

**The Morgan Crucible Company plc**  
Annual Report + Accounts 2002

**material solutions**  
for customers

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Caption to front cover

**Micrographs of (left to right)**

– Carbon material (pyrolytic carbon)

– Ceramic material (aluminium alloy before refining)

– Magnetic material (as-cast microstructure overlayed with magnetic domain structure for Neodymium magnets (VACODYM))

Morgan, using our world-leading technology in Carbon, Ceramic and Magnetic materials, designs, develops and supplies a broad range of innovative solutions to meet customer needs in a wide variety of demanding applications worldwide. Our ability to develop higher performing, purer, stronger, lighter and smarter materials solutions means that our products remain at the very heart of modern everyday life.

# chairman's statement

The cost reduction programme coupled with good cash management, disposals, and the refinancing of the Group provides us with a strong base from which to capitalise on the eventual recovery of global markets.



As we entered 2002 there was considerable uncertainty in manufacturing industries around the world and increasing volatility in stock markets. Although we had started to reduce operating costs in the second half of 2001 your Board agreed it was necessary to lower operational gearing and reduce fixed costs further and substantially. This became a matter of necessity as orders rapidly decreased, were delayed or cancelled and 2002 turned into the worst year that global manufacturing and Morgan in particular had suffered for many years. It was unique for Morgan in that all our major markets rapidly declined at the same time. Consequently, in 2002 we announced a radical restructuring programme that would continue into 2004, reduce the cost base by £30 million and would cost around £70 million (£40 million in cash). This programme is on schedule. Concurrently a major debt reduction programme was initiated and in the second half of the year a refinancing programme began.

Group turnover for the year was £880.3 million (£879.4 million after allowing for disposals) compared to £1,024.5 million in 2001, a 14.1% reduction. Underlying operating profit before goodwill and operating exceptionals was £34.1 million against £64.3 million in 2001. The loss before tax, after exceptional charges of £72.3 million, depreciation of £46.7 million and net finance charges of £12.8 million was £58.7 million. Net borrowings at the year end were £251.6 million compared to £276.1 million at the end of 2001. There was a positive free cash flow of £5.1 million compared to an outflow of £7.4 million in 2001.

In these circumstances the Board agreed that it should keep cash in the business and has therefore not declared a dividend. We shall however return to a policy of progressive dividend payments at the appropriate time.

In such a demanding and volatile year and with such major shortfalls in sales and operating profit it was pleasing to see that net debt was reduced and a positive free cash flow was achieved. This was attained by major control of working capital, capital expenditure, disposals and good cash management.

The refinancing action was in two parts a private placement programme and a renewal of bank facilities. Both of these have now been concluded satisfactorily.

In October a subsidiary company in the US agreed to pay £7 million in settlement of anti trust violations during the 1990s. A training programme has been implemented worldwide in order to prevent such an event occurring again.

Morgan's people have always risen to challenges laid before them and this year has been no exception. We have asked a great deal of those who work for us and we are fortunate that we have such a loyal and talented team. Actions taken to improve costs and productivity have meant that there has had to be changes and we do not forget the human impact of these actions. I thank everyone for their efforts.

In March of this year we welcomed Nigel Young to the Board as Finance Director following the resignation of David Davies, who left us to widen his experience by joining a large European Oil Group. Bill Macfarlane, who has been with Morgan since 1981 mainly in North America in the Carbon Division, joined the Board in October 2002.

It was with regret that we had to say farewell, early in October, to Ian Norris who stepped down as a Director and Chief Executive through serious ill-health. Ian's life was Morgan, having joined the Company in 1969, and we all owe him our grateful thanks for the time and commitment and contribution he gave to Morgan.

In December, we were pleased to welcome Warren Knowlton onto the Board prior to his taking over as Chief Executive Officer on 6 January 2003. Warren's experience in North America, Germany, Belgium and the UK, particularly with Owens Corning and latterly with Pilkington will be of great benefit to Morgan. In the interim, following Ian Norris's resignation Nigel Howard took over as acting Chief Executive and played a major part in putting the refinancing and cost reduction programme in place. I would like to thank him on your behalf.

Finally, I should like to thank Richard Perle who will not be seeking re-election as a non-executive Director at the forthcoming Annual General Meeting. Richard joined the Board as a non-executive Director in 1988 and, in accordance with good corporate governance, has decided to step down in June. We thank him for his wise counsel, which we shall greatly miss.

There is evidence that demand is beginning to stabilise in many of our markets and that customer de-stocking is slowing. However, we continue to view the immediate future with caution and are not anticipating any significant upturn in overall customer demand in the short term.

The immediate focus of the Group will remain on cash management and the programme of cost reduction that is already well advanced. These actions, coupled with our disposals, should reduce net debt, drive profit growth, despite weak customer demand and, following the refinancing of the Group's sources of funding, provide us with a strong base from which to capitalise on the eventual recovery in global markets.

**Dr Bruce Farmer CBE** Chairman  
11 March 2003

We are improving our efficiency and  
strengthening our market position

# chief executive's statement

Our businesses, many of which are market leaders, have significant strengths and expertise. Our portfolio includes the potential to both grow and generate cash. We have the ability to deliver significantly improved results as markets become more positive.

Morgan has significant value creation potential; there is scope for considerable improvement in 2003 and beyond.

Morgan's 2002 performance was reasonable relative to the market environment but, since joining Morgan in December 2002, my initial impression is that Morgan has significant unrealised value creation potential. Many of our businesses are market leaders. There are areas of significant expertise and strength, and a good combination of growth and cash generative potential. We need to make sure we aggressively redirect resources to maximise these areas of advantage by accelerating our restructuring programme and reducing complexity. I am confident that there is scope to significantly improve the operating and financial performance in 2003 and beyond, and the initial actions to achieve this are already underway.

I have also been greatly impressed by how passionate Morgan people are about our businesses. Their quality and dedication is outstanding and they are meeting the current difficulties with determination. This gives me great confidence that we will succeed in realising Morgan's value creation potential.

2002 was one of the most difficult periods that global manufacturing has experienced for many years. The sharp slowdown in world economic activity seen in the second half of 2001, exacerbated by the terrorist attack in September, continued into the new year. All market sectors, with the exception of medical and defence, were depressed with customers, unsure of their own demands, cutting back on inventories.

Morgan responded by increasing the focus on cash generation and cost reduction. Despite the drop in operating profit arising from the reduced volumes, and expenditure on restructuring, the Group was able to generate a positive free cash flow for the year. This along with other actions produced a solid reduction in borrowings.

In February 2002 we announced a significant restructuring programme over the period 2002–2004 with a total investment of approximately £70 million, £40 million of which would be cash. This was expected to generate a reduction of around £30 million in the overall cost base of the Group by the middle of 2004. The restructuring was aimed at positioning the Group for the future and not at solely reducing short-term costs. A number of plants have been closed, employee numbers reduced and further operations are being relocated to lower cost countries where Morgan already has established high quality operations. The restructuring programme is on time, so far generating the planned savings.

Morgan has a very broad market sector spread with only the consumer goods and automotive sectors, both at 11%, representing over 10% of total Group sales in the year. In previous years this spread has been a considerable strength with different sectors operating on slightly different microeconomic cycles. This has had the effect of mitigating the severity of previous downturns. The events of the second half of 2001, however, had the effect of bringing all the sector lows together.

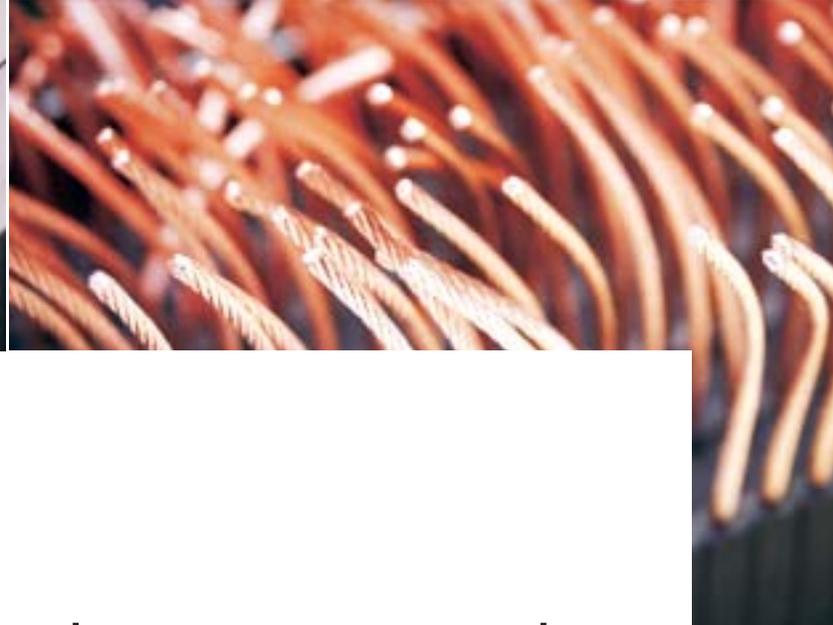
The Group has a strong geographic spread with approximately 46% of sales in Europe, 43% in the Americas and 11% in the rest of the world. The long established strategy of developing strong bases in China, India and throughout South East Asia is providing a strong platform for future growth. Although representing less than 8% of sales in the year the region accounted for 15% of underlying operating profit. In sectors such as consumer appliances, many customers are relocating to countries such as China and Korea. We are well placed, more so than our main competitors, to be able to support these customers by being able to supply them locally with the same quality product that they received in their domestic market.

During 2002 we have maintained our focus on technical development and, even in these depressed times, see exciting new applications developing within our businesses. Our technology is broader than any competitor and gives us the capability of combining our ceramics, carbon and magnetics technologies into sophisticated engineered solutions. Despite the current low volume of demand, the strength of our technology and the quality of our service has meant that our gross margins in most areas of our business have been maintained.

