Report on Road Transport Best Industry Practices











Metzger Spedition GmbH

Driver Training for Improved Safety and Fuel Efficiency



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Founded in 1946 by Hans Metzger Sr, Metzger Spedition is a national road transport operator located in Neu-Kupfer, Germany. Since 1994, the company has been under the leadership of Hans and Isolde Metzger, members of the younger generation. Today, business operations involve transport throughout Germany, with the main focus on source-destination links between Hamburg and western Germany.

A workforce of 70 people, including 50 drivers, ensures smooth operations with full and part loads. Every day, Metzger Spedition GmbH transports approximately 200 domestic part loads on a 24/48-hour delivery schedule.

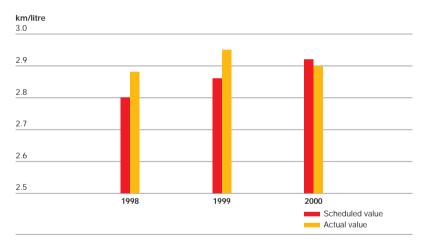
Since establishing a quality management system in 1996, Metzger has also been active in environmental issues and in 1999 implemented an environmental management system certified to ISO 14001. Among the various environmental activities are two particularly successful best industry practices: "Driver Training for Improved Safety and Fuel Efficiency" and "Water-saving Equipment and Use of Rainwater for Vehicle Cleaning" A driver training programme was initiated in 1997. All drivers took part in "economy" and "safe driving" classes. The training focuses on teaching drivers, even the most experienced, moderate driving methods and correct gearbox handling. The first classes were offered over two weekends in the summer of 1997, when new drivers underwent individual training. In 1998, one of Metzger's experienced drivers was qualified to train others. At the same time, driver assessment began. Existing figures for fuel efficiency (before and after training) and accident records enable Metzger to chart and compare improvements. In this way, every driver can see how economically he has driven. Appropriate incentives were introduced to encourage and reward above-average economical and, thus, ecological driving behaviour. The causes of abnormally high fuel consumption were analysed in teams to find solutions.







Average fuel efficiency per year





COSTS

The training costs in 1997 amounted to EUR 6'100, which is equivalent to EUR 120 per year for each of the 50 drivers who had to be trained.

BENEFITS FOR THE ENVIRONMENT

Fuel efficiency has increased by 12% (see Figure "Average fuel efficiency per year"). The company has saved a total of 30'000 litres in fuel. At the same time, CO_2 emissions have been reduced by a total of 81'000 kg.

The number of accidents has decreased by more than 8%.

BENEFITS FOR THE COMPANY

Fuel costs have decreased along with the savings in fuel consumption. A comparison with training costs led to a cost-benefit ratio of 2.5 in 1998.

Based on accident statistics, vehicle insurance premiums have been reduced by 5%.

OUTLOOK

Fuel efficiency figures for the year 2000 and the current trend of increasing accident costs have led to Metzger's decision to repeat driver training on a regular basis. In particular, new drivers will be trained in individual classes to achieve optimum performance.



Water-saving Equipment and Use of Rainwater for Vehicle Cleaning

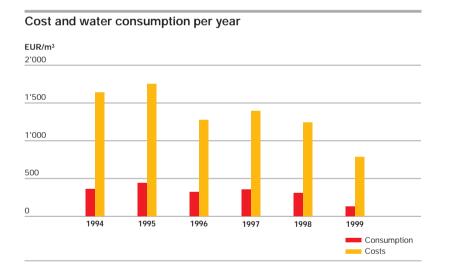
High-pressure cleaners produce large volumes of wastewater. A new water-saving high-pressure cleaner was put into operation in 1996. It has led to a significant reduction in water consumption and the associated costs. The installation of water cisterns enables high-priced drinking water to be substituted by rainwater (which is free of charge). A useful bonus is the absence of minerals in rainwater, which leads to better results when cleaning vehicles. In 1998, subterranean water cisterns were built when the new warehouses were erected, thus minimizing construction costs.

BENEFITS FOR THE COMPANY

The costs of drinking water and sewage disposal were reduced by more than 50% for 1999 compared with 1995.

OUTLOOK

The company plans to install a wash-water recycling system within the next three years in order to minimize waste. This decision will be based on a cost-benefit analysis. The use of rainwater will also be extended to other applications to minimize the consumption of drinking water.





COSTS

The price of the high-pressure cleaner unit was EUR 2'820.

BENEFITS FOR THE ENVIRONMENT

The consumption of drinking water was reduced by 70% for 1999 compared with 1995 (see Figure "Cost and water consumption per year").

The total volume of sewage was reduced.



