

## CASE STUDY: METALMAN AUTO PVT. LTDS.

### Description of the company

#### Background

Metalman was started in 1976 to manufacture electroplating and metal finishing work for the bicycle and auto industries. Since then the group has expanded and diversified. It now manufactures intricate deep draw sheet metal components; a range of tubular and sheet metal fabricated components; and provides advanced metal finishing techniques for tri-nickel chrome plating. It also has a well-equipped tool room for the manufacture and maintenance of dies, press, tools, jigs and fixtures.

Currently, Metalman is the supplier to M/s. Kinetic Motor Company Ltd. & M/s Bajaj Auto Ltd., as well as to other two- and four-wheelers in the auto industry. Between 2002-2003 it grossed nearly nine million US dollars. It employs 393 people.

The company owns three factories, two in Pithampur and one in Aurangabad that opened in 1997. The basis for this case study will be limited to an analysis of the factory in Aurangabad, Metalman Auto Pvt Ltd.

#### Participating in the business linkages programme

The factory began operation in 1998 with 20 employees. After four years it employed 190 workers, produced more than 370,000 units of product and grossed revenue of five million US dollars per year. Metalman's only customer is Bajaj Auto Ltd. As one of the key car manufacturers in India, Bajaj is undergoing supplier consolidation. In the past seven years alone it has gone from more than one thousand suppliers to 190.

Mr. Thorat, the Director of Metalman, understood that to maintain his business he would need to guarantee top quality products cost-efficiently. In 1999 Metalman became certified by ISO 9001 and initiated a process of improvement and technological upgrading. However, due to high market expectations and the growth of customer demand, Mr. Thorat was looking for in-depth change that would enable Metalman to readily adapt and have a competitive edge with Bajaj. At the end of 2002 Mr. Thorat received a letter from UNIDO and ACMA inviting Metalman to participate in the Business Linkage programme for the automotive sector.

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“It came at the right time,” says Mr. Thorat, “because we were expanding very quickly and needed to make sure our absorbing capacity would not jeopardise the quality or delivery requirements of our customers.”

The programme began February 2003 and will last 30 months. It includes 40 companies from four different regions of India and offers different types of activities as models for continuing improvement. The programme includes:

- Classroom training sessions for a selected group of SMEs on quality management, cost efficiency and delivery of products.
- Two visits a month by an international expert to evaluate corporate performance, propose best practices for improvement, change management practices and assign tasks to the management team.
- A monthly meeting among the regional cluster to jointly evaluate performance. The meeting is held at one of the SME sites, with each member evaluating the performance and improvements of the company visited. In addition, each company must provide a 10-minute presentation highlighting achievements and pointing out areas for improvement.

