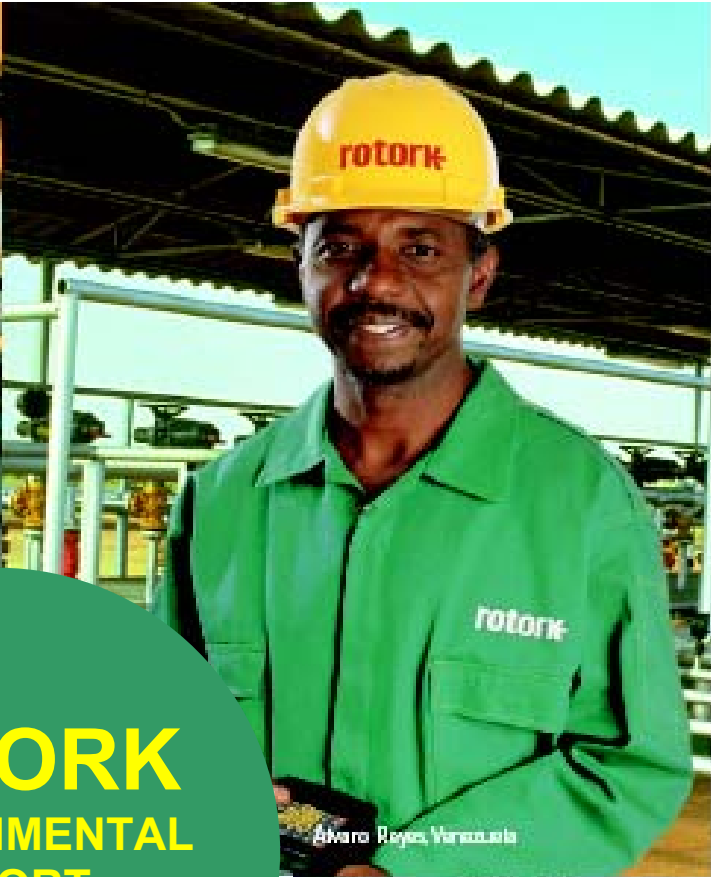


Chandra Goh, Singapore

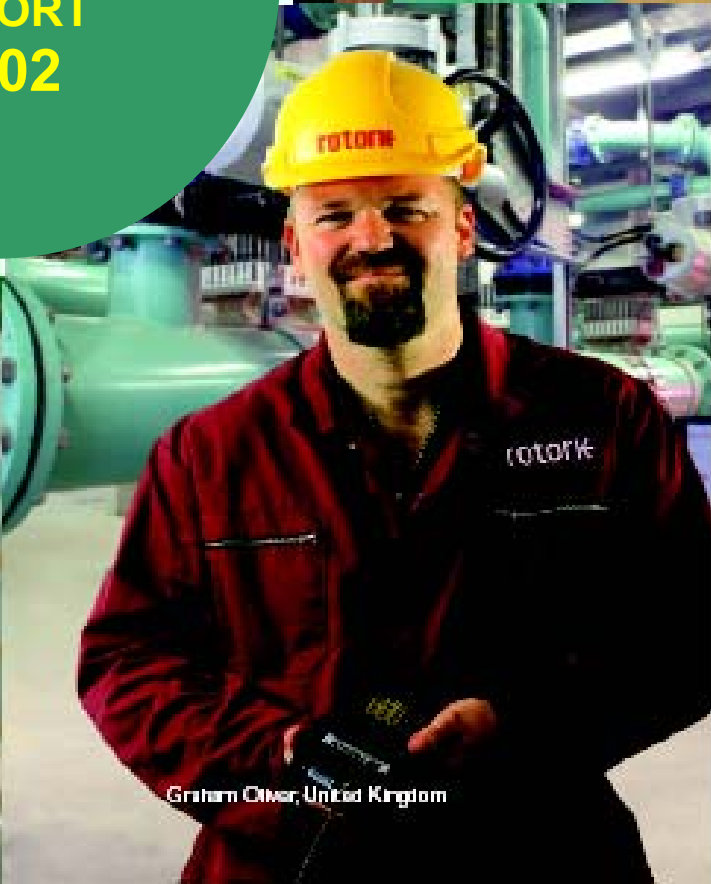


Alvaro Rojas, Venezuela

**ROTORK
ENVIRONMENTAL
REPORT
2002**



Yolanda Elsoquez, Spain

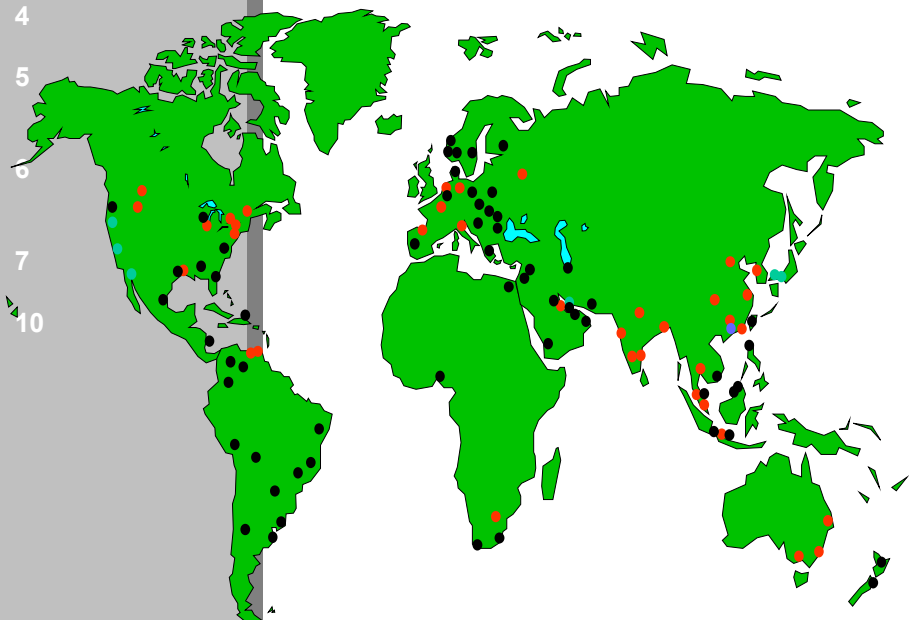


Graham Oliver, United Kingdom

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ROTORK PLC



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Compiled by: Jeff Harris
Environmental Co-ordinator
January 2003

9 Assembly / Manufacturing Sites

31 Subsidiary Offices

59 Agents

ROTORK CONTROLS LIMITED



The Rotork Controls Limited site at Bath overlooking the River Avon

The principal activities of **Rotork PLC** are the design, manufacture and support of valve actuators, systems and related product and services worldwide.

The company's main competencies include design and development, technical support, maintenance, site services and training.

As the main activity at the Bath plant is assembly work, the direct pollution risk is very small.

The manufacture of components and electronic assemblies is subcontracted to experts in their respective fields.

