# ROTORK ENVIRONMENTAL REPORT 2004

## **Rotork PLC**

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## Rotork Environmental Report 2004

## Introduction

Welcome to the second annual Rotork Environmental Report.

We have maintained our commitment to managing and improving our environmental performance and to communicating this performance to our stakeholders through the publication of this annual report.

This year's report details activities and performance during the 2003 financial year ending 31<sup>st</sup> December 2003 for Rotork plc. It presents quantitative data from the measurement of our environmental impacts. It also presents qualitative information about the environmental improvement programmes and initiatives undertaken during the past year. We have included some historical data from previous years, where available.

Our key environmental impacts include the use of energy and water, disposal of waste and the procurement of goods and services. We are continually developing policies and procedures on these issues to minimise our impact on the environment.

As for our positive impacts, we believe that we contribute to sustainable development and environmental improvement through the products and services we sell. Used around the world in all environments, including hazardous environments and in many types of industries, our products help reduce human error and thus potential environmental disasters, whilst saving energy and resource.

With the launch in late 2003 of our new Intelligent Quarter Turn (IQT) range of actuators, which consume a tenth of the energy of their predecessors, Rotork is continuing to develop and produce energy efficient products with improved performance.

In November 2003, following the City of Bath initiative, Rotork signed up to the UN's Global Compact and its ten principles. Rotork's commitment to these principles is fully supported by the Board of Rotork plc and Rotork is a keen advocate of the Compact and its objectives. This forms part of the wider Corporate Social Responsibility programme within the Rotork Group.

Looking forward, we will develop our approach to environmental management and reporting as we continue to implement systems to incorporate the ten principles of the Global Compact and to reduce our environmental impacts. We are confident that we will make further progress with our environmental improvement programmes and look forward to presenting next year's report in due course.

## **Company Overview**

Rotork PLC is an international business with annual revenue of £136 million in the financial year to December 2003.

With the headquarters in Bath, England, our principal operations are in the UK, USA, continental Europe, India and Malaysia.

Our principal activity is the design, manufacture and support of actuators, their control systems and related products worldwide.

## **Organisational Structure**

Our overall business is structured around four major business areas:

#### Electric -

This, the largest of Rotork's activities, supplies latest state of the art electric valve actuators for controlling the opening and closing of pipeline and other valves. Around 30% of these are supplied with digital control systems. Manufacture is based in the UK, USA, Malaysia and India.

#### Gears -

A complete source of gearboxes, adaptor kits and ancillaries for the valve industry. Production facilities are based in the UK, Holland and the USA.

#### Fluid System -

Heavy-duty pneumatic and hydraulic valve actuators for emergency shut down in safety critical and subsea applications. Manufacture is based in Italy and the USA.

#### **Process Control –**

Actuators for mainstream and specialist process control and other positioning applications are produced in our facilities in the USA and the UK.

We have a worldwide network of subsidiary offices to support the sales and servicing of the four business areas.

## Our second environmental report

This second Rotork annual environmental report covers the financial year ending 31<sup>st</sup> December 2003.

It includes for the first time information from our manufacturing sites in the USA, Holland, Italy and India in addition to UK.

# Comparison with our last report

Our policy is to maintain a consistent reporting style and format. To aid comparisons in future reports we have limited our performance data to:

> Energy Water Waste Hydrocarbons Volatile Organic Compounds Ozone Depletion Landscape & Biodiversity

## **Reporting process**

The information for this report has been collected via an electronic questionnaire completed by an assigned environmental representative at each manufacturing site.

We have taken into account the sustainability reporting guidelines of the Global Reporting Initiative (GRI) in preparing this report. However, at present, many of the indicators are not relevant to our business.

## **Environmental impacts**

A detailed aspect and impact assessment was completed at the Bath site in June 2003. The significant impacts were highlighted for specific attention in the management programme. The significant impacts will be reviewed in July 2004.

Impacts, which were associated with legislation, were given high severity ratings. This was regardless of any operational controls in place at the time of the assessment or to be written in the future.

#### Environmental impacts Continued

Other impacts, such as energy and waste, were also given a High Severity rating; including any impact associated with serious environmental issues such as global warming or ozone depletion.

