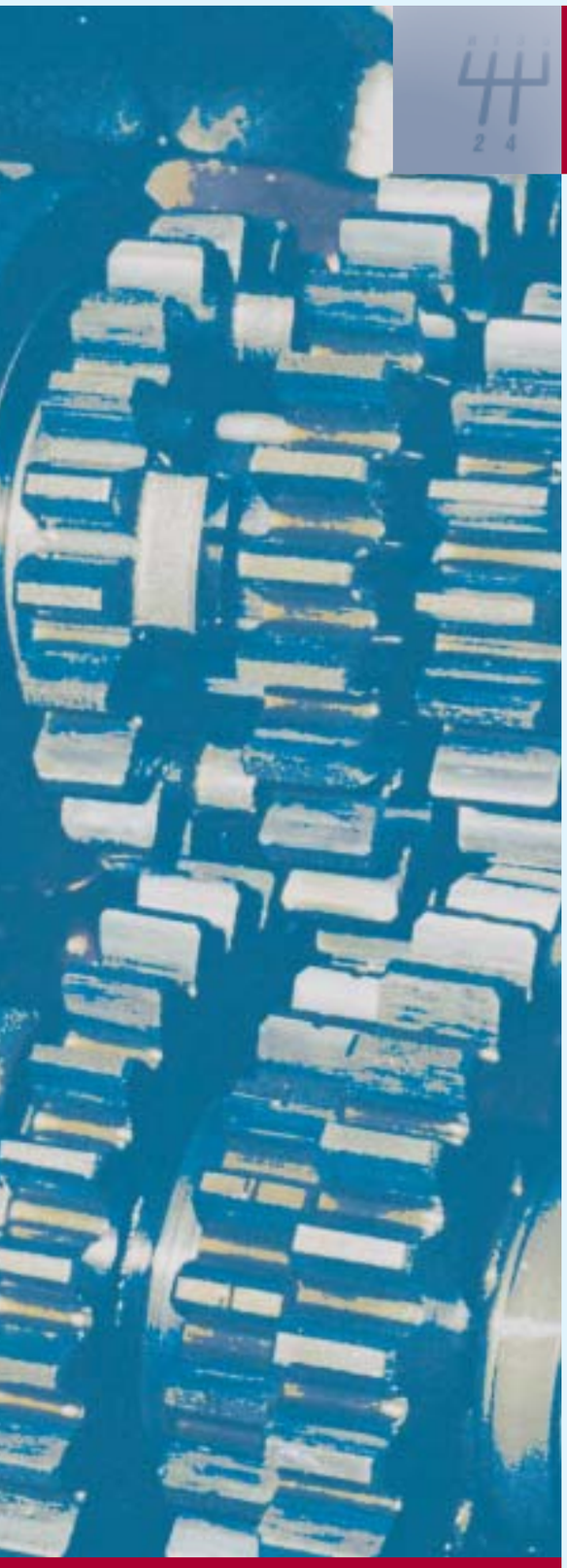
Geared up for management systems



The General Motors site in Strasbourg achieved ISO/TS 16949 certification from LRQA in March of this year. The site is also certified by LRQA for ISO 14001 and OHSAS 18001. This article explores GM Strasbourg's philosophy and approach towards these management systems.

The automotive industry is under increasing pressure to reduce emissions and design engines that consume less petrol. For the General Motors site in Strasbourg, this translates into producing automatic transmissions that consume less energy. The site's President, Marc Schiff, is meeting the challenge with enthusiasm and is committed to the implementation of certified management systems to help achieve it. He observes:

"For GM in Strasbourg, our driving vision for the future is quality and this has always been a vital part of our business plan. We started with ISO 9000 certification in the 1990s, then we achieved QS-9000 certification and we have recently achieved certification to ISO/TS 16949, the automotive standard. Achieving such standards ensures we have systems in place which help ensure people do things correctly. These standards have provided us with a structured approach and this is very powerful as it forces people to do the right thing every time.

"In 1998, when we started production of the five speed automatic transmissions, we really appreciated the benefits of the system. The quality of the product was far higher than the usual start up quality. So, as a management team we want to communicate to our staff that using standards will help us to improve our product and our business."

