going up
- ❑ Ensuring manufacturability of new products in the shortest possible time as per the OEM requirement

Some of the Indian Auto Ancillary Industries find themselves grappling with large capacity being wasted due to rework and rejection and thus biggest challenge for them is to improve reliability of manufacturing process

### ECS helps a leading precision Auto Engine component Manufacturer to improve Quality and Set New Benchmarks

The Client hired ECS to help it reduce rejections and increase “first time right” for both chrome as well as non-chrome piston rings.

**Benefits achieved**  
**Total savings of Rs 1.4 Cr in material cost at an auto ancillary plant with a TO of about Rs 70 Cr.**

The Client was exporting 35% to 40% of its output and was facing a severe pressure from customers to further tighten the quality norms and reduce costs. The competitive advantage, it thought it had, as a low cost manufacturer was more than nullified as a result of high rejections - its internal rejection rate was 30% to 40% higher than international competitors. Also the rework percentage was very high. High rejection and rework had further complicated the matter by reducing order execution rates. Being one of the largest manufacturer of the precision component the client had very rich experience of the precision manufacturing process that involved forging, heat treatment, milling and grinding. There was also a believe that there is a little scope to improve quality as several attempts in the past have peaked to get the current performance.

In these circumstances, ECS was asked to help them reduce rejections. ECS worked with this client and helped it realise significant benefits – both tangible as well as intangible!

### **A structured and rigorous with involvement of all was critical in order to bring drastic improvement in Quality**

Areas of improvement were identified which were either product type specific or process specific or defect type specific on the basis of a detailed study. Cross-functional teams were formed to work on each of these areas. Some of the teams also included senior operators. All members were trained structured problem solving methodology and simple as well as advanced statistical tools & techniques.

The teams applied 7QC tools as well as various other tools such as Hypothesis testing, Design of Experiments, Regression Analysis, Process Capability, Criticality Assessment, Condition Appraisal, etc to confirm various causes of rejection / rework as well as suggest modification in the manufacturing process. At some places the manufacturing process itself was modified, at a few locations the input parameters were changed to given optimal output.

#### **Reasons to celebrate...**

- Reduction in chrome plated rings by 35%
- Improvement in "First Time Right" for chrome plated rings by 25%
- Reduction in non-chrome rings by 30%
- Improvement in "First Time Right" for non-chrome rings by 10%

**The ECS intervention helped the Client go beyond the International Benchmarks its had set for itself.**

#### **Contact for details**

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**ECS Limited** is a premier business management consulting firm in India. Its consulting practice covers **Strategy, Operations, Human Resources & Change Management, Supply Chain Management and Full Value Sourcing.**

In its Operations practice, ECS is active in helping clients to align their operations with their strategic goals using the latest concepts in **Business Process Re-engineering, strategic cost reduction, policy deployment, new product development** etc. ECS has been pioneering the effort of transformation management in India and is well known in **process transformation, TQM, TPM & Six Sigma** consulting.

We always partner with our clients till implementation of solutions. We have a proven record of over a decade of successful implementation in large Indian Organization and Multinational organizations.

The interventions have helped its clients in significantly reducing cycle time, cost and defects and increasing throughput, productivity and reliability.

ECS follows a method of collaborative consulting with a strong emphasis on people involvement in the change process.

Our client-list includes well-known companies in India, such as Marico, Mother Dairy, Castrol, Godrej, Larsen & Toubro, Crompton Greaves, Electrolux, Rallis India Ltd., Torrent Cables, Deepak Fertilisers, Reckitt Benckiser, Electrosteel Castings, Goodlass Nerolac, Rallis, ITC, Grindwell Norton, Trident, Crompton Greaves and TAFE etc.

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