The process of identifying our significant impacts will not only help us to prioritise our most pressing environmental issues, but will also set targets to eliminate, reduce or minimise those impacts.

Environmental issues are also incorporated in the due diligence process for acquisitions.

## **Negative Impacts**

Having identified our negative environmental impacts through an extensive impact assessment, work has started to reduce these.

#### Energy

Energy used to heat, cool and light buildings is mainly generated by burning gas and fossil fuels. This produces carbon dioxide, the main contributor to climate change. Energy is closely monitored, however, usage is dependent on customer orders and varies accordingly.

#### Water

Our business uses water mainly for sanitation and refreshment. Less than 2% of our water intake is used in testing and cleaning processes

#### Waste

Disposal of waste to landfill and incineration has a range of environmental impacts. Plans to improve and increase our facilities on the Bath site to accommodate recycling of card, wood and plastic have been drawn up and discussions are ongoing with a number of waste management organisations to manage our recycling activities.

Office waste, including paper, toner cartridges and IT equipment is being recycled.

#### Packaging

Packaging used to ship and protect components from our suppliers is considered a significant impact.

Components from all but a few UK suppliers to Rotork are included in a Kanban system. The system involves the reuse of component bins; in this system new bins are only purchased to replace damaged or lost bins.

Packaging from overseas suppliers is being monitored and measured. A planned action for the removal of foam infill, the largest waste by volume, is in progress with our suppliers.

#### Transport and Travel

Due to the nature of our business the transporting of the product to worldwide destinations is significant.

Rotork has reduced business travel through the extensive use of teleconferences and Internet services.

## **Positive impacts**

Rotork actuators and associated products are used extensively around the world to open and close valves. These are both large and small, used 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.

Our products are often used in unmanned sites, in unpleasant, dangerous and hazardous environments, in restricted spaces and inaccessible areas. From a small steam pipe in a boiler to a large water pipe supplying a city; from an emergency shut down valve on an offshore platform, to a metering valve in a refinery, Rotork actuators and associated products safely help to reduce human error and thus potential environmental disasters, whilst saving energy and resource.

Saving energy leads to less depletion of fossil fuels, lower emission of greenhouse gases such as carbon dioxide and a cleaner environment.

#### Positive impacts Continued from previous page

With the launch in late 2003 of our new Intelligent Quarter Turn (IQT) range of actuators, which uses a tenth of the energy of its predecessor, Rotork is continuing to develop and produce energy efficient products with improved performance.

#### **Environmental awareness**

Rotork is a member of Envolve, a local environmental business association based in Bath. We extensively used Envolve for providing educational resource on the environment and raising awareness of environmental issues. All Rotork employees will be given environmental awareness training.

#### Paper saving

Rotork saves paper by using email and the Internet for transmitting and reading documents, brochures, newsletters and other communications. Rotork operates an electronic storage system for documents that also helps reduce the amount of paper used.

## **Dedham Lock and Mill**

The subject of the masterly John Constable oil painting has seen relatively few changes in the 180 years that have passed since the celebrated British landscape artist was inspired to capture it on canvas.

Now, the integrity of this much admired scenery is being further protected by its inclusion in an advanced river level management automation project undertaken by the UK Environment Agency in the Anglian region.

The project - initiated in the late 1990's - is improving flood protection throughout Norfolk, Suffolk and Essex by automating previously manually-operated sluice gates in rivers and bypass-channels and linking them by telemetry to centralised control rooms.

Automation involves equipping the sites with Rotork electric actuators that operate automatically in response to control signals from upstream level sensors.



#### Dedham Mill

At some of the most remote sites there is no mains electricity supply available to power the automation plant.

At these locations, the problem is overcome by the installation of Rotork actuators with DC motors, operated and controlled by innovative battery-powered packages that are kept charged by wind generators and/or solar panels.



One of a number of penstock sluice gates in rivers and bypass channels

#### Dedham Lock and Mill Continued from previous page

Situated on the River Stour between Colchester and Ipswich, the sluice gate at Dedham Mill is the latest site to be modernised, using a Rotork IQ range intelligent actuator connected to a Millronics ultrasonic level sensor and controller.



A closer view of the penstock sluice gate with a Rotork actuator attached

## **Ratcliffe Power Station**

Increasing the useful life of power stations and increasing their efficiency.