Looking forward, few of our customers are forecasting any improvement in their markets in the near future and it is likely that the recovery from the current recession will be gradual. Performance improvements will come from our cost reduction programmes and our continued focus on cash conservation and generation. As markets improve, and we continue to refocus, we are confident that Morgan has the capability to deliver significantly improved results.

**Warren Knowlton** Chief Executive Officer





Our innovative ideas in Carbon, Ceramic and Magnetic materials technology continue to expand our market opportunities. We act as development partners alongside major international companies who respect our ability to turn research and development initiatives into working products.



Our products can be found in almost all processes required to manufacture semiconductor microchips used in mobile phones, cars, personal computers, domestic appliances and many other electronic devices. As a world-leading supplier of sophisticated components and assemblies for semiconductor wafer production, we are well-placed to meet increasing worldwide demand.

Looking ahead, our engineering solutions are meeting the challenges of future technologies. Already, our solutions are setting the standards for the material and component technology currently creating the next generation of 300mm semiconductor products. Our full range of materials solutions include metallised ceramics and ceramic-metal assemblies, silicon carbide and graphite components, diamond coatings, aluminium nitride and pyrolytic boron nitride. We also supply silicon carbide coatings on graphite, silicon nitrides and zirconias.

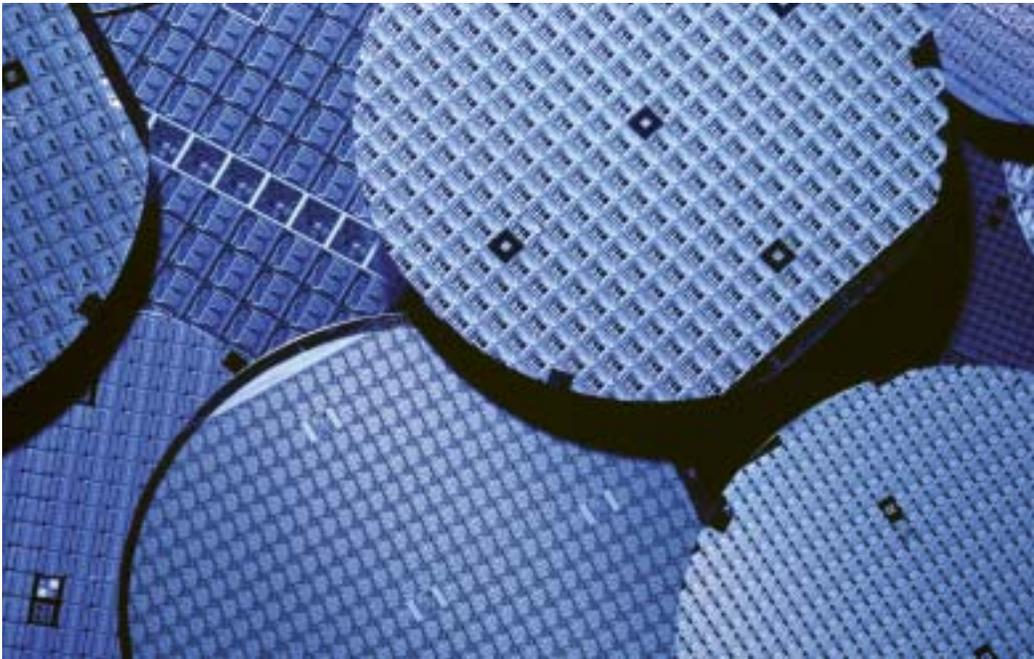
In this market our ceramic and carbon divisions provide customised material production, machining, processing and clean room packaging, all available at customer-qualified manufacturing plants in each of the key economic time zones.

Our magnetics division is also a major supplier to the telecommunications industry. This began during the digitisation of worldwide telecoms networks in the 1980s, when we achieved a leading position in the field of Integrated Services Digital Network ('ISDN') transmission and the suppression of radio frequency interference.

As the global trend in telecoms is now moving towards broadband digital subscriber lines ('DSL'), new products such as asymmetric digital subscriber line ('ADSL') splitters and micro-filters are needed to offer the best performance to DSL subscribers.

We are energetically exploiting this trend by widening our product range. Our forward-integrated products incorporate unique technology along the entire process chain from materials and filter designs to inductive components and devices. All our products for DSL technology are engineered to combine optimum electrical performance, compact size and ultimate balance between design and cost.

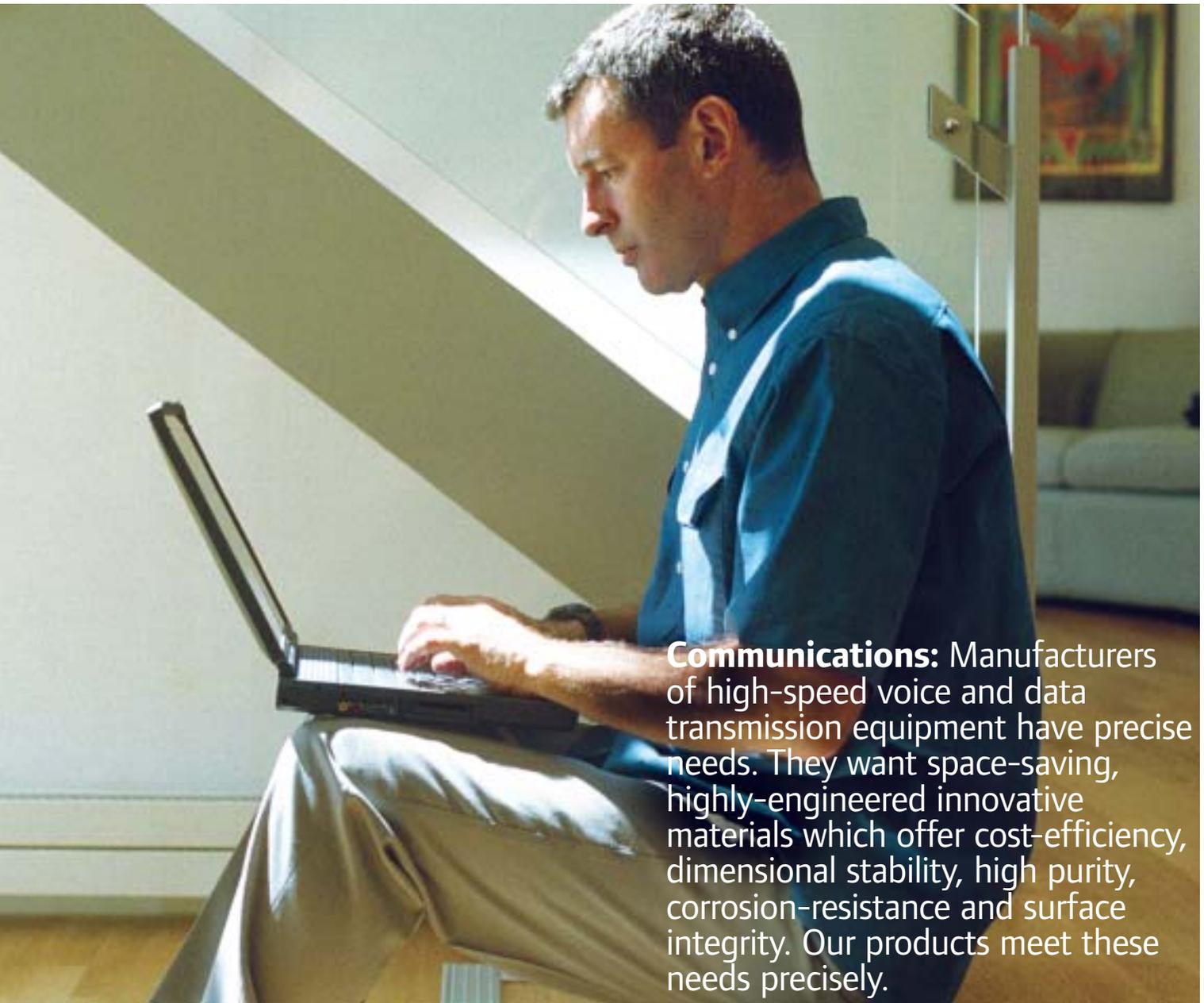
In all applications, our customers benefit from our extensive materials base, our certified manufacturing facilities, worldwide procurement and experience of international markets. We liaise with American and European standardisation bodies and we work closely with telecoms companies to understand their needs fully and develop the best solutions.



shaping the world's

COMMUN

Below **Our ADSL splitters are essential for broadband telecommunications.**  
Below left **300mm wafers processed using our high purity corrosion-resistant materials.**



**Communications:** Manufacturers of high-speed voice and data transmission equipment have precise needs. They want space-saving, highly-engineered innovative materials which offer cost-efficiency, dimensional stability, high purity, corrosion-resistance and surface integrity. Our products meet these needs precisely.

# ications

# improving healthca



# re

**Medical:** Our electro-ceramic, magnetic and advanced ceramic materials are helping us build sales in high-growth medical sectors.

### Implants

Hearing. Walking. Smiling. Even breathing. We help people regain and enjoy some of their most basic human functions. Our advanced components are used in electronic cochlear implants, heart pacemakers and defibrillators. In dentistry, we supply the materials used in three vital components of a tooth implant. Our zirconia and glass-ceramics are used in the coping layer, zirconia forms the tooth abutment and titanium ceramic makes up the 'root' of the implant. We also supply materials for prostheses implants, where guaranteed consistency and product tolerances are essential. Artificial hip joints incorporate a ball made from our advanced ceramic material. Here, our ability to deliver sphericity, radial clearance and surface finish is crucial.