With the exception of 'A' Range and larger IQ units, enclosure castings are powder-coated by suppliers prior to delivery.

Specialist finishing processes on complete actuators are also subcontracted.

The only activities that require significant amounts of energy are the assembly of electric motors and test rigs.

The company has some 270 employees at the Bath plant; the activities include UK and international sales networks, service and site services, customer product training and built to order actuators for worldwide distribution.

ABOUT THIS REPORT

This report covers the activities associated with Rotork's assembly plant in Bath, England. The reporting period for the performance data is January to December 2002 and includes data from prior years.

The scope of this report focuses on the site's environmental performance data and increases the coverage of our environmental parameters against previous reports. For the first time information on carbon dioxide emissions and the use of ozone depleting substances are included.

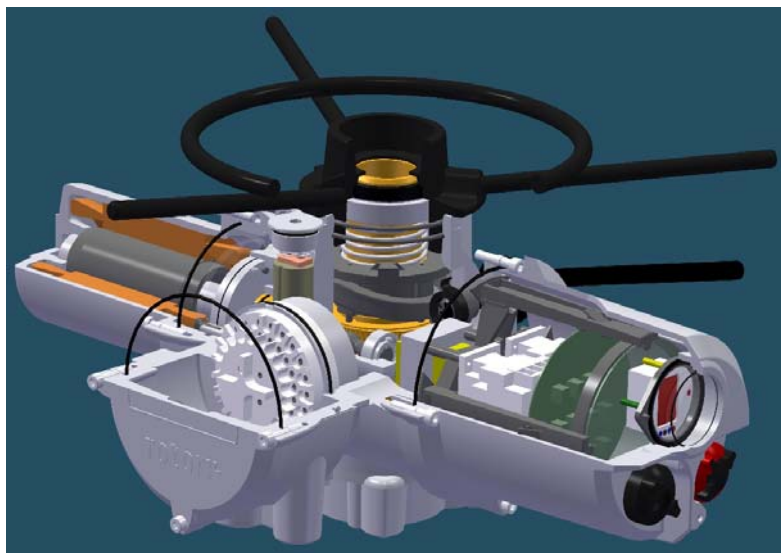
The previous Environmental Report for the plant in Bath contained performance data for 2001 and was issued in November 2002.