To meet the demands of the National Grid, power stations are often required to come on-and-off-load twice each day. This sequence creates large temperature fluctuations in the boiler, making the operation inefficient and causing stresses in the equipment. This, in turn, leads to greater downtime for the power station and increased maintenance costs.

This can be overcome by the installation of a pumping system that continues to circulate heated water around the boiler during the off-load periods.

The complex new plant, known as the economiser re-circulation system, needs to detect the temperature of the re-circulating water and control the flow to keep a constant temperature throughout the boiler tubes Accuracy, fast response to temperature changes, high pressures and high flow rates are all important factors to be considered by the system designers.

Rotork IQM and Skilmatic quarter-turn and linear electric actuators were incorporated into the system design due to their ability to modulate flow continuously as the temperature changes occur. In addition IQ25 and IQ12 actuators were installed on the system's isolating and bypass valves.

## Management

With our Group Environmental Policy and Strategy we intend to provide overall direction on our environmental performance.

#### **Environmental Strategy**

The key components of our Group environmental strategy are:

- Identifying and prioritising the environmental impacts of our operations including any consequent threats or opportunities.
- Setting achievable environmental standards and best practice guidelines that meet business needs and move the business forward.
- Identifying common environmental risks and opportunities and providing a framework for managing them.

We will report the progress of these strategies on an annual basis in our Environmental Report.

#### **Management Responsibilities**

The Board of Rotork plc is updated on environmental, social and ethical issues at least once annually, and more frequently when required, by the Group Chief Executive who chair's the Corporate Social Responsibility Committee. At these meetings the Group's progress on Environment Strategy is reviewed. This consists of the Health and Safety, Social Issues and Environmental Committees.

## Legal Compliance

Rotork is committed to complying with health and safety and environmental legislation wherever we operate. There were no prosecutions or notices issued against the company in the 2003 financial year.

Rotork subscribes to the Environmental Legislation Update Service supplied by Groundwork.



## The Rotork Corporate Social Responsibility Infrastructure

## **Environmental Management Systems**

At the main manufacturing site in Bath we are continuing to develop our Environmental Management System (EMS based on the international standard, ISO14001). The Environmental Coordinator, based in Bath, also works with other sites in the Group to support their EMS activities and collate data for global reporting.

#### 1. Environmental Policy

#### ROTORK PLC ENVIRONMENTAL POLICY

PLO2 Issue 3

The principal activities of Rotork PLC are the design, manufacture and support of valve actuators, systems and related products and services worldwide. Our products are used extensively in projects that greatly enhance or protect the environment. 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.

Rotork has signed up to the Global Compact Initiative and is committed to the 10 principles laid down in this voluntary initiative. These principles will be incorporated in the day-to-day operating activities.

As a FTSE company listed in the FTSE4Good Index, Rotork is committed to the principles laid down for its membership. Specifically, Rotork is committed to the prevention of pollution, to compliance with all relevant legal and other regulatory requirements and to continuous improvement. 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 in managing our environmental impacts. In general terms, Rotork will:

- Meet or exceed the requirements of all relevant legislation in all areas of its operations.
- Rollout the planned and documented Environmental Management System at the main assembly site in Bath during 2004.
- Improve facilities to enable recycling of card, wood and plastic at the Bath Site in 2004.
- Work with overseas suppliers to reduce or eliminate their use of foam packaging around components and continue to expand the use of reusable containers in the UK supply chain.
- Further develop policies, standards and guidelines to embrace the 10 principles of the Global Compact Initiative. These policies, standards and guidelines to be based on best practice and applied across the business.
- Continue to adopt good environmental practice in new product design by designing energy efficiency into new products, which can also 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.
- Continue to improve the environmental awareness of employees by including environmental information in training and discussions with staff.
- Regularly report environmental performance data regarding our global operations on the Rotork website.

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.

#### 2. Scope

The Environmental Policy applies to all manufacturing sites in the Group and is intended for the use of all employees. It will be of particular importance to Managers in understanding their responsibilities and their roles in implementing the Group's Environmental Management System.