### Endoscopy

In surgery, the trend is towards faster, less invasive operations. Surgeons want to enter the body in a minimal way, allowing the patient to recover within days. We are benefiting from this trend by supplying specialist components to manufacturers of endoscopic equipment. Our materials are used in cataract removal transducers, ultrasonic scalpels and disposable ceramic scalpel blades. We also supply intrusive seals for arthroscopic units and insulators for electro-surgery. Catheters used in endoscopic surgery also incorporate our electro-ceramic components. Our bio-compatible coatings are favoured for endoscopic instruments because they have excellent barrier properties, superior chemical resistance and low friction. They also perform well in high vacuum situations.

### Diagnostics

Along with endoscopy, another medical growth market is real-time operating theatre diagnostics. We have a stake in this market via our electro-ceramic components. These help the surgeon see 3D images of blood flow, organs and tumours during an operation. Our other diagnostic products include high energy magnets for MRI and NMR scanners, components for X-ray and ultrasonic imaging machines and parts for foetal heart monitors. We are also involved in the expanding market for DNA and blood analysis, as we make parts for DNA separation equipment, blood centrifuges and blood flow monitors. Our advanced materials also find their way into nebulisation diagnostic equipment.



Applying our skills in material and process technology to the motor car has led to major technical breakthroughs. By combining our carbon brush, commutator, noise suppression and magnetic technologies we have come up with some innovative energy conversion systems.

One of our more ingenious developments is the new Magnetorheological Fluid (MRF) Fan Clutch System. Working with BEHR, a German producer of auto air moving systems, we have created the first non-contact clutch technology. This innovative system, replacing conventional electromechanical technology, creates significant fuel efficiency gains by cutting engine cooling losses. Unlike conventional fan clutches which are typically either On or Off, the MRF works at variable speeds. Its higher

maximum speed enhances the fan driving cooling performance while a lower disengaged speed improves fuel economy by 1 – 3%. It is also quieter, simpler and more controllable. The fan drive controller measures the engine's cooling needs and directly commands the clutch to produce the fan speeds needed for optimal cooling. The response, measured in milliseconds, is virtually instantaneous.

This revolutionary fan clutch system is just one example of our innovative thinking in motor technology. We are also working as primary design partner and materials systems manufacturer for other applications. These include flexible fuel pumps, hi-amperage alternators, lead-free starters and intelligent accessory motors. In each case our unique core materials work as components or in combination through sub-systems to create technology breakthroughs.

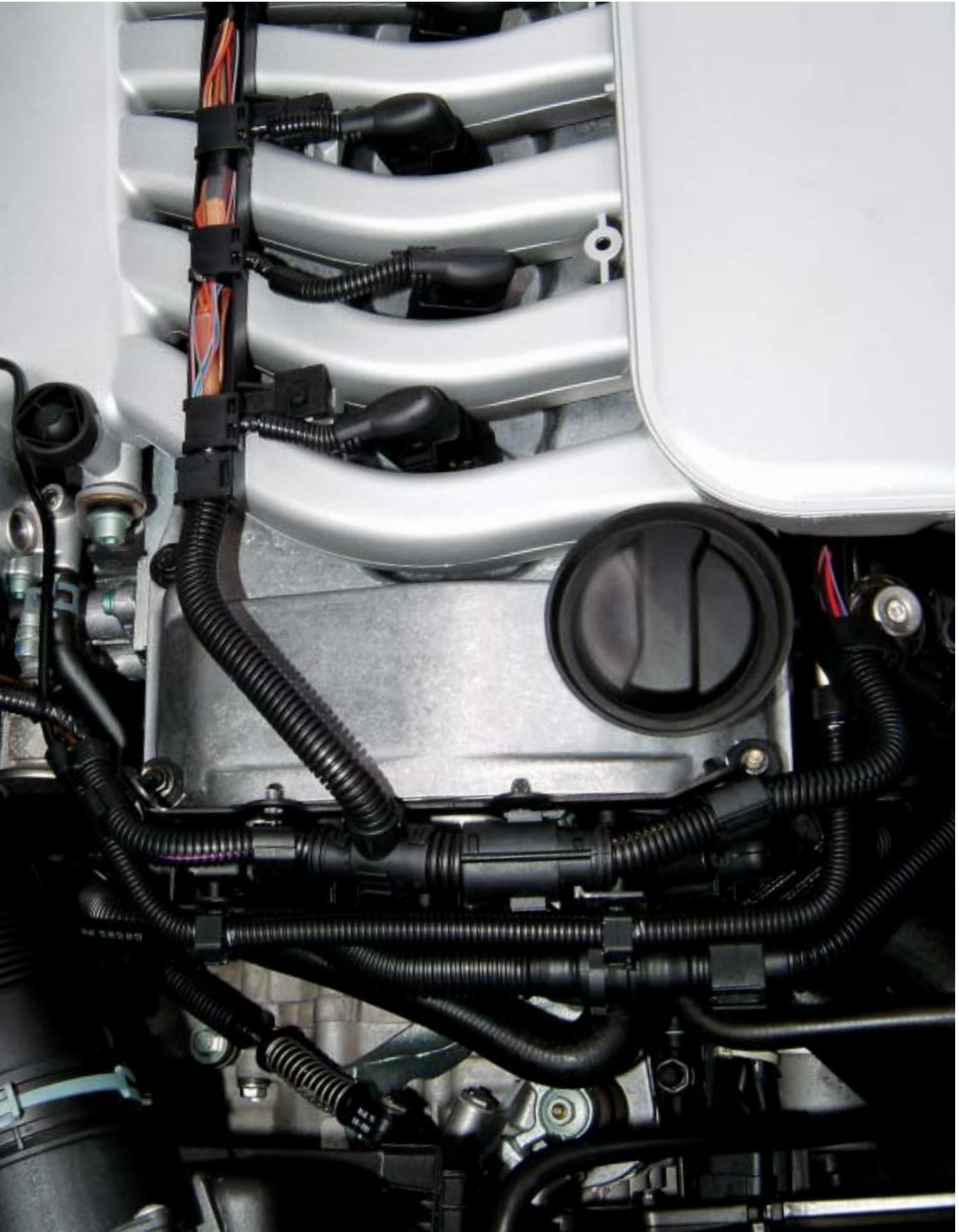
The common factor among our motor technology developments is that we are removing devices, such as the fan belt, that run off the engine continuously whether they are needed or not, and replacing them with small motors that drive fans, water pumps and other devices only when they are needed. This results in significant improvements in energy efficiency.

Our key partners include companies such as Delphi, Behr, Bosch and Siemens.

**Automotive:** As motor manufacturers face pressure to cut emissions and improve fuel economy, our energy conversion systems are in demand. We make motor subsystems and sensors that improve engine performance and fuel efficiency, resulting in lower emissions.

a cleaner more efficient  
**world**





# helping supply and conserve energy

## Mass transit

Trams, trains and high-tech people movers need to 'collect' the current that propels them. We make the current collectors that pick up the electrical power for these mass-transit systems. As the market moves towards lead-free materials we are conducting worldwide field testing of new collector materials. We also make traction brush products for railways and other transit customers. Our patented 'Vibratop' cushioning absorbs track vibrations to extend brush life. In this market our emphasis on continuous development has led to less frequent inspections and lower running costs.

## Wind energy

We help convert wind power to electrical power. Our components are used to transfer the current generated by wind mill farms. We make rotating current transfer units to control the pitch of the blades and our high current brush holder units protect wind mills from lightening damage. We have also developed transfer systems that provide more than five years maintenance-free operation on offshore wind mills. All power and data signals for the blade angle drives are transferred with a single system using either brush and slip-rings or gold wire and slip-rings. Our latest development is a brush and carbon slip-ring unit that operates brushes ten times longer than standard solutions.

## Fuel cells

We are involved in the development of products that will allow the production of a low-cost, long-life, lightweight fuel cell. Using our skills in materials technology, we are challenging current thinking on fuel cell performance. Among our innovations are carbon-graphite plates with the specific properties essential for efficient fuel cell operation. They are resistant to electrochemical corrosion and they have excellent thermal conductivity. Our R&D capabilities are backed-up by manufacturing plants in Europe, North America, Korea, China and India. We have the flexibility to translate technology to the most cost-effective location.



**Generating power:** Our businesses play a crucial role in the generation, transfer and conservation of electrical energy.





From getting up in the morning to going to bed, our products are among the components that make up everyday life. The motors in hairdryers contain our parts and we produce the insulation material that keeps ovens gently warm outside while baking hot inside.

Superwool™ is the first high temperature insulating material with low 'biopersistent' qualities. The environmental qualities of this material, coupled with the fact that it does not need the use of organic binders, allows domestic oven manufacturers to meet increasingly stringent Health & Safety regulations.

We manufacture Superwool™ under a strict quality control system, supplying insulating material for 1.5 million ovens in Europe alone. Home appliance companies in North America and Asia are also using or testing Superwool™.

Our achievements have been recognised by Bosch-Siemens, the major manufacturer of kitchen appliances. During each of the last 11 years, we have won an award that puts us among the top Bosch-Siemens suppliers. This award recognises our reliability, quality and support for new product development.

Continuing our commitment to innovation, we are collaborating with white goods manufacturers to make appliances work smarter. These projects exploit our skills in semiconductor microchips and Broadband DSL technology. A typical development is to allow ovens to be switched on remotely via a mobile phone signal, enabling homeowners' dinners to be ready the minute they return.

We are also helping to introduce the remote monitoring of domestic power supplies. Our meters allow suppliers to make remote readings and for new power providers to take over by sending wireless phone signals. As remote operations become commonplace, our components will even allow people to turn on their bath taps while on their way home.