All previous Environmental Reports have focused on environmental issues and compliance with regulatory requirements. These reports were distributed internally. This report is the first to be published on our website. In future the Rotork Environmental Report will be published on the Rotork website each year in March.

Towards Sustainable Development

This report includes Rotork's strategy for global reporting on environmental performance and the social aspects of the Rotork operation.

Systems, procedures and reporting structures will be established throughout 2003 for global reporting of environmental data from all Rotork online assembly or manufacturing plants.



IQ Electronic Actuator – putting the customer in control. The second generation of intelligent, non-intrusive, user-friendly electric valve actuators. Setting the industry standard since 1992 further improved with 'system on a chip' technology.

- **Complete integrated motor control**
- **Simple non-intrusive infra-red set-up and adjustment**
- **Digital, analogue or bus system remote control and status reporting**
- **Comprehensive software tools for plant records and valve performance analysis**

The first global report will be available on the Rotork website by the end of March 2004.

Rotork has adopted the FTSE4Good and DEFRA guidelines for Environmental reporting. The FTSE4Good and DEFRA recommendations are intended as guidelines rather than strict rules. Rotork will where appropriate amend or delete some of the recommended indicators, to suit Rotork's activities and reporting principles.

FOREWORD

In 1945, as part of the Frenchay Product Group, Rotork was concerned with the fringe interests of valve motorisation, a sphere of engineering barely acknowledged as a separate field of great significance. However, the future growth potential for a business prepared to specialise exclusively in this branch of engineering was soon to be recognised. In 1957 Rotork Engineering, as we were then known, began trading from Widcombe Manor, the home of Jeremy Fry the company's owner. Staffed by a dozen people and supported by the goodwill of a number of subcontractors, a small number of Rotork actuator designs were built. The first actuator to bear the Rotork name, a one-horsepower (0.75 kilowatt) device weighing 170kgs, was built in 1952. By 1957 the first recognisable features of a modern, modular actuator design were already in evidence with the 'thrust taking' arrangement in 1953 and the actuator output measured by 'axial displacement' of the worm shaft in 1956. Significant progress was soon being made as a result of the expansion of the oil industry in Europe, when Rotork redesigned the actuator to obtain flameproof certification. This development enabled Rotork to introduce stator/rotor assembly motors with the associated benefit of reduced rotor kinetic energy, resulting in less overrun and less risk of damage to valves requiring torque seating – another design benchmark. By the end of 1958, annual production of Rotork actuators had risen to 600 units and most valve makers were referring their motorisation to Rotork, safe in the knowledge that the expertise available was not only reliable, but also independent of competing valve makers.

It was common practice on flameproof equipment at the time to allow the internal parts to breathe to account for temperature fluctuations. Breathers and drains were incorporated to let out condensation.

Heaters were installed to preserve internal electrics and in 1960 'O' ring sealing, which dispensed with breathers and drains was introduced. This was a fundamental breakthrough in environmental sealing and enabled the actuator to develop into an increasingly self-contained and sophisticated device.

The importance of export business had also been recognised with the appointment of Rotork's first overseas agent in Australia. The 1960's saw dramatic growth in Rotork's commercial and organisational development with the deliberate expansion of sales activities in Europe. It was not long before the production of actuators reached 1000 per year. Rotork USA was soon established and agencies in Canada and South Africa followed. Before long Rotork had out grown the site in which it was situated and in April 1962 Rotork moved to a purpose designed production plant in Bath, England, where output soon rose to 6000 units per year. This site is today the International Headquarters of Rotork PLC. A landmark was reached in 1968 when Rotork was introduced to the London Stock Exchange, at the same time the company name changed to Rotork Controls Ltd to reflect its activities more accurately. By 1970 the manufacturing facilities at Bath had more than doubled and in 1992 Rotork launched an important new product. The IQ actuator was designed to complement the long established 'A' range, which had been the corner stone of Rotork's success since the 1960's. The IQ broke new ground with the introduction of a system for non-intrusive commissioning and interrogation by means of a hand-held infrared setting tool, allowing actuators to be commissioned in wet or hazardous conditions. Since then the IQ has become Rotork's largest selling product as well as the world's best selling intelligent electric actuator.