#### 3. Implementation

Rotork will, through its Environmental Management System:

- Allocate formal environmental responsibilities to ensure compliance with legislation.
- Support a culture of consultation with employees, key stakeholders and other interested parties.
- Provide environmental information, guidance and, where necessary provide training that meets best practice.
- Monitor, measure, audit and seek continuous improvement in its environmental performance.
- Work with external agencies and bodies to ensure continued adoption of best practice solutions in environmental management.

#### 4. Communications

Rotork will:

- Communicate best practice and publish internal and external information detailing its aims and achievements.
- Foster open communication with employees, customers, suppliers and other stakeholders via both electronic publishing and face-to-face discussion.

#### 5. Responsibilities

Responsibilities for the implementation and monitoring of the Group's Environmental Policy and performance are defined in the Corporate Social Responsibility infrastructure.

## Environmental Management System Project

#### **Reporting progress**

Our project to develop and implement an Environmental Management System at our Bath site is well advanced. Most of the planned actions, as a result of the aspect and impact assessment carried out in 2003, are in their final stages of completion.

Waste to landfill has been identified as the biggest environmental site impact and challenge. To turn this impact into an environmental 'win' required the redevelopment of our site facilities to accommodate the recycling systems necessary to reduce the impact. Recycling facilities will be implemented during 2004, which will reduce waste to landfill, by two thirds by mid 2005.

#### Significant Project Milestones

The two tables on the next page identify just some of the environmental activities undertaken and the progress of the activities at the time of writing this report.



## Significant Project Milestones

Item	2003	Progress	2004
Environmental	Develop a verified	First stage third party	Complete implementation
Management	Environmental Management	audit of system	at the Bath site.
	System at the assembly plant	documentation	
	In Bath based on ISO14001.	completed.	
	Carry out Environmental	Complete.	Carry out annual review of
	Impact Assessment of the		the environmental impacts
	Path manufacturing site		and up-date impacts
	Compile a Logal Degister of	Complete	Corry out oppual raview of
	applicable environmental	complete.	our legal compliance and
	legislation		undate register as
			appropriate.
	Introduce Operational Controls	Complete.	Review and update in line
	to ensure compliance with		with legal register review.
	legal requirements.		
	Improve the environmental	All employees given	Develop Environmental
	awareness of employees.	<b>Environmental Awareness</b>	awareness training module
		training by our	for new starters.
		consultants Envolve	
		during 2003.	
	Introduce Environmental	I wo issues June and	Continue reporting EMS
	amployees of events and to	site	progress via newsietters.
	continue the environmental	SILE.	
	awareness theme		

## Significant Project Objectives

Item	2003	Progress	2004
Energy	Improve energy use efficiency.	Energy survey completed.	Review survey for
Waste	Minimise waste / reduce waste to landfill.	84 tonnes of wooden pallets, 16.6 tonnes of paper and 5 tonnes of plastic. 10.4 tonnes of metal, all obsolete IT equipment recycled.	Improvement opportunities. Introduce recycling of all wood, card, plastic cups and tin cans.
Packaging	Optimise packaging used to	Complete.	Review suitability of
	protect the product during transit.	Assessment of packaging has established that optimum packaging is already being used.	compressed recycled cardboard pallets.
Oil Storage	Improve oil storage facilities and controls on site.	Outside storage of drums upgraded to comply with	Upgrade internal bulk storage facilities.
WEEE & RoHS	Address WEEE and RoHS Directives.	Assessment completed.	Continue to review changing legislation.
Suppliers	Improve supplier Environmental performance.	Worked with key suppliers to rationalise product packaging.	Continue to review packaging, especially reusable options.

## Impact Management

The following pages give information about how we managed our key environmental impacts during the reporting year 2003.

For the first time we have included data from other Group manufacturing sites.

Bath is the largest manufacturing site in the Group. Its inclusion is intended to help comparisons with the data for the Group.

The information is organised into seven key environmental issues:

- 1 Energy
- 2 Water
- 3 Waste
- 4 Hydrocarbons
- 5 Volatile Organic Compounds
- 6 Ozone Depletion
- 7 Landscape and Biodiversity

#### 1. Energy

#### The issue

Burning fossil fuels for energy - either directly or to generate electricity - emits carbon dioxide  $(CO_2)$  into the atmosphere. Experts believe this is contributing to global warming, which may in turn be causing climate change.

Energy use also depletes limited fossil fuel reserves.