We continue to play a vital, although frequently unrecognised role in everyday life. Whether you are using a vacuum cleaner or a power tool, a mobile phone or computer, a washing machine or a dishwasher, you will be using a Morgan component. If you travel by train, plane or car Morgan technology will enable your journey to happen. In fact, in many unseen ways, we allow modern life to run smoothly.

**Consumer products:** At home.  
At work. In the car. On the plane.  
On the phone. Unseen and  
unannounced, our products feature  
in many aspects of modern life.

Left **Mobile phones contain many of our micro-electronic ceramics.**  
Middle **A Superwool™ blanket for high temperature insulation.**  
Right **Ovens incorporate our high performance insulation.**



the invisible  
fabric of **life**

# Carbon

Our Carbon businesses supply highly engineered products that utilise the electrical and mechanical properties of our leading range of advanced carbon, graphite and associated materials.

## Electrical Carbon

The turnover for the year was £199.9 million (2001: £210.0 million) and underlying operating profit was £14.6 million (2001: £17.0 million).

Our Industrial and Traction business designs, manufactures and supplies components and systems for industrial and rail traction applications worldwide. These products include carbon brushes, brush holders and commutators used in DC motors, traction current collectors used as pantographs, third rail shoes, and trolley bus inserts, linear and rotary current transfer systems and assemblies used in many applications including irrigation systems, wind energy and industrial automation.

The business is also providing a real time diagnostic motor maintenance resource for industry through the introduction of a reliability systems support package. This package includes vibration analysis, remote diagnostics and optimum motor performance conditioning.

Turnover improved in the second half of 2002 compared with the first half, with order intake finishing the year more strongly. The rationalisation programme was in line with plan. In the Americas, 30% of manufacturing capacity has been relocated to Mexico during the past two years. In Asia, a number of manufacturing locations have been consolidated and a centre of manufacturing excellence established in Shanghai. In Europe, as in the rest of the world, resources have been redeployed into marketing and sales initiatives that are providing growth opportunities for the future.

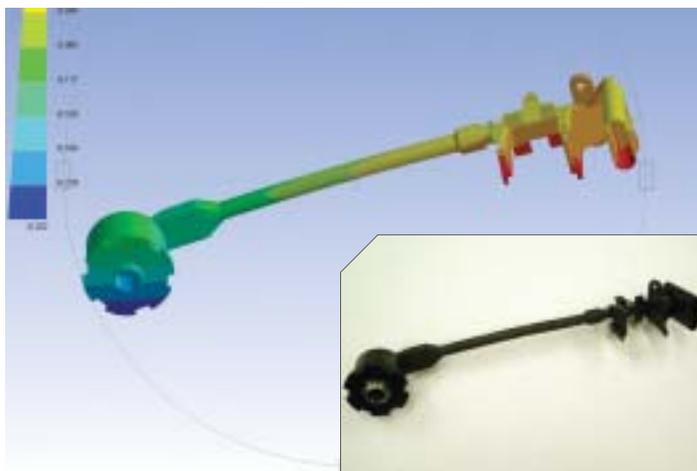
The Auto Consumer business is a well established global leader in the supply of AC/DC electric motor commutation components & sub-systems used primarily in automotive, power tool, and floor care products. The product range, which expanded significantly in 2001-2002, includes carbon brushes, brushcard systems, commutators, RFI suppression devices, solenoids and magnetic stators/rotors.

The business provides 'energy conversion technologies' in higher growth market segments, including fuel pumps, automotive 42 Volt Systems, and several intelligent/energy efficient DC motor developments for auto and consumer appliances. It has the potential in these new technology areas to expand into SE Asia/Europe and to maintain cost competitiveness via 'World Class Lean Enterprise' initiatives.

Left **Computational modelling eliminates the risk of product failures.**

Middle **Our research and development expertise supports the product pipeline of the future.**

Right **Accelerated life-testing of an industrial power transfer system.**



Significant new business contracts were secured towards the end of 2002 which provide an encouraging outlook for 2003 and beyond. During the year, as a result of the restructuring programme, two US automotive operating units were consolidated onto a single site. 2002 margin performance and growth remained depressed, largely the result of adverse market conditions. Despite earnings shortfalls, however, favourable cash generation was maintained.

### Engineered Carbon

The turnover for the year was £111.3 million (2001: £127.3 million) and underlying operating profit for the year was £3.8 million (2001: £8.4 million).

With a wide and continually expanding range of materials in our Mechanical Carbon business we are able to provide seal faces, bearings, rotors, vanes and other components providing the technical solutions required for a large variety of applications.

Fluid handling and aerospace/defence, which are traditional markets served by Mechanical Carbon, have been depressed throughout 2002. The general economic climate in the USA and Europe, combined with the continued weakness in the commercial aircraft market led to a decline in orders. However, the business has secured strategic alliances and long-term agreements with a number of large key accounts in these markets. This bodes well for the future as manufacturing economies recover.

The business is being rationalised to reduce cost and increase manufacturing capability in lower cost regions. This, coupled with our ability to rollout core technologies to these operations, will ensure that we are well positioned as customers migrate to these geographic regions.

The decline in our traditional markets has been partly offset by new business gains. Our range of silicon carbide materials continues to provide an excellent platform for growth. This family of materials has also proved to be adaptable in ceramic armour applications for the protection of military ground troops and critical aircraft systems. A major contract was secured in 2002 for the supply of silicon carbide body armour. In this application, our silicon carbide material provides the required strength at a lower weight than alternative materials.

Specialty Graphite produces and supplies precision high purity specialty graphite products for use in high temperature and corrosive environments. During 2002, in each of our chosen growth markets, market share advances have been attained. Our customers continue to look to us to provide responsive customer service on a global basis.

In semi-conductor chip processing equipment, Morgan technology has been increasingly chosen for the next generation larger wafer production by leading OEMs. The technology provides outstanding reliability and value as well as performance advantages.

In aero-propulsion, NASA has selected our newly developed materials for future rocket nozzle programmes due to their consistency and strength.

In super-abrasive markets (synthetic diamond) we launched our new optimised graphite material and performance has exceeded all the expectations of the world's leading players.

In the exciting new PEM (Proton Exchange Membrane) fuel cell market, our technologies and capabilities are in significant demand from the major fuel cells OEMs. Enhanced current densities, unprecedented low pressure drop and application-calibrated materials are setting the standard for future fuel cells designs.



# Ceramics

Morgan's specialist ceramic materials with unique properties of hardness, wear and corrosion resistance, electrical and thermal insulation and biocompatibility meet the most rigorous customer demands.

## Technical Ceramics

The turnover for the year was £125.2 million (2001: £149.9 million) and underlying operating profit was £5.0 million (2001: £13.5 million).

Our Advanced Ceramics business, using its extensive range of leading edge oxide and non-oxide ceramic materials, produces products used in a range of applications including semi-conductors, laser power tubes, aerospace, healthcare and micro-electronics.

In healthcare, surgically implanted devices such as heart pacemakers, defibrillators and cochlear implants require materials that are hermetic and biocompatible. We provide the ceramic materials for these applications as well as hermetic feed-through assemblies, braze alloys and highly engineered coatings for radio frequency shielding. More and more surgically implanted hip joints are made from our ceramics. Blood analysis and separation equipment use valves made from advanced ceramics. We even have coatings that make hypodermic needles penetrate less painfully.

In communications, the growth in applications for wireless and fibre optics has placed demands on our business for unique material solutions. Satellite uplinks require powerful microwave signal generation devices such as travelling wave tubes constructed with our ceramic and ceramic/metal components. Leading edge applications in fibre optic communications require diamond heat spreaders, signal generation and amplification devices and components for high quality connections. These diamond, ceramic and metal products are supplied by several of our operations.

Our ceramic materials, braze alloys and assemblies are essential building block products used in the construction of sensing devices that monitor aero engine performance for fuel efficiency and safety. We also supply blade coatings, braze alloys and repair materials for the manufacture of new gas turbine engines and the refurbishment of engines already in service. The experience gained in supplying these materials to the aero engine industry has also positioned us to supply materials for gas turbine engines in the power generation industry.

In the area of the high temperature Solid Oxide Fuel Cell ('SOFC') designs our broad base of ceramic and metallising technologies are enabling the sub-system development of these complex geometries and materials.

2002 was a disappointing year for the Advanced Ceramics business with turnover affected by the downturn in the telecommunications and semiconductor market sectors. The medical sector continued to show good growth. A major site consolidation was completed in the US with three sites combined into a new site in Hayward, California. The silicate ceramics business in Barcelona was sold and a European restructuring programme is in progress.



Electro Ceramics develops and manufactures piezoelectric ceramic components, ultrasonic transducers and sensor assemblies, actuators, radio frequency and high voltage capacitors and microwave filters. Our actuators, transducers and sensors provide an electromechanical interface between electronic systems and the real world. Applications include hard disk drives for computers, sonar systems, medical imaging, ultrasonic scalpels and parking sensors for cars.

Our advanced RF capacitors are used in applications such as MRI, high power oscillator circuits in radio transmitters, lasers, semiconductor processing and electrostatic spraying equipment. Our microwave dielectric components are used in cellular phone base stations.

The business grew rapidly at over 20% pa until 2002 when sales fell by 12% due to the downturn in the semiconductor and telecommunications markets. The short-term order book recovered at the end of the year and sales are expected to rise significantly from 2003 onwards.

Exciting new opportunities have been secured in the hard disk drive, defence, automotive and medical industries. In particular, a production capability has been established for the production of specialist materials required for the next generation medical imaging and sonar systems.

### Insulating Ceramics

The turnover for the year was £256.8 million (2001: £287.7 million) and the underlying operating profit was £13.9 million (2001: £18.8 million).

For Thermal Ceramics, the year started with weak trading conditions that saw a continued decline in our markets in the USA, primarily affected by the poor state of the aluminium, steel and related industries.