SUMMARY AND KEY INDICATORS

Summary

A strategy to introduce global environmental reporting of all Rotork assembly and manufacturing plants is in place. Planned activities will be rolled out throughout 2003 with the first Rotork global environmental report being published in March 2004.

This strategy also includes plans for the implementation in 2003 of a formal environmental system compliant with ISO14001 at our plant in Bath. Thereafter, to other online Rotork manufacturing sites on a progressive basis.

To achieve these goals, Rotork has sought help and advice on environmental best practice and the development of our Environmental Management System. Through Envolve, a non-profit making organisation working with several local authorities, we have joined the Business Environment Association Bath & District. Membership provides access to a wealth of information and expertise regarding environmental legislation and ISO14001 implementation.



Raw weather at Rotork Rochester contrasts sharply with the sun in Singapore

Performance Indicators

Key indicators for measurement of environmental performance within the Bath plant are shown in Figure 1 below.

Figure 1

Key performance indicators used

Indicator	Unit	2002	2001	2000	1999	1998
Electricity consumption	Kwh	1,213,504	1,211,512	1,141,619	1,028,172	995,959
Natural gas consumption	Kwh	791,066	986,278	822,248	1,116,888	1,550,622
Water consumption	CM3	5,200	5,826	4,750	4,417	N/M
Lost day injuries	Unit	5	0	0	0	24

N/M = Not measured

POLICIES, ORGANISATION AND MANAGEMENT SYSTEMS

Policies

Rotork's first Environmental Policy was issued in 1994. The Environmental Policy is reviewed regularly and was updated in 1998, 2000, 2002 and again in February 2003.

Specific responsibilities relating to individual tasks are defined in relevant operating procedures, which are available to all personnel.

All personnel on joining the company are made aware of the Environmental Policy and any responsibilities they have in meeting it.

ROTORK PLC ENVIRONMENTAL POLICY

PL02
ISSUE 2

The principal activities of Rotork PLC are the design, manufacture and support of valve actuators, systems and related products and services worldwide. We do however recognise that in our day-to-day activities and operations we inevitably impact upon the environment by the generation of packaging waste, which is sent to landfill sites and by the consumption of energy and water.

As a FTSE company listed in the FTSE4Good Index, Rotork is committed to the principles laid down for its membership. Acknowledging this, Rotork is committed to the prevention of pollution, to compliance with all relevant legal and other regulatory requirements and to continuous improvement. Rotork's commitment to continuous improvement and good environmental practice is demonstrated by its new product designs that require less electronic parts and consume less energy. In this way we are contributing to the protection of the environment.

Accordingly, this Policy has been developed to outline Rotork's intentions and expectations during the coming year. In general terms, Rotork will:

- Meet or exceed the requirements of all relevant legislation in all areas of its operations.
- By the end of 2003 develop a verified Environmental Management System at its assembly plant in Bath based on ISO 14001. Thereafter develop plans to rollout the EMS to its other manufacturing sites on a progressive basis.
- Seek to reduce consumption of materials in all operations and reduce the amount of waste sent to landfill through avoiding waste at source, and by re-using and recycling materials.
- Consider the environment by designing energy efficiency into new products that make efficient use of resources, which can be re-used, recycled or disposed of safely.
- Continually review our premises to minimise the visual appearance, operational noise output and other impacts on the local environment, manage energy wisely in all operations and minimise our consumption of water.
- Work with our suppliers to encourage them to improve their own environmental performance
- Improve the environmental awareness of employees by including environmental information in training and discussions with staff.
- Publish environmental performance data regarding our global operations on the Rotork website in March 2004.

This policy has been reviewed and endorsed by the board of Directors who take responsibility for its execution and require that it is communicated to all employees. Copies of this policy statement are freely available to the general public, regulatory authorities, customers, stakeholders and other interested parties.