#### **Background information**

The effects of climate change include extreme weather conditions such as droughts, floods, rising sea levels and storms. This may seriously impair the ability of certain regions to support their inhabitants, leading to the mass migration of environmental refugees.

Mounting international concern for climate change led to the 1997 Kyoto Protocol, in which many developed countries have set commitments to reduce their emissions of  $CO_2$  and other greenhouse gases.

#### Rotork's Impacts

The environmental impact of energy consumed by Rotork includes the use of gas and fossil fuels and generation of  $CO_2$  emission by the power supplier.

Our calculated CO<sub>2</sub> emissions are based on the UK Government guidelines for companies reporting on greenhouse gas emissions. We have used conversion factors, which take into account the average mix of fuels used to generate electricity.

We are working to reduce our energy consumption by promoting energy efficiency initiatives within our businesses.

These may also include management systems and the consideration of installing more efficient operational equipment when replacement is necessary.

Use of non-renewable energy involves the consumption of fossil fuels, releasing CO<sub>2</sub>.

Summary of significant energy usages within the Rotork manufacturing sites:

- Lighting of offices and buildings.
- Heating and cooling of offices and buildings.
- Web-based systems of communication.
- Various test equipment and process equipment (such as compressors, paint spray booths, induction heating, product functional and life test equipment).
- CAD systems and printers.
- Vending machines.

We recognise the need to tackle our contribution to global warming.

This can be achieved by increasing energy efficiency and by purchasing energy from sources with lower CO<sub>2</sub> emissions.

#### Our performance data for Energy

#### Group

 $CO_2$  emissions generated through the use of electricity and gas, by Rotork manufacturing sites for the year 2003 amounted to 1869 tonnes. These  $CO_2$  emissions from energy are expressed below, both in terms of tonnes and the number of tonnes per £M Group turnover.



The following graph shows the spread of energy used across the Group. Europe includes manufacturing sites in Italy and the Netherlands.



#### Bath site

CO<sub>2</sub> emissions from energy use at the Bath site is expressed below, both in terms of tonnes and the number of tonnes per £M Group turnover.



An increase in sales resulted in higher  $\mbox{CO}_2$  emissions for 2003.

#### Transport

Vehicles emit CO<sub>2</sub>, which is a key contributor to global warming. Other emissions are acid gases, which can lead to acid rain, and particulates, which can cause respiratory illness. Road and air transport also cause major disturbance to communities due to noise and congestion.

#### 2. Water

#### The Issue

In 1977 a UN assessment of freshwater resources concluded that a third of the world's population live in areas of medium to high water stress.

While over-use and pollution are causing a decline in freshwater supply, rapid population growth is increasing demand, in particular, in developing countries. It is therefore paramount to conserve water, recognising it as the precious resource that it is.

The principle also applies in areas with apparently abundant water resources because the supply and cleaning process for water requires large amounts of energy, contributing to global warming.

#### **Rotork Impact**

Our manufacturing sites use water for sanitation and refreshment. Small amounts are also used for environmental testing of the product. Less than 2% of the total usage is used in the production process and test. Therefore water use is not a major issue for Rotork.

Safe storage of hydrocarbons and chemicals is also important to avoid polluting watercourses – our main potential pollutants are oil and kerosene stored in bulk storage tanks and oil drums.

Rotork recognises the importance of water conservation. Our manufacturing sites implement their own procedures and policies to keep water use to a minimum.

#### Our performance data for Water

We are working to minimise the use of water through prompt and effective maintenance and by promoting water conservation amongst employees.

#### Group

Water consumed by all manufacturing sites for the year 2003 was 11,065 cubic metres ( $m^3$ ). The water usage is expressed below, both in terms of  $m^3$  and the number of  $m^3$ per £M Group turnover.



The following graph shows the spread of water used across the group. Europe includes manufacturing sites in Italy and the Netherlands.



#### **Bath site**

Water use at the Bath site is expressed below, both in terms of  $m^3$  and the number of  $m^3$  per £M Group turnover.



#### 3. Waste

#### The Issue

Materials wasted are both a financial cost and a burden on the environment. Their production will have consumed energy and resources and their disposal - via landfill or incineration – has several associated problems.