The General Motors site at Strasbourg also has an environmental management system certified to ISO 14001 and has recently achieved certification to OHSAS 18001, the health and safety management system standard. Marc is equally committed to both of these standards. He recalls: "We implemented ISO 14001 in 1998 before it became the policy for all GM sites to have this standard. A company such as General Motors needs to be seen as environmentally friendly and at this site we believe we should be a good corporate citizen."

The main environmental impacts at the Strasbourg site relate to waste management, water pollution and propane gas used for heat treatment. When implementing and developing the environmental management system, the management team found that it helped to produce improvements inside the company such as a cleaner working environment, improved waste management and the achievement of an overall commitment to continual improvement.

In relation to implementing a health and safety management system, Marc comments:

"As a company we are very committed to moving forward and we saw the OHSAS certification as another way of motivating our workers and improving our business. With the environmental and the health and safety approvals we feel that we have given something to the workers. The environment in which they work is more pleasant now and with OHSAS we are showing them that we care for them as workers and I believe these are very powerful messages to our employees.

"With ISO/TS 16949 there is currently no obligation for us to implement this standard and OSHAS is not yet a recognised standard. However, there is no reason for us to wait; we want to implement systems that will help us become more effective as a business. I believe this pro-active approach is motivating for our staff. "

Automotive quality

The GM site in Strasbourg first introduced a quality management system certified to ISO 9001 in 1994. In 1996 the site achieved certification to QS-9000, a specific standard for the automotive industry developed by the 'Big Three' Ford, General Motors and DaimlerChrysler. Earlier this year, the site was recommended for approval to ISO/TS 16949. This standard aims to achieve standardisation in the automotive industry and a reduction in multiple assessments. The site in Strasbourg is the first in the GM Group to achieve this. Dominique Veith, Quality Manager for the Strasbourg site, reinforces Marc's views about quality, he comments:

"We have been using quality management systems for around ten years and we are committed to working with them to ensure we get business benefits. We want to provide good products to ensure we satisfy our customers."

ISO/TS 16949 introduces more demanding requirements for a company to achieve. Dominique expands:

"With ISO/TS 16949 there were three major challenges for our quality management system. We needed to define our processes, show continual improvement in each area and measure customer satisfaction. Adopting a process approach meant a considerable change for the site and we achieved this by mapping the activities, at first at an operational level and then in the other services.

Commitment to continual improvement

To ensure that continual improvement is carried out, each business unit or service is required to collate and monitor information. Twice a year the business unit team leader presents the findings to demonstrate that the unit is achieving continual improvement. A number of these presentations were carried during the LRQA assessment. Dominique recalls:

"The agenda for the presentation is common to all business units and is based on the five key areas of safety, quality, responsiveness, cost and people. We monitor the information and have a record of the previous presentations; progress in relation to these measures can therefore be clearly demonstrated. The LRQA assessors were pleased to see such an approach; they could see it was systematic and standardised."

Customer satisfaction

The Strasbourg site provides automatic transmissions to a number of high level external customers, such as BMW, Land Rover, Opel and Cadillac, as well as supplying converters to internal customers in the GM Group. ISO/TS 16949 requires a company to monitor customer satisfaction and the GM site has embraced this requirement. Some customers evaluate GM on a yearly basis using a rating system which reviews such aspects as logistics, quality and engineering. For the other

customers, GM uses specifically devised questions. With so few customers, close relationships are developed and the way information is gathered for each customer is tailored to their requirements.

Dominique explains the approach to internal customer satisfaction:

"We have two ways of carrying this out. The first method is by a questionnaire which is prepared by the team leader of a business unit. This is then distributed to the relevant customers of that unit. Feedback is monitored on an ongoing basis. The other way is to have a formal discussion and evaluation of the service that the business unit has been providing. This assumes that the service provided to the customer has been satisfactory during the year. This evaluation must be conducted on an annual basis and a record of it must be kept."

Dominique concludes: "As an organisation we are committed to producing a quality product and ensuring customer satisfaction. ISO/TS 16949 has helped us to refine and improve our system of evaluation."

Environmental system

The GM site in Strasbourg achieved certification to ISO 14001 in 1998. The purpose of introducing the environmental management system was to minimise the impact of the plant on the environment, to implement the best technologies to help produce less waste and to be as clean as possible in relation to all aspects of the environment, both internally and externally.

The system enabled the site to look at how it dealt with dangerous products such as chemicals and gases, the recycling of materials and the reduction of risks. Didier Driant, Environmental Engineer, comments: "We were already dealing with all of these issues but implementing a certified system put a structure in place and gave us a better view of what was going on and what progress we needed to make. It also showed us where we needed to put additional resources."