## Outcome and proven results

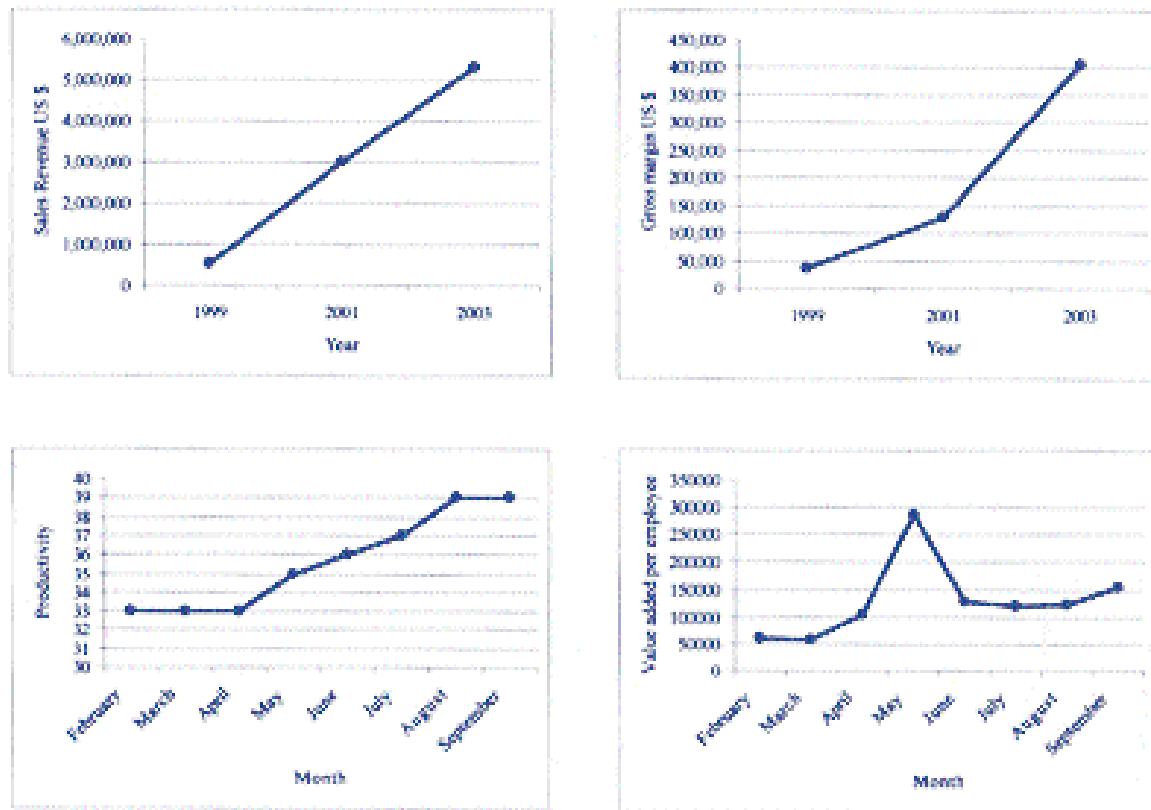
Metalman’s performance has been evaluated according to the three criteria defined in the Renata case study (business performance, quality performance and environmental and social performance). However, since Metalman began its participation in the programme only recently, most of the quantitative analysis has been done only since that date.<sup>39</sup>

### Business performance

Metalman has increased its productivity by 18% since February 2003 while the added value per employee has increased 150% (data is not available before that).

<sup>39</sup>Part of the information obtained from the INSEAD and UNIDO questionnaire for business processes and supplier and customer integration.

Figure 2 | Business performance of METALMAN AUTO PVT. LTDs since 1999



#### Quality performance

Since the partnership with Metalman was initiated only in February 2003, not much data is available to indicate the results in terms of quality performance. However, some indicators have already shown an improvement of the company's productive process since it started with the Business Linkages programme. The following quality improvements have been quantified:

*Number of defects:* indicates the number of defects due to mishandling, wrong operation, stacking, etc. Since February 2003, this number has been reduced dramatically by 91% and achieved minimum levels in the most recent months.

*Tool change time:* measures the minutes spent on tool change on average. Since February 2003, Metalman has been able to reduce tool change time by 28%, which is currently equivalent to 16 minutes. To achieve this gain the company started an action plan that ensures, for instance, that all required tools and gauges are accessible near the machines.

In addition, Metalman has drastically reduced customer complaints to only one per month, a drop of 85% from February.

#### **Environmental and social performance**

Although social and environmental aspects are hard to quantify, as in the case of Renata, Mr. Thorat has developed awareness of the relevance of these issues as well as of the need to assess the company's achievements in such areas. As a positive result, despite the initial stage of the partnership programme, Metalman has already obtained some considerable improvements.

In terms of environmental performance, by implementing best practices Metalman has achieved substantial savings in the consumption of energy and resources: 90 man-days per month in manpower, 24,000 litres per month in water and 260 units per month in electricity.

Although Metalman results in the area of social performance have still to be assessed and quantified, there have already been some positive indicators related to conditions of work and absenteeism.