Landfill sites produce methane, which is a greenhouse gas. Landfill can pollute soil, rivers and groundwater if not carefully contained. Landfill sites take up valuable land, in particular near urban areas, which could be put to better uses.

Incinerators contribute to global warming. In many countries their use is controversial due to concerns about emissions of heavy metals and dioxins, as well as the disposal of ash waste.

Reducing waste through minimisation, reuse and recycling is generally regarded as preferable to disposal. Electronic equipment contains plastics and metals, which do not biodegrade. The recovery of these metals can also bring financial savings.

#### **Rotork's Impact**

Our business is not waste-intensive, however we do generate a variety of wastes including:

- Commercial waste such as packaging from overseas suppliers.
- Office waste such as paper, toner cartridges, old IT equipment and furniture.
- Hazardous waste, such as electronic equipment, paint waste and used oils.

#### Our performance data for Waste

#### Recycling

Materials recycled by our manufacturing sites include paper, toner cartridges, plastic scrap metal, wooden pallets, electronic printed circuit boards and IT equipment.

#### Our performance data for Waste

#### Paper

Rotork's Information Management System (RIMS), an electronic media storage system, has been developed for the purpose of storing written media, drawings, test data, procedures and instructions, which are available to all applicable users.

#### **Commercial waste**

In the main we sell our product to valve manufacturers and end user sites such as power generation plants, water and sewage plants, oil and gas rigs and terminals and chemical plants. Many of our immediate customers reuse the original packaging supplied by Rotork to transport the product to their customer, the end user.

New legislation in Europe (known as the Waste Electrical and Electronic Equipment or WEEE Directive) will transfer the responsibility for electrical waste disposal onto the producer.

Rotork has assessed the WEEE Directive, with regard to the latest information available. We believe that it is unlikely to have a significant impact on Rotork since we sell a component that needs an end product to function.

However, we fully understand that the end user will have responsibilities under the WEEE Directive for the correct end of life disposal of our product. Rotork will supply recycling information on the product, including components within the product that may require special treatment.

#### Group

Commercial waste generated by Rotork manufacturing sites includes paper, card, wood, plastic and general office and plant waste.

The total waste to landfill or incineration by all Rotork manufacturing sites during 2003 was 594 tonnes. The waste is expressed below, both in terms of tonnes generated and the number tonnes per £M Group turnover.



The following graph shows the spread of waste generated across the Group. Europe includes manufacturing sites in Italy and the Netherlands.



#### Bath site

Commercial waste generated at the Bath site is expressed below, both in terms of tonnes and the number of tonnes per £M Group turnover.



□ Tonnes of Waste □ Tonnes per £M Turnover

#### **Hazardous Waste**

Hazardous waste generated by Rotork is minimal. It includes paint waste and used oils. All hazardous waste is disposed of via waste carriers licensed to transport the waste to authorised disposal plants.

#### Group

Hazardous waste generated during 2003 was 10.31 tonnes. The waste is expressed below, both in terms of tonnes generated and the number tonnes per £M Group turnover.



The following graph shows the spread of waste generated across the Group. Europe includes manufacturing sites in Italy and the Netherlands.



#### **Bath site**

Hazardous waste generated at the Bath site is expressed below, both in terms of tonnes generated and the number of tonnes per £M Group turnover.



□ Tonnes Hazardous waste □ Tonnes per £M Turnover

#### 4. Hydrocarbons

#### **Rotork's Impact**

Oils, grease and kerosene are used for lubricating purposes and in some products for functionality, as in hydraulic actuators.

The safe storage of hydrocarbons is important to avoid polluting watercourses. Our main potential pollutants are oils and kerosene stored in bulk storage tanks and 205 litre drums.

Rotork complies with all national and local authority regulations applicable to the storage of hydrocarbons. This includes the storage of drums onto bunded pallets and bulk storage tanks that meet current legislation.

In November 2003 the Environment Agency undertook an audit of the Bath site with regard to Water Course Regulation and Oil Storage Regulations and were completely satisfied.

#### Our performance data for Hydrocarbons

#### Group

Hydrocarbons consumed by all Rotork manufacturing sites during 2003 were 57 tonnes.

The usage is expressed below, both in terms of tonnes used and the number tonnes per £M Group turnover.