POLICIES, ORGANISATION AND MANAGEMENT SYSTEMS

Organisation

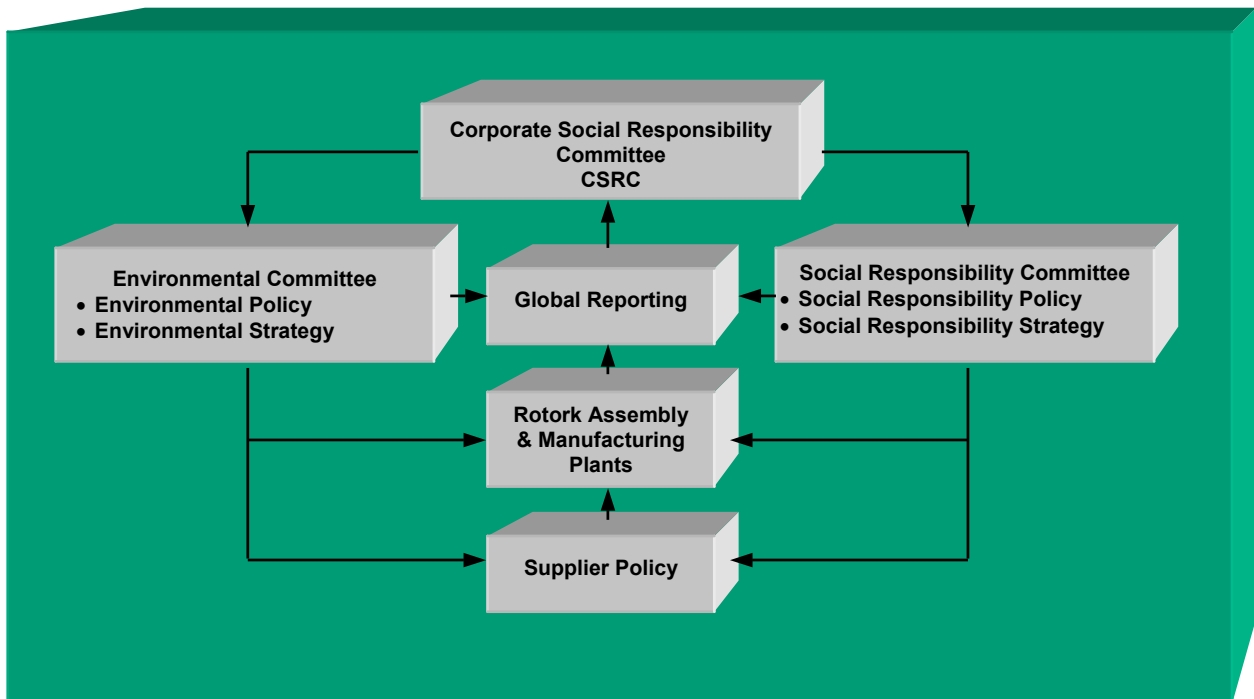
The Rotork Corporate and Social Responsibility infrastructure (See Figure 2) consists of a Board level CSR Committee chaired by the Chief Executive for review, policy and top-level objectives. Two further committees, one for environment management issues relating to plant activities and one for social issues, oversee issues relating to environmental care and sustainable development. Both committees have an input to the production of this and future Environmental Reports.

The Rotork approach to Quality is focused on its employees with an emphasis on doing things right first time in all areas of our activity.

Employees are encouraged to aim for the highest standards in the activities they perform. This commitment is essential in the pursuit of business excellence and to ensure customer satisfaction and to achieve long-term objectives for sustainable growth.

Rotork will involve its employees in the development of standards and the setting of targets for sustainable development. Implementation of these standards can only be satisfactorily undertaken by delegation of responsibility for environmental activities to all levels of the Company and by appropriate training to support these increased responsibilities.

Figure 2
Rotork Corporate & Social Responsibility Infrastructure



POLICIES, ORGANISATION AND MANAGEMENT SYSTEMS

Training

Training in environmental awareness is a requirement for all employees working for Rotork.

For functions that require more specialised instruction such as waste management or handling of oils, paints and cleaners, this training will be undertaken by specialists. In addition, trained auditors will ensure the environmental system is operating effectively. Product training by specialist trainers for both employees and customers is undertaken at the Rotork training centre in Bath.



Management Systems

Rotork exploits technologies that are beneficial to the environment. The products we place on the market are extensively used around the world in projects that greatly enhance or protect the environment. However we also recognise our responsibility to minimise our impact on the environment in our day-to-day activities and operations.