Europe was flat, with Germany and the UK being particularly weak. However, demand from Petro-chemical industries improved during the year.

Asian markets continued to grow with the exception of Japan, and the new fibre plant in Shanghai was successfully commissioned.

Overall sales were some 6% down on a like-for-like basis. However, second half sales showed some recovery and a strong final quarter gives some optimism that the bottom of the recession has passed for this business.

Environmentally driven markets continue to demonstrate growth with significant activity in the development of products for auto-emission control. Tighter controls and tax incentives are producing new exhaust system designs for current and future automotive requirements. The dash-for-gas boom has temporarily slowed as the USA power market came into balance and the demand for large land based turbine sets abruptly dipped. The growth in this sector should resume in 2004/5 as demand for clean electricity grows in China and Continental Europe. Clean air legislation continues to drive demand for incineration and high temperature filtration/catalytic products for industrial emissions.

Demand for consumer products has remained buoyant and the general shift towards our bio-soluble fibres continues as specifications for our products become more globally based.

Despite a background of lower sales, our Crucibles business gross margin percentages held up well, with the business benefiting from the restructuring of its global manufacturing base. Over the last three years, significant reductions in manufacturing cost as well as overhead structures have been achieved, allowing the business to maintain robust financial results despite the current cyclical fall in market volumes.

The last phase of this manufacturing restructuring was completed in 2002. The closure of our US crucible manufacturing facility in Connecticut was announced and successfully completed during the year. The US market – previously served with both imported and indigenously manufactured product – will now be addressed exclusively with product manufactured at lower cost in highly efficient core manufacturing plants in UK, Germany and Brazil.

Demand in the non-ferrous foundry industry continued to fall in 2002 as manufacturing industries suffered worldwide. The US market stabilised slightly after its decline in 2001, but European markets were weak, impacting on our core crucibles and consumables business. Orders for new furnace equipment suffered from deferral of capital investment by customers facing uncertainty.

Asian markets were mixed, with disappointing economic activity in Japan. In contrast, China continued to show growth, and is likely to become a more significant market in the medium term. Our distribution in China was strengthened during the year.

Having completed its restructuring, the crucible business has increased focus on new product development to pursue growth opportunities in its core non-ferrous foundry markets. It now has the platform on which to build volumes and take full advantage of the upturn of the economic cycle.



From left **The processing of high performance electro ceramic materials.**  
Middle **The production of ceramics.**  
Right **Parking sensors incorporate our essential piezo ceramic technology.**

The turnover for the year was £186.2 million (2001: £215.1 million) and the underlying operating loss was £2.9 million (2001: £5.8 million profit).

We supply a broad selection of high-grade magnetic materials, parts, components and systems used in applications in virtually every field of electronics and electrical engineering. This makes us the only globally operating company able to offer the entire spectrum of magnetic technology: from soft magnetic alloys to the world's most powerful rare earth permanent magnets.

Our materials knowledge is outstanding – we were the first company to launch vacuum melting of alloys on an industrial scale – and have nearly 80 years of experience in magnetic technology. Today Morgan Magnetics has more than 3,000 people working in production sites and field sales offices in 40 countries worldwide.

We are a major supplier of transformers, chokes and modules for the telecommunications market, especially for ISDN and DSL technologies. In the year we launched a series of new developed products. Our splitters and line cards are designed to meet the requirements of the different national standards. The major European telecommunication service providers have however effectively frozen their investments for these new technologies. Following a sharp decline in 2001 the telecommunications markets did not recover in 2002. Even promising growth markets like USA and China did not perform to our expectations. Our permanent magnet business continued to suffer from a harsh business climate in the important computer market throughout the year. As a result Morgan Magnetics sales declined 13% compared with the previous year.

# Magnetics

We are a leading supplier worldwide of advanced magnetic systems and components. We develop, manufacture and market magnetic materials and products derived from them.



We have seen a stable demand for our products in the consumer market. For example, for electronic article surveillance systems, we deliver soft magnetic strips that are processed to labels and tags. Attached to retail products they must be deactivated to prevent the shop's alarm system from being set off. In the second half of 2002 we saw an increase in order activity. Our deliveries of high precision materials and parts to the Swiss wristwatch manufacturers also remain at a high level.

Many of the advances being made in today's automobiles would not be possible without our materials and components. Modern engine management systems are using our wide range current sensors. Parts made from nickel-iron and cobalt-iron materials lead to increased efficiency in high-pressure fuel injection valves and help to economise on fuel consumption, contributing to a reduction of emissions. Highly reliable permanent magnets ensure precise operation of all kinds of sensors. Whether in the latest ESP systems (Electronic Stability Program), in ABS brake systems or in crash sensors that shut the fuel supply to prevent car fires, our technology provides innovative solutions for all our automobile customers.

The market for power generation and distribution offers exciting opportunities for our recent development of current transformers for electronic energy meters. With the progressing liberalisation of the energy markets, remote access for energy meter reading for corporate and private customers becomes a valuable feature for power generating companies. Precise metering combined with exceptional reliability and full compliance with national standards is boosting our sales in this area. The success of these products in all parts of the world is encouraging us to keep a clear focus on this market.

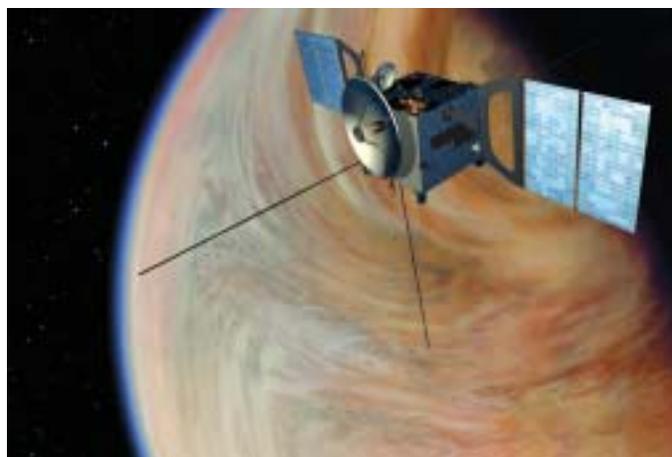
Our permanent magnets operate in energy generating machinery up to approximately the one megawatt region – such as in drives for wind power stations. The significantly higher energy density of rare earth permanent magnets compared to conventional magnet materials allows for the necessary volume and weight reduction in the drive allowing it to be located close to the huge propeller. Electric permanent magnet motors that are located outside the ship's hull drive the latest ship propulsion systems. These offer 360° rotation for excellent manoeuvrability. Additionally these systems do not require a shaft between engine and propeller thus decreasing weight and increasing performance.

Our products are used in a variety of medical applications. High energy magnetic systems form an essential part in MRI (magnetic resonance imaging) systems. These make even soft parts of the human body visible, without the hazardous side effects of x-ray diagnosis. Ultra-sensitive systems for the measurement of electric signals generated by the human brain help to detect tumours at a very early stage, when therapy still promises to be successful. These systems are so sensitive that they need to be shielded even from the earth's magnetic field. Our magnetically shielded rooms perfectly achieve the necessary environment for these systems.

2002 continued to be difficult as some key markets and geographical areas, particularly Germany, for Magnetics products remained depressed. We are successfully implementing a restructuring programme including the relocation of some of our operations to our existing site in Slovakia, which should provide the necessary cost base to reposition our business. Our markets are driven by technological innovation and therefore we continue our research and development programmes to provide the essential foundation for future growth.



From left **Process control is vital to maintaining our high technical standards.**  
Middle **Melt spun precision soft magnetic material used in article surveillance systems.**  
Right **Precision motors using our permanent magnets focus the mirrors on the Herschel telescope.**



# financial review

The immediate focus of the Group will remain on cash management, the programme of cost reduction, and reducing net debt.

Group turnover totalled £880.3 million (2001: £1,024.5 million), a reduction of 14.1% on the previous year. On a continuing business basis it reduced from £990.0 million to £879.4 million, a reduction of 11%. After eliminating the effect of foreign exchange rates the decline in continuing business turnover was 12.7%. On the same basis turnover in the second half of the year compared with the corresponding period in 2001 reduced by 9%.

Summarised below is an analysis of the Group's turnover and operating profit by global business.

	Turnover		Underlying operating profit	
	2002 £m	2001 £m	2002 £m	2001 £m
Electrical Carbon	199.9	210.0	14.6	17.0
Magnetics	186.2	215.1	(2.9)	5.8
Engineered Carbon	111.3	127.3	3.8	8.4
Technical Ceramics	125.2	149.9	5.0	13.5
Insulating Ceramics	256.8	287.7	13.9	18.8
Continuing businesses	879.4	990.0	34.4	63.5
Discontinued business	0.9	34.5	(0.3)	0.8
<b>Total Group</b>	<b>880.3</b>	<b>1,024.5</b>	<b>34.1</b>	<b>64.3</b>

## Underlying operating profit

The reduced level of customer demand in the year impacted margins, although this was mitigated by the positive impact from cost reduction measures within the Group's restructuring programme. Group operating profit for the year from continuing businesses, before goodwill and exceptional costs was £34.4 million (2001: £63.5 million). Operating margins for the year on this basis were 3.9% (2001: 6.4%). A comparison of the first and second halves of last year shows that Group was able to improve its operating margins from 3.5% in the first half to 4.3% in the second.

Operating exceptional costs in the year were £57.3 million and include both the costs of the US Department of Justice anti trust settlement and related legal costs and £45 million of costs for the Group's restructuring programme. Goodwill amortisation was in line with the previous year at £7.7 million.

Corporate exceptional charges were £15.0 million (2001: £17.6 million). They arose principally from the sale of two loss making businesses, Technical Ceramics' Spanish activity in Barcelona and Insulating Ceramics' building products activity in Holland together with the disposal of several surplus properties as a result of the restructuring programme.