#### Hydrocarbons continued from previous page

The following graph shows the usage of hydrocarbons across the group. Europe includes manufacturing sites in Italy and the Netherlands.



#### **Bath site**

Consumption of hydrocarbons at the Bath site is expressed below, both in terms of tonnes used and the number of tonnes per £M Group turnover.



#### 5. Volatile Organic Compounds

Volatile Organic Compounds (VOC's) are carbon-containing compounds that evaporate into the air. The most prevalent compounds are butanes (from petrol and solvents), ethanol (from solvent use and production processes) and toluene (from petrol exhausts and solvents). VOC's are one of the precursors of ground level (tropospheric) ozone, which is toxic to plants and can cause breathing difficulties in humans.

Most VOC's are not harmful, but some are dangerous to humans, such as the carcinogens benzene and 1,3-butadiene.

The majority of VOC emissions in the UK come from road transport and solvent use.

#### Rotork's Impact

Total VOC emissions in the UK peaked in 1989 and fell by 38% by 2000. Road emissions fell by 55% over the same period, mainly as a result of the introduction of catalytic converters for petrol engine cars. Fuel switching from petrol engines to dieselengined cars has also had a small but beneficial effect.

Emissions from solvent use have changed little over the past 25 years. Under international agreements, the UK has agreed to cut VOC emissions to 72% of the 2000 levels by 2010. Several measures are in place to achieve this target.

The Solvent Directive, which came into force in 2001, aims to reduce emissions from certain industries by about 57%. Reductions will come mainly from the sectors of textile coatings, pharmaceuticals, surface cleaning and vehicle finishing.

The Auto Oil Directives will cut vehicle emissions of VOC's and nitrogen oxides by about 70% through the promotion of cleaner fuels and reduced car use.

#### Rotork's Impact

Rotork uses VOC's in the form of paints and thinners for the finishing of our products.

The safe storage of these compounds is important to avoid contaminating land or polluting watercourses.

High volume components used in our products are painted before they reach our manufacturing sites.

Rotork will comply with any national and local authority regulations applicable to the storage of these compounds. This includes the bulk storage of paint in bunded storage areas.

#### Our performance data on VOCs

#### Group

Consumption of VOCs by all manufacturing sites during 2003 was 21.6 tonnes. The usage is expressed below, both in terms of tonnes used and the number tonnes per £M Group turnover.



The following graph shows the usage of VOC's across the group. Europe includes manufacturing sites in Italy and the Netherlands.



#### **Bath site**

Consumption of VOCs at the Bath site is expressed below, both in terms of tonnes used and the number of tonnes per £M Group turnover.



#### 6. Ozone Depletion

#### The Issue

The ozone layer in the upper atmosphere provides protection against ultra-violet radiation from the sun. It is essential to life since long-term exposure to ultra-violet radiation can cause cancers and damage ecosystems.

Some man-made chemicals, including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) and Halon deplete the ozone layer if they are released into the atmosphere. These chemicals are used in a range of applications including fire protection, refrigeration, air-conditioning and as solvents.

#### **Background information**

In 1987, at the signing of the Montreal Protocol, 46 countries agreed to phase out the use of ozone depleting substances. Production of CFCs and Halons is now banned in developed countries, although remaining supplies can still be used.

The Montreal Protocol allows current production and use of HCFCs, which are less damaging to the ozone layer, but there are staged targets to phase them out.

There are alternatives to ozone-depleting substances for most applications. One of the main non-ozone-depleting alternatives used in cooling systems are hydro-fluorocarbons (HFCs). However, these do have a high global warming potential.

Hydrocarbons are also used in cooling, although they are flammable, which poses a health risk. Ammonia is another alternative but is suitable for large-scale commercial refrigeration only.

The Montreal Protocol has been successful at cutting emissions and scientists now expect a steady recovery if the protocol's schedule is adhered to. It is estimated that the ozone layer will return to normal by 2050.

#### Rotork's Impact

The heating and cooling of the workplaces involves the use of ozone-depleting substances.

# Our performance on Ozone Depletion

Rotork is developing Group standards and guidelines on ozone depletion. These will provide information on how ozone-depleting substances should be disposed of and suitable alternatives.

Ozone depleting materials or gases (mainly HCFCs) are present in certain office airconditioning systems. Our actual impact is minimal since the gases are held in sealed systems and are only released if there is an accidental leak.