As part of our continuing drive for quality in all the things Rotork do we have developed a strategy for 2003 that will concentrate our efforts towards sustainable environmental improvement that can be monitored and measured on a regular basis.

A part of this strategy is the development of a verified Environmental Management System, based on ISO 14001, at Rotork's assembly plant in Bath by the end of 2003. Thereafter develop plans to rollout the EMS to its other manufacturing sites on a progressive basis.



The Rotork Controls Ltd training centre at Bath

Involving Suppliers

In order to evaluate the numerous suppliers in the most efficient manner, the Purchasing Department in Bath have identified some 100 'major suppliers'. These provide the bulk of the requirements for materials and services. During the period 2003 – 2004 supplier audits will be expanded to include an assessment of environmental factors.

ENVIRONMENTAL PERFORMANCE



Products and Services

Rotork Actuators help the Environment

Rotork actuators and associated products are used extensively around the world to open and close valves both large and small in varying types of environment and in many types of industries, such as water purification, sewage, food processing, marine, irrigation, power generation, oil and gas as well as heating and ventilation.

Since 1992 Rotork's IQ actuators have had a beneficial effect on the environment due in the main to the advanced electronic designs that have vastly reduced the energy consumption of each unit. Saving energy leads to less depletion of fossil fuels, lower emission of greenhouse gases such as carbon dioxide and a cleaner environment.

Rotork is continuing to develop and produce actuators with less material content and more energy efficiency and with improved performance.

Benefits to the Environment

Whether used in unmanned sites, in unpleasant, dangerous and hazardous environments, in restricted spaces or inaccessible areas, Rotork actuators provide the control and power. From a small steam pipe from a boiler to a large water pipe supplying a city; from an emergency shut down valve on a off shore platform, to a metering valve in a refinery, Rotork actuators safely help to reduce human error and thus potential environmental disasters, whilst saving energy and resources.

ENVIRONMENTAL PERFORMANCE

Energy

Electricity Consumption

Electricity consumption at the Rotork assembly plant in Bath, where lighting, air conditioning, IT (office and support equipment), motor assembly and test rigs are the main areas of usage, increased by 0.2% for the year 2002. Consumption in previous years saw substantial increases, 10% in 2000 and a further 6% in 2001. Although showing an increase, we see the figure for 2002 as encouraging. Electricity consumption at the Rotork assembly plant in Bath is shown in Figure 3.

Gas Consumption

Gas consumption at the assembly plant in Bath, where heating, motor build and cooking are the main areas of usage, saw a 20% reduction on 2001 figures. With the exception of 2001, a steady reduction in the use of natural gas has been seen over the past four years. Gas consumption at the Rotork assembly plant in Bath is shown in Figure 3.

Saving Energy and Costs

Since an energy monitoring system was installed at the Bath plant early in 1999 a substantial reduction in gas consumption has been realised – equivalent to a 41% reduction since 1998.

During 2003 Rotork will continue to set targets for energy saving with specific targets for the reduction of carbon dioxide emissions. Carbon dioxide emissions associated with energy consumption at the Rotork assembly plant in Bath are shown in Figure 4.

The environmental impacts of energy consumed by Rotork include the use of fossil fuels and generation of carbon dioxide emissions by the power supplier.

Figure 3

Total energy consumption

	Unit	2002	2001	2000	1999	1998
Electrical energy	Kwh	1,213,504	1,211,512	1,141,619	1,028,172	995,959
Natural gas	Kwh	791,066	986,278	822,248	1,116,888	1,550,622
Totals	Kwh	2,004,570	2,197,790	1,963,867	2,145,060	2,546,581

Figure 4

Carbon dioxides emissions (CO2) associated with energy consumption

Energy source	Units	2002	2001	2000	1999	1998
Electricity	Tonnes	522	521	491	442	428
Natural gas	Tonnes	150	187	156	212	295
Total	Tonnes	672	709	648	655	723

ENVIRONMENTAL PERFORMANCE

Water

Water consumption at the Rotork assembly plant in Bath during 2002 was 5200 cubic metres, a reduction of 11% compared with 2001. The main areas of water usage are hygiene, staff canteen and pressure testing of electrical covers to comply with product certification. Water usage for the plant in Bath is shown in Figure 1 page 6. During 2003 targets for water saving will be introduced with specific targets for the reduction of water consumed in the testing process.