Net finance charges fell by £6.4 million to £12.8 million compared with the previous year. This was due to improved cash management, a lower average level of borrowings and more favourable interest rates. Since the majority of the Group's borrowings are at variable interest rates we have been able to benefit from lower interest rates in the USA and Europe.

A five year summary of the Group's financial results is set out on page 68 of the accounts.

## Foreign currency impact

The principal exchange rates used in the translation of the results of overseas subsidiaries were as follows:

	Average rate		Year end rate	
	2002	2001	2002	2001
US\$	1.504	1.440	1.603	1.441
Euro	1.590	1.609	1.539	1.611

## Taxation

Group taxation for the year showed a net credit of £0.5 million (2001: charge £12.5 million) after taking account of goodwill and all exceptional charges. The effective rate before these items was 30%.

## Net debt £m

2001 (276.1)

2002 (251.6)

## Controllable working capital £m

2001 228.7

2002 197.7



## Dividend

In view of the current economic conditions in many of our markets and the need to invest in the cost reduction programme the Board has decided not to declare a dividend. It is the intention of the Board to return to an appropriate policy of progressive dividend payments when trading performance has significantly improved.

## Earnings Per Share

Basic earnings per share (EPS), calculated using the overall loss on ordinary activities was a loss per share of 26.5 pence (2001: EPS of 1.6 pence). EPS based upon the earnings for the year before all exceptional items and goodwill was 5.0 pence (2001: 12.5 pence). Details of these calculations can be found in note 11 on page 54.

## Balance sheet

At the year end total capital employed was £350.4 million (2001: £421.5 million). With closing net borrowings of £251.6 million (2001: £276.1 million), gearing at the year end was 71.8% (2001: 65.5%).

The net book value of tangible financial assets fell to £433.6 million (2001: £490.3 million) as the charge in the year for depreciation of £46.7 million (2001: £48.0 million) and asset write-offs and disposals of £25.3 million exceeded capital additions of £32.5 million (2001: £60.1 million). The ratio of additions to depreciation charge was 0.7 times (2001: 1.3 times). Net current assets reduced to £96.7 million (2001: £159.3 million) at the end of the year.

## Cash flow

Despite £18.3 million of cash costs in the year from operating exceptional items, cash flow from operating activities was £75.2 million (2001: £109.4 million). This performance included a £18.7 million reduction in working capital (2001: increase £4.3 million) of which inventories contributed a reduction of £17.6 million (2001: £6.7 million). As a result of lower cash outflows from interest, taxation, capital expenditure and dividends there was a free cash inflow in the year of £5.1 million (2001: outflow £7.4 million). After including a positive foreign exchange movement, an outflow from deferred acquisition consideration and an inflow from asset disposals, net debt at the year end was reduced to £251.6 million (2001: £276.1 million).

## Treasury policy

Group Treasury acts as a service to the businesses of the Morgan Crucible Group, not as a profit centre. It operates under policies approved by the Morgan Crucible Board. Group Treasury seeks to reduce financial risk and to ensure that the Group has sufficient liquidity available to meet all foreseeable needs. It is responsible for all of the Group's funding requirements, cash management and other treasury business. Group Treasury makes limited use of derivative instruments to hedge foreign currencies and interest rates; speculative transactions are not permitted.

A formal report on Treasury activities is prepared for the Board at least biannually and reports for the Finance Director monthly.

## Foreign exchange risks

Subsidiaries are encouraged to manage all material transactional foreign currency exposures using forward contracts. Any items of a more complex nature require approval by Group Treasury.

Currency translation risks are controlled centrally. Policy is to manage the translation exposure of major overseas net assets by seeking to match the currency of borrowings with the currency in which the net assets being held are denominated. Forward exchange contracts are used to adjust the exposure. The objectives are to maintain a low cost of borrowings whilst maintaining a balanced portfolio of net assets by currency.

## Borrowing facilities and liquidity

All of the Group's borrowing facilities are arranged by Group Treasury and the funds raised are then lent to operating subsidiaries on an arms length basis. In a few cases operating subsidiaries have external borrowings but these are supervised and controlled centrally. Bank borrowings during the year were principally in the form of committed, multi-currency bilateral credit facilities from 11 banks. Other borrowings consisted of various US dollar note facilities.

At the end of the year, excluding the US receivables securitisation, the Group's total committed borrowing facilities amounted to £327 million of which 39%, or £127 million, was due to mature in the following 12 months. At that same date it had cash reserves of £60 million and undrawn committed facilities of £55 million.

The Group's strategy has been to increase the proportion of longer term debt and reduce its reliance on committed bank finance. During the year a US\$40 million receivables securitisation arrangement was completed in the United States.

Since the year end the Group has issued US\$105 million of private placement notes with maturities of 7 and 10 years at interest rates of 6.23% and 6.84% respectively. The Group also entered into a US\$300 million syndicated loan with its banks of which US\$240 million is available for 3 years to March 2006 and the remainder for one year. This new banking arrangement is in addition to various bilateral arrangements totalling US\$115 million that mature at various dates in 2004.

## Capital investment

There are established procedures for the approval of investment in new businesses and on capital expenditure.

## Interest rate risk

The Group's policy is to borrow principally on a floating rate basis but when appropriate the Group will fix interest rates using interest rate swaps or other instruments. At the year end there was US\$25 million of interest rate swaps outstanding. After taking account of these swaps 86% of the Group's net debt was exposed to floating rates of interest.

## Accounting policies

The Group has adopted the transitional requirements of Financial Reporting Standard (FRS)17 *Retirement Benefits*, and this has been disclosed in note 32 of the accounts. The Directors have considered the existing policies of the Group and concluded that no changes are required. FRS19 *Deferred Tax* has been adopted for the year ended 4 January 2003.

## Pensions

The Group operates a number of pension schemes throughout the world, the majority of which are defined benefit, and the largest of which are located in the US, UK and Germany. Provisions totalling £87.0 million are included in the financial statements at the end of the year, an increase of £1.9 million compared with the previous year.

On the basis of FRS17 which compares the market value of a funded pension scheme's assets with an actuarial valuation of its future pension liabilities, the Group's defined benefit schemes showed a net deficit of £82.0 million, an increase of £64.6 million in the year.

The Group's UK schemes currently meet the minimum funding requirement and therefore there is no cash impact for the Group from the FRS17 shortfall.

## Going concern

In accordance with the recommendations of the Combined Code, the Directors have duly considered the budgets, forecasts, cash flows and the outlook from the operating companies and consider that the Company and the Group have adequate financial resources to continue in operational existence for the foreseeable future. For this reason, they continue to adopt the going concern basis in preparing these accounts.

**Nigel Young** Finance Director

# board of directors

† Members of the Executive Committee  
\* Member of the Audit Committee  
# Member of the Nominations Committee

With the exception of Dr E B Farmer and Mr R N Perle, all of the non-executive Directors are members of the Remuneration Committee.

## EXECUTIVE DIRECTORS

### 01 Warren Knowlton (56) (USA)†

Appointed Chief Executive Officer in January 2003. Prior to this new appointment he was an executive Director of Pilkington plc, having first joined Pilkington in 1997 as head of the newly created global Building Products business. He came to Pilkington from Owens Corning where he had worked in various senior executive positions since 1977, most recently as head of their European and African Building Materials business. He has also served since 2000 as a non-executive Director of Smith & Nephew plc and chairs the Audit Committee of that Board.

### 02 Nigel Howard (57)†

Joined Morgan in 1967 and became a Director in 1992. Appointed Deputy Chief Executive Officer in January 2003 having previously held the posts of Managing Director of Morganite Special Carbons 1980 to 1986, Chairman of Mechanical Carbon Division 1986 to 1988, Chairman of Thermal Ceramics Division 1988 to 1998 and Chairman of the Ceramics Division 1998 to 2002.

### 03 Bill Macfarlane (54) (Canada)†

Appointed a Director in October 2002, having joined Morgan in August 1981. He was Chairman of the Carbon Division from January 1998 to 2002 and from this date became Director of Market Development. Prior to this, he held a series of senior positions within the Carbon Division from 1992 to 1998. He was previously Managing Director of Crane Canada Limited's Environmental Systems Division for six years.

### 04 Nigel Young (49)†

Appointed as Finance Director in April 2002. He has previously worked in a similar capacity for United Scientific Holdings (later Alvis), First Technology and Babcock International.

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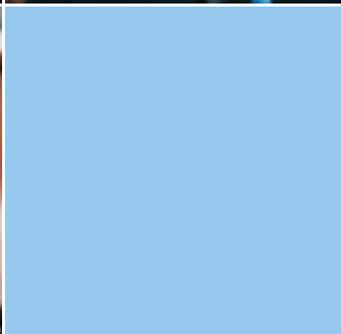
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## NON-EXECUTIVE DIRECTORS

### 05 Dr Bruce Farmer CBE (66)\*#

Having joined Morgan in 1981 as a Director, he was Group Managing Director from 1983 to 1997 and was appointed Chairman in January 1998. He is currently Chairman of Scottish and Southern Energy plc. He is a non-executive Director of Foreign & Colonial Smaller Companies plc and President of the Institute of Materials.

### 06 Sir Clive Whitmore (68)\*#

Appointed as the senior non-executive Director in December 1998 after four years' service as a non-executive Director. He was previously Permanent Secretary at the Home Office and is a Director of N. M. Rothschild & Sons Limited.

### 07 Sir Alan Cox CBE (66)\*#

Joined the Board as a non-executive Director in January 1995 and has been a recent Member of the Financial Reporting Council. He is a non-executive Director of Meggitt plc.