Operational controls are being developed for maintenance and end-of-life removal of this plant.

With the exception of the above, no ozone depleting materials or gases are used in any process activity at any of our manufacturing sites.

#### 7. Landscape and Biodiversity

#### The Issue

Biodiversity describes the variety of life, including genes, species and ecosystems. It is essential to society, providing us with food and raw materials. But it is being lost faster than ever before due to rising human population and development.

The conservation organisation World Wildlife Fund estimates that over 30% of the World's ecosystems have been lost since 1970. Most of the World's remaining species are concentrated in biodiversity hotspot such as rainforests and coral reefs, which need particular protection.

#### **Background Information**

An international agreement to protect biodiversity was reached in 1992, known as the Conservation on Biological Diversity. This requires signatories to develop national biodiversity strategies and action plans, and has been signed by over 170 countries.

As well as leading to loss of biodiversity, insensitive land development can spoil the aesthetic value of an area.

#### Rotork's Impact

Our main impact on landscape and biodiversity is the impact of our manufacturing sites on the local communities where they are located. Rotork is committed to reducing the visual impact of these sites on the local communities.

#### Our performance data on Landscape and Biodiversity

The main risk of land contamination at any of our manufacturing sites is from the leakage of stored oil. We are also aware of the potential for acquiring contaminated land as part of the purchase of a business or site.

We store hydrocarbons (oils and kerosene), which are used in our products, in above the ground tanks and 205 litre drums. Small amounts of fuel oil are stored to be used in back up generators in the event of power cuts.

The issue for Rotork is the risk of contamination from oil or fuel spills. These can pollute land and water and can harm ecosystems and wildlife. In the UK, the Environment Agency estimates that approximately one-sixth of pollution incidents are caused by oil spills.

In 1971 the Southern Testing Laboratories undertook a site investigation of the Bath site, where no contamination was found (report on file).

We carry out a due diligence process prior to site acquisitions to identify any potential risks and the cost of any necessary clean up to be undertaken by Rotork as part of the purchase.

# External environmental initiatives

#### **Global Compact**



Kofi Annan, the United Nations Secretary-General first announced the Global Compact in an address to the World Economic Forum on 31<sup>st</sup> January 1999. The Global Compact's operational phase was launched at UN Headquarters in New York on 26<sup>th</sup> July 2000.

The Secretary-General invited business leaders to join an international initiative that would bring companies together with UN agencies, labour and civil society to support ten universal principles in the area of human rights, labour and the environment.

Today hundreds of companies from all regions of the world, international labour and civil society organisations are engaged in the Global Compact.

In August 2003 the City of Bath joined Melbourne, Nuremberg and San Francisco in signing up to the Global Compact by joining the GC Cities Programme. These cities have now since been joined by Porto Alegre and Jamshedpur. Rotork joined the initiative in November 2003.

On 1<sup>st</sup> April 2004 Rotork participated in the first GC City Workshop hosted by Wessex Water in Bath. During this workshop, ideas on the way forward for Bath were discussed.

During the course of 2004, the business will review its operations and establish actions

required to implement more fully the principles of the Global Compact.

#### Global Reporting Initiative



Rotork supports efforts to standardise and refine sustainability reporting. We have followed the suggested indicators of the Global Reporting Initiative where possible.

#### Supply Chain

While maintaining our own environmental standards, we also recognise the importance of product stewardship - being aware of the environmental issues of products and services both up and down the supply chain.

#### Investors

We continue to have open discussions with Socially Responsible Investment (SRI) rating agencies and investors.

Rotork is a member of the FTSE4Good Index.

#### FTSE4Good



#### **Investors continued**

FTSE4Good is the SRI index series designed by the global index provider FTSE.

Its selection criteria cover three main areas:

- Working towards environmental sustainability.
- Developing positive relationships with stakeholders.
- Upholding and supporting universal human rights.

#### Communities

Rotork recognises the importance of the community role in society. Embracing this, we will:

- Report environmental performance data regarding our global operations on the Rotork website each year.
- Foster open communication with employees, customers, suppliers and other stakeholders via both electronic publishing and face-to-face discussion.
- Continually review our premises to minimise the visual appearance on the local environment.