Effluents

Water emissions are controlled by strict legislation. A process at the Rotork plant in Bath that results in discharges to storm drains or sewers is the pressure testing of electrical covers to comply with product certification. After testing, the water is discharged to storm drains. This process adds no contaminant. It is estimated that approximately 100 to 110 cubic metres are discharged from this process each year, which represents less than 2% of total water consumption.

The cleaning of substrate prior to painting is undertaken using water-based solution with 2% of volume being a detergent. Before discharge the oil is skimmed from the solution and reused in other processes. A maximum of 5 cubic metres per annum of cleaning solution from this process is discharged.

Emissions

Air emissions are controlled by strict legislation. However compliance with regulations is a minimum requirement for Rotork and there are advantages to the environment and the company if performance is improved beyond that required by law. In 1992 all cleaning processes at the assembly plant in Bath that used ozone-depleting chemicals were replaced.

Materials

The main raw materials used for actuators are steel and aluminium. Material used at the plant in Bath in the product and its protection during transit to our customers is shown in Figure 5.

Figure 5
Significant material usage in the product or protecting the product during transit to customer

Material	Unit	2002	2001	2000	1999	1998
Oil	Tonnes	27	29	22	24	22
Kerosene	Tonnes	1.4	0.69	0.62	0.74	0.8
Grease	Tonnes	0.91	0.98	0.97	1.11	1.14
Solvent consumption	Tonnes	0.024	0.007	N/M	N/M	N/M
Batteries (1)	Units	23,000	22,483	18,750	21,424	23,614
Card (2)	Tonnes	124	112	120	N/M	N/M
Steel (2)	Tonnes	1	9	10	N/M	N/M
Plastic (2)	Tonnes	14	10	11	N/M	N/M
Wood (2)	Tonnes	338	293	293	N/M	N/M
Paper (3)	Tonnes	6.33	N/M	N/M	N/M	N/M
Ferrous (4)	%	53.9	53.9	N/M	N/M	N/M
Non-Ferrous (4)	%	44.6	44.6	N/M	N/M	N/M
Plastic used in product (4)	%	1.5	1.5	N/M	N/M	N/M

1) Used for electronics sleep circuit - prevention of memory loss

2) Virgin materials used in packaging

3) Office paper purchases

4) Percentage of usage on a typical product

N/M = not measured

ENVIRONMENTAL PERFORMANCE

Waste Management

Commercial waste generated in 2002 by the plant in Bath increased for the second year, up 28% on 2001. Commercial waste figures for the Rotork assembly plant in Bath are shown in Figure 6.

Since 2000, increased imported components from overseas sources have accounted for the increase in commercial waste.

During 2003 projects for recycling cardboard, wood and plastic will be introduced with specific targets for the reduction of general waste generated by the plant.

The metal recycled from Rotork assembly plant in Bath totalled 16.9 tonnes in 2002. This was an increase of 21% on 2001 figures and 34% on 2000 figures.

The amount of Hazardous Waste, a by-product from our painting process generated at our Bath plant, increased in 2002 by 59%. The increase was due to customer requirements for non-standard paint finish. All waste classified as Hazardous Waste is recycled and reprocessed into incinerator fuel.

The recycling of other materials is shown in Figure 7.

Figure 6

Other waste streams

	Unit	2002	2001	2000	1999	1998
Commercial	Tonnes	148	107	87	95	247

Figure 7

Recycling

Material	Unit	2002	2001	2000	1999	1998
Ferrous	Tonnes	6.8	5.5	4.4	N/M	N/M
Non-Ferrous	Tonnes	9.1	6.8	5.5	N/M	N/M
Steel Turnings	Tonnes	1	1	1.2	N/M	N/M
Wood	Tonnes	1	29	N/M	N/M	N/M
Cardboard (2)	Tonnes	1	4	N/M	N/M	N/M
Paper	Tonnes	7	5.3	6.4	4.6	5
Plastic	Tonnes	0.5	N/M	N/M	N/M	N/M
Special Waste (3)	Tonnes	3.9	2.3	2.2	1.7	N/M (1)
Oil (4)	Tonnes	1.1	1.4	1.8	0.2	N/M (1)

1) N/M = not measured

2) The quantity is probably somewhat underestimated, because some paper is discarded with commercial waste

3) Converted into incinerator fuel

4) Removed from product repaired or serviced

This concludes the report for 2002. The date for the next Environmental Report covering data for 2003 is March 2004.