### 08 Lars Kylberg (63) (Sweden)\*#

Appointed a non-executive Director in September 1996, having previously been President and CEO of Saab Scania and Chairman of Haldet A.B. He is Chairman of the Swedish Institute of Standards and holds non-executive Directorships with ASG AB, International Business Systems IBS and The Generics Group AG.

### 09 David Godwin (64)\*#

Became a non-executive Director in July 1998 and had previously been senior corporate partner at Cazenove & Co. His other non-executive Directorships include PZ Cussons Plc, Great Portland Estates P.L.C. and The Generics Group AG.

### 10 Richard Perle (61) (USA)

Became a non-executive Director in June 1988 having previously served as United States Assistant Secretary of Defence 1981 to 1987. He is currently Resident Fellow of the American Enterprise Institute.

## SENIOR EXECUTIVES

### 11 David Coker (57)†

Appointed Company Secretary in 1989 having joined Morgan in October 1988 from the Guthrie Corporation, and previously NatWest and businesses associated with the electricity, gas and oil industries.

### 12 Andy McIntosh (58)†

Joined Morgan in 1984 as Director of Group Personnel and became a member of the Executive Committee in 2001. He previously worked for the Jefferson Smurfit Group, Kraft Foods and Bowater Corporation.

### 13 Dr Alan Begg (48)†

Joined Morgan in 2001 as Director of Group Technology, having been Vice-President Technology of Federal-Mogul. He previously worked with T&N and BP.

### 14 Dr Andrew Hosty (38)†

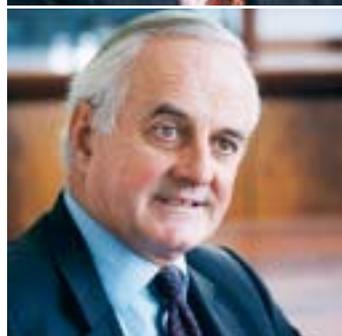
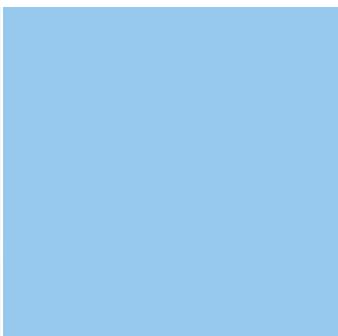
Joined the Group in 1991 via Morgan's graduate recruitment and development programme. He has held a number of senior positions within the Carbon and Ceramics businesses, and is currently the Director of Operations.

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## Directors' report

The Directors present their report together with the financial statements and auditors' report for the year ended 4 January 2003.

### Principal activities and business review

The Company is the ultimate holding company of a group of subsidiary undertakings engaged in the manufacture and marketing of carbon, ceramic and magnetic components for application in a wide range of industries and services (the 'Group'). A review of developments affecting the Group during the year and its prospects for the future appear on pages 1 to 23.

### Disposals

The Company disposed of a number of its businesses during the year under review. The dense calcium silicates business of Thermal Ceramics Deutschland GmbH was sold for €0.4 million (£0.3 million); the ULTRAGARD business of Thermal Ceramics Benelux BV was sold for €3.9 million (£2.5 million), and the business and the assets of Morgan Matroc SA were sold at a loss of €4.5 million (£2.8 million).

### Share capital

The Company's share capital, together with details of shares issued during the year, are set out in note 24 on pages 61 and 62.

### Financial results

The loss after taxation for the year ended 4 January 2003 was £58.2 million (2001: profit £7.3 million). Loss before tax for the same period was £58.7 million (2001: profit £19.8 million). Turnover was £880.3 million (2001: £1,024.5 million) and operating profit before goodwill amortisation and operating exceptionals was £34.1 million (2001: £64.3 million). Diluted loss per share was 26.2 pence (2001: diluted earnings per share 1.6 pence). Capital and reserves at the end of the year were £350.4 million (2001: £421.5 million). The retained loss of £61.5 million would be transferred to reserves. The Group's accounting policies can be found on pages 42 and 43.

### Profit appropriations

No dividends were paid in respect of the Ordinary capital relating to the period under review. It is not proposed to pay a final dividend. The proposed dividend on Preference capital is £2.1 million.

### Policy on the payment of creditors

The Company's policy in relation to its suppliers is, where possible, to settle terms of payment when agreeing the terms of the transaction and to abide by those terms, provided that it is satisfied that the supplier provided the goods and services in accordance with the agreed terms and conditions. The Company and its subsidiaries do not follow any one code or standard on payment practice due to the diverse nature of the global markets in which the Group operates.

The number of days' purchases outstanding for payment by the Company at the end of the year was 36 days and for the Group was 53 days.

### Research and development

The spend on research and development was £20.0 million during the year (2001: £19.0 million).

### Personnel

Details of the Company's and the Group's personnel policies and employee involvement are disclosed on page 33.

### Employee share and share option schemes

The Company operates a number of employee share and share option schemes. Under the rules of the employee and executive share option schemes, 881 employees have options over the Company's Ordinary shares. Details of the outstanding options are given on page 62. In addition 483 USA employees are currently participating in the US Employee Share Purchase Plan.

### Directors

All those who served as Directors throughout the year under review are listed on pages 26 and 27. In addition, Mr D C Davies and Mr I P Norris were Directors at the beginning of the year but resigned on 31 March 2002 and 9 October 2002 respectively. Mr N R Young was appointed a Director on 9 April 2002 and Mr W E Macfarlane was appointed a Director on 9 October 2002. Mr W D Knowlton was appointed a Director on 9 December 2002.

The details of those directors who will be offering themselves for re-election at the forthcoming Annual General Meeting in June will be set out in the circular to shareholders which will be posted in May 2003.

Details of the background and experience of all the Directors and details of Board Committees on which they serve can be found on pages 26 and 27.

### Donations

Morgan companies made the undermentioned charitable donations.  
No political donations have been made.

United Kingdom    £91,000  
Overseas            £82,463

### Substantial shareholdings

The Directors have been advised of the following holdings representing 3% or more of the issued Ordinary share capital of the Company as at 10 March 2003, the latest possible date prior to the publication of these financial statements:

Company	Shares	%
AXA S.A.	32,612,706	14.06
Aviva plc	11,310,907	4.88
Classic Fund Management A.G.	8,170,488	3.52
Legal & General Investment Management Limited	7,053,352	3.04
Schroder Investment Management Limited	25,677,095	11.07

### Auditors

KPMG Audit plc have expressed their willingness to continue in office and a resolution for their reappointment will be proposed at the forthcoming Annual General Meeting.

### Annual General Meeting

The Annual General Meeting of the Company will be held on Friday 6 June 2003 at the Hotel Intercontinental, One Hamilton Place, Hyde Park Corner, London, W1. A circular will be sent to shareholders in May incorporating the Notice of the Annual General Meeting and detailing any special business to be transacted at that time.

By Order of the Board

**David Coker** Secretary

11 March 2003

Morgan House, Madeira Walk, Windsor, Berkshire SL4 1EP.  
Registered in England, No. 286773

## Corporate governance

### Statement by the Directors on compliance with the Combined Code relating to Corporate Governance

The Board of Directors of the Company confirms that throughout the year ended 4 January 2003 the Company has been in compliance with the provisions set out in Section 1 of the Principles of Good Governance and Code of Best Practice issued by the Financial Services Authority (the 'Combined Code') and the Internal Control Guidance for Directors on the Combined Code. In addition, in 2002, the Board considered and where appropriate implemented the guidelines on Corporate Social Responsibility ('CSR') issued by the Association of British Insurers in October 2001, and takes full responsibility for CSR and explicitly includes it in its risk management process. The Board notes Derek Higgs' Review of the Role and Effectiveness of non-executive Directors and Sir Robert Smith's Report and Proposed Combined Code Guidance for Audit Committees, and is considering their recommendations. The Board maintains a Corporate Governance Manual which is reviewed and updated annually.

The Directors, through the Executive and Audit Committees, confirm that they have carried out a review of the effectiveness of the system of internal financial control as it operated during the year in accordance with existing regulations.

Information on how the Company has applied the principles of the Combined Code and the ABI guidelines are included in this section on Corporate Governance, in the review of CSR and in the Report of the Remuneration Committee on pages 33 and 35 respectively.

### The Board

The Board of Directors is shown on pages 26 and 27. It holds regular meetings and met 13 times during 2002. Following the practice which has been in force within the Company for many years, the roles of Chairman and Group Chief Executive are separate. In addition to the Chairman, the Board currently comprises four executive Directors and five non-executive Directors. All of the non-executive Directors, with the exception of the Chairman, are deemed by the Company to be independent. These independent non-executive Directors do not participate in share schemes and bonuses nor qualify for pension benefits. The Chairman was awarded options and other benefits whilst he was an executive Director of the Company in accordance with share scheme rules. Since his appointment as a non-executive Director in 1998, he has not been entitled to participate in any further share scheme grants to which the executive Directors may be entitled.

Candidates for appointment as a Director, having regard to the structure and balance of the Board, are considered by the Nominations Committee. The re-election of any individual Director at an Annual General Meeting is also considered in each case and is recommended by the Board to shareholders in the circular sent to them in the Notice of Meeting. The Company amended its Articles of Association at its Annual General Meeting in 2001 so that every Director must now be re-elected every three years.

The Board has named Sir Clive Whitmore as the senior independent Director.

There is a schedule of matters specifically reserved for the Board and a formal agenda for each meeting, with any Director able to request items to be added. In 2002 the issue of CSR was added to the schedule of matters. The Directors have access to the advice and services of the Company Secretary who is also responsible for ensuring that Board procedures are followed, and that applicable rules and regulations are observed. The Directors may also seek independent professional advice at the Company's expense in connection with their duties as Directors.