Having an environmental management system in place can deliver a number of benefits to an organisation. Didier explains some of these:

"The system has helped us achieve a number of benefits to the site internally. The site now is cleaner and better adapted to our employees. We try to involve all staff in the implementation of a number of our environmental aspects, such as the recycling of materials and ensuring that they understand the correct containers to use for different materials. From an external point of view, I also think the image of the plant

Fact box

General Motors facts & figures

- The General Motors site at Strasbourg is part of the General Motors Corp.
- GM is the world's largest vehicle manufacturer, employing 349,000 people globally in its core automotive business and subsidiaries.
- GM was founded in 1908 and today has manufacturing operations in 32 countries and its vehicles are sold in more than 190 countries.
- GM's global headquarters is at GM Renaissance Centre in Detroit, USA.
- In 2002, GM sold more than 8.5 million cars and trucks, nearly 15 per cent of the global vehicle market.

GM Strasbourg's products and their customers:

- **5-speed automatic transmission** – 1,550 produced per day
- **Customers**: BMW, Cadillac, Opel and Land Rover
- **6-speed automatic transmission** – currently being developed
- **Hydrodynamic torque converters**
- **Customers**: GM Toledo, USA and GM Strasbourg

Location:

- Eastern France – 500km east of Paris
- 6 km south of the city of Strasbourg
- 1,500 metres to the west of the river Rhine

Size of the site and number of employees:

- 75,657 sq m
- 1,796 employees

has improved and customers have a better perception of the site."

Though the site does not produce a large amount of dangerous materials, there is still a major risk in relation to the use of propane gas in heat treatment of metal parts. This process, using the same technology, has been in place since the site was established in 1968. However, at the end of this year a new process will be implemented and this will reduce the risk for the plant and the workers. Didier comments: "The ISO 14001 system helped us to become more aware of the potential problem. A change in the law in 2000 raised the awareness internally about the potential risk in relation to propane and we felt that this had a negative image for us as a company. So, we decided to identify action to remove the risk from the plant."

Health and safety certification

Cyril Rauscher, Human Resources Manager for the GM site, reflects the President's commitment to the health and safety management system. He comments:

"In this organisation our key priorities relate to quality, productivity and costs. The well-being of our staff is equally important. So, we undertook the implementation of a health and safety system certified to OHSAS 18001 with a strong commitment. It provided us with the opportunity to have a rigorous system and consistent approach in the same way that we do for quality and the environment."

A consolidated approach

Prior to implementing the OHSAS system, the GM site was already operating a range health and safety activities. Implementing the system provided the site with the opportunity to have a more structured approach to its health and safety aspects and this produced a more consistent approach throughout the site. However, this was only possible with the total commitment of the organisation and with the support of the management.
As the human resources manager, Cyril is responsible for the safety management system and all employees on the site are affected by it. He explains how the system works:

"A safety council which consists of staff members meets every two months and they have the capability to make decisions on aspects relating to safety and the management system. The company is organised into business units and this helps ensure the management is aware of what is happening on the shop floor. The leader of each business unit is responsible for implementing, tracking and monitoring the unit's safety aspects. "

To ensure that the system remains robust, auditing is carried out on a regular basis. Pascal Christmann, Safety Engineer, observes:

"The business unit leader or assistant leader is required to carry out a safety audit of the work station every two months. This helps to ensure that the work area continues to be a safe area for people to work in. Staff members are also responsible for carrying out audits. For example, I audit environmental and safety aspects throughout the site in conjunction with the environmental engineer to ensure that the consistency of the approach is maintained.

"We also operate a system whereby any employee can raise a safety concern. I receive these enquiries and investigate the situation as soon as I am aware of the concern."

One of the main benefits that the system brings is the company's commitment to continual improvement. Cyril explains:

"Our system requires each business unit to have action plans to ensure continual improvement in relation to health and safety. This communicates to our employees that health and safety is an ongoing commitment for the company and that we are committed to their health and safety."

The structured approach that is required by the three standards has helped the Strasbourg site to identify different approaches to managing quality, health and safety and environmental issues throughout the site. The way in which GM develops and uses the management systems shows their commitment and belief in the benefits of these systems in relation to products and organisation.