*Number of accidents per employee per hour/ and number of days lost per employee a year:* following the implementation of the partnership programme in February 2003, accidents were rapidly reduced to practically zero. Although the introduction of new techniques caused a sudden increase in the number of accidents in July and August, the company quickly implemented training procedures that helped to bring the ratio back to zero in September.

In addition to these indicators, absenteeism among employees has also been reduced by 51% since the implementation of the programme.

#### **Global Compact performance model**

Metalman has demonstrated its awareness of the importance of the Global Compact objectives. In the following an assessment of Metalman's integration of the Global Compact nine principles through the 10 elements of the performance model is described:<sup>40</sup>

<sup>40</sup>The Global Compact Performance Model – Output paper of UN Global Compact Policy Dialogue, July 2002.

### **Vision**

Metalman's vision is to be competitive on a global scale and to be able to supply not only Indian manufacturers but also to global producers. They aim to achieve this by excelling in quality, on time delivery of products and guarantee of cost-effective goods. As Mr. Thorat, the Director of Metalman, has reported, they want to eliminate defects, breakdowns and accidents and achieve cost reduction and on time delivery of products through the introduction of best practices and total productive maintenance (TPM).

### **Enablers**

Mr. Thorat has shown full awareness of the importance and the need for companies to adopt environmentally responsible practices and promote social development through adequate employment practices.

While the continuation of the partnership programme is expected to bring further concrete actions by Metalman in these areas, the company and its management have been truly motivated to implement policies and strategies that aim at achieving higher levels of performance at various levels. Some examples we have seen included the introduction of innovative best practice processes that resulted in substantial gains in quality and upgrading of the productive process.

### **Results and reporting**

Metalman is making a strong effort to quantify its business performance, but also its quality achievements as well as its environmental and social impacts. As we have seen, the company has started to measure and pay attention to indicators such as defect rates, employee absenteeism, energy and water consumption and others.

Although the company has not been required to publish annual reports so far, they are willing to provide them whenever necessary.

### **Enhanced business linkages**

Having joined UNIDO's programme, Mr. Thorat has understood the crucial role business linkages play in the current scenario faced by Metalman. The company's only customer, Bajaj, has gone through a process of consolidation of its supply base, which has been reduced from more than 1,000 to approximately 190 companies. Therefore, staying in business

*“In order to create business linkages with the global market,” says Mr. Thorat, “we need to compare ourselves with European and Japanese companies; we need to know what kind of goals they are setting, so we understand better what is required to compete in the global market.”*

becomes Metalman’s predominant objective. As this became more and more difficult, a continuous improvement process needed to be installed within the company to meet the constantly increased demand from the customer. The business linkages programme provides the framework and the tools and technologies and has supported Metalman in its efforts to keep up with its client’s requirements.

Metalman received the last two best supplier awards given by Bajaj, thus showing its successful achievements in creating business linkages. In addition, the participation in the programme has allowed the exposure of the management of Metalman to the practices and demands of other players in the industry, including foreign companies. Such awareness is important to increase the potential for creating further business linkages with new clients and global markets.

#### **Lessons learned and questions unanswered**

Although the programme began only in February 2003, Metalman has achieved tremendous results and significantly improved its performance. The company has participated actively in the programme and has created the type of ownership that will allow achieving a highly competitive performance.

One of the crucial lessons learned according to Mr. Thorat is the opportunity to visit other component supplier companies of the programme once a month and be able to see how they are dealing with their problems.

“We are all facing similar problems in our industry,” says Mr. Thorat, “being able to participate in the programme and understanding how other companies are managing their business allows us to position ourselves better and adopt a continuous improvement approach.”

Mr. Thorat acknowledges that the programme is giving him the necessary tools to improve quality, excel better in on-time delivery and become more cost-effective. This allows Metalman to create more competitive business linkages and to access global markets.

One of the remaining unanswered questions for Metalman is how to benchmark itself with the whole global market. The programme has allowed Metalman to benchmark with other component companies from India, but Mr. Thorat feels there is a lack of understanding on how other companies are globally managing themselves and what kind of targets they are setting to improve performance.