### Board Committees

The principal standing committees appointed by the Board of Directors are:

#### *Audit*

Membership consists of Dr E B Farmer, Sir Clive Whitmore, Mr D C Godwin, Mr L Kylberg, and Sir Alan Cox who is the Committee Chairman. The Committee has the power to, and does, request the attendance at meetings of any Director, auditor or member of management as may be considered appropriate by the Chairman of the Committee. The Committee also meets with the auditors without the presence of executive Directors or other members of management. It meets at least twice per annum, and did so in 2002, to review the scope and findings of the Company's auditors and to review a wide range of financial matters including annual and half year profit figures, financial statements and accompanying reports prior to their submission to the Board, thereby ensuring the integrity of the financial information reported to shareholders. It met in 2003 to review the 2002 accounts.

#### *Remuneration*

Membership consists of Sir Alan Cox, Mr D C Godwin, Mr L Kylberg, and Sir Clive Whitmore who is the Committee Chairman. The Committee is assisted in its duties by the Group Chief Executive, the Company Secretary and the Director of Group Personnel, none of whom take part in any discussion of their own remuneration or vote on any resolution. The Committee also has the power to request, for all or part of any meeting, the attendance of any Director or member of management as may be considered appropriate by the Chairman of the Committee. The Committee reviews contracts and authorises the remuneration, performance-related and discretionary bonuses (including performance targets) and other benefits of the executive Directors. As detailed in the Report of the Remuneration Committee, the Company's intention is that by the Annual General Meeting to be held in 2004 all executive Directors will be on 12 months' notice of termination.

Awards are granted by this Committee under the Company's various share and share option schemes. The Committee also sets relevant criteria for such schemes. During 2002 this Committee met on three occasions. The Report of the Remuneration Committee, which includes details of Directors' remuneration and Directors' interests in options and shares is set out on pages 35 to 39.

#### *Nominations*

Membership consists of Dr E B Farmer as Chairman, Sir Clive Whitmore, Sir Alan Cox, Mr L Kylberg and Mr D C Godwin. The Committee has the power to request the attendance of any other Director or member of management, for all or part of any meeting, as may be considered appropriate by the Chairman.

The Committee is responsible for identifying and nominating executive and non-executive candidates for approval by the Board to fill vacancies as and when they arise, and to put in place succession plans in particular for the Chairman and Chief Executive. Recruitment consultants are used to assist in providing a shortlist of candidates who then meet with the Committee. In addition, the Committee will review the Board structure, size and composition and from time to time make any relevant recommendations to the Board.

## Corporate Social Responsibility

The Board believes good governance of a company includes social and ethical awareness, and the management of the Company's impact upon the environment. The Company's policy and procedures to ensure this are described in the separate section, CSR, and as described below, CSR matters as well as being on the Board's schedule of matters are included in the Company's internal control and risk management processes.

### Internal control

The Board of Directors has overall responsibility for establishing and maintaining the Group's system of internal controls and for reviewing their effectiveness. The Directors have delegated the establishment and implementation of the system to the Executive Committee and the monitoring to the Executive and Audit Committees.

The Group operates under a system of controls that has been developed over time to meet its needs. It has an established internal control framework which is appropriately monitored and supported and complements the Group's management structure. The system is also designed to manage, rather than eliminate, risk and to provide reasonable (but not absolute) assurance against material misstatement or loss. The system is also designed to address key business and financial risks, and for 2003 is planned to explicitly include CSR. The main features of the formal system for assessing the potential risks to which the Group is exposed are summarised below.

#### *Financial reporting*

A detailed budgeting system for each global business exists with an annual consolidated budget reviewed and approved by the Board. The businesses present their revenue and capital expenditure budgets to the Executive Committee for approval. The monthly comparison of actual and forecast is considered, including cash flows, against budget and the previous year. There is half yearly external reporting of the Company's results. The interim statement is reviewed by the auditors.

#### *Monitoring performance*

There are monthly meetings of the Executive Committee and regular meetings of the Board. Global business board meetings are also held regularly within the businesses to review performance. These meetings now include CSR as an agenda item. Regular presentations of actual and forecast performance are made to the Executive Committee by the Group's Global Business Presidents. Regular site visits are made by members of the Executive Committee.

## Risk management

A systematic approach to risk management has been in place since 2000. The Executive Committee looked at an appropriate framework to ensure that the current methods of risk analysis and assessment were adequate for the Board to evaluate the likely overall impact of material risks upon the Group. This risk-based approach, fully operational since 2001, enables the Board to review the existing risk management and internal control processes, including CSR as necessary.

The identification of major business risks is carried out in conjunction with operating management and steps are taken to mitigate or manage any material risks identified. The Board either directly or through the Audit Committee receives regular reports on financial, treasury, taxation, insurance, pension, legal, information systems and CSR risks from the Executive Committee. The Global Business Presidents discuss risk issues at their management meetings and during 2003 it is intended to extend local risk management committees to all geographic regions to help ensure that internal control and risk management is embedded into the Group's operations.

Morgan's risk management process is in line with the Internal Control Guidance for Directors in the Combined Code.

### Risk factors

The business of Morgan is affected by a number of factors, many of which are influenced by macroeconomic trends and are therefore outside the Company's immediate control, although as noted above the identification and management of such risk is systematically assessed. The area where assessment is not yet complete is CSR, as it is still being incorporated into the risk management programme throughout every business unit. As discussed in the CSR section of this report, the area which it has not yet been possible to assess fully relates to the supply chain. It is planned to address this in 2003.

### Communications with shareholders

The importance of entering into a dialogue with major shareholders in the Company is recognised and meetings are held in order to achieve a mutual understanding of objectives. In this respect, the Chief Executive and Finance Director make themselves available to major shareholders as appropriate throughout the year, in particular at the time of the preliminary and interim announcements. The Annual General Meeting is attended by all members of the Board and a representative of the auditors. At the end of the Meeting the results of the proxy voting on all resolutions are provided for all attendees. In addition, following the formal questions which are answered during the Meeting, individual shareholders have an opportunity to meet personally with the Directors and other senior management of the Group. The Company's website is also used for informing existing and potential investors of Morgan's results and other developments. Conferences are arranged on items of particular interest on its future development: in March 2002 a conference on Morgan's growth opportunities from new technologies was held at the Institute of Materials Technology. The presentation is on Morgan's website.

### **Verification of financial controls**

The Company has conducted a formal self-assessment procedure through the completion of an internal control questionnaire by global businesses every three years.

In the intervening years, businesses were required to review and update their responses. The findings were reported to the Executive and Audit Committees.

The Directors believe that the Group's system of internal financial controls is assessed and monitored to an extent which provides reasonable, if not absolute, assurance that the assets of the Group are safeguarded, transactions are authorised and recorded in a correct and timely manner and that such controls would prevent and detect, within a timely period, material errors or irregularities.

Global Financial Controllers have been appointed, and an independent accounting firm has reviewed in detail the internal controls of certain of the Group's larger businesses. The Directors monitor the process of internal audit and, having taken account of the above and having also reviewed the scope of the work carried out by the Group's external auditors, they are not aware of any significant weakness or deficiency in the Group's system of internal financial control. In order to help verify the Group's systems and procedures the Board endorsed the appointment of a Head of Internal Audit. The internal audit process which is being introduced in 2003 will complement the above self-assessment process.

### **Directors' responsibilities for the financial statements**

Company law requires the Directors to prepare accounts for each financial year which give a true and fair view of the state of affairs of the Company and of the Group and of the profit or loss of the Group for that period. In preparing those accounts, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the accounts; and
- prepare the accounts on the going concern basis unless it is inappropriate to presume that the Group will continue in business.

The Directors confirm that the accounts comply with the above requirements.

The Directors are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the Group and to enable them to ensure that the accounts comply with the Companies Act 1985. They are also responsible for safeguarding the assets of the Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

By Order of the Board

**David Coker** Secretary  
11 March 2003

## Corporate social responsibility

In the 2001 Annual Report, the Board referred in its Corporate Governance review to its commitment to social, ethical and environmental best practice. This year it is reporting on these matters under the separate heading, Corporate Social Responsibility (CSR), to illustrate where progress has been made, and the steps taken to ensure improvement in other areas.

As noted within the Corporate Governance section, the Company has taken into account the guidelines issued by the Association of British Insurers in October 2001, and the information on Corporate Social Responsibility increasingly sought by investors. Although the Board takes overall responsibility for CSR, Nigel Howard has specific executive authority.

### Core values

Morgan Crucible's implicit recognition of its social, ethical and environmental responsibilities has a long history. The Company has not yet explicitly summarised these as a statement of core values. It is intended to define an appropriate statement, to help ensure that our employees are fully aware of our values, and to ensure that the policies which stem from these are fully implemented.

### Our people

Morgan's employment policies are designed to ensure equal opportunity and diversity amongst employees, irrespective of sex, race, religion, culture, creed, age, or disability, and to ensure full compliance with the UN guidance on minimum working age. Morgan is in the process of establishing regional Human Resource Councils around the world to monitor these policies.

Employees are encouraged to develop and improve their skills through a variety of training programmes, and through the Six Sigma continuous improvement programme. This programme, introduced in 1999, maintains its momentum: all business units have adopted the Six Sigma principles with the active encouragement of the Director of Group Operations.

In addition to site based training, the Group organises management development programmes which are linked to the succession planning process, and aimed at identifying and developing managerial talent in the Group. As well as encouraging younger employees, Morgan is also proud of its long serving employees. The longest serving, Sidney Waltower, was honoured at last year's AGM for 60 years' service to the Company at Thermal Ceramics, Augusta, Georgia.

Communication with employees is facilitated by the Group-wide and individual company websites and newsletters, and Group-wide communications such as *Morgan News*. A Communication Forum has been established with each global business appointing its own Communications Champion, helping ensure a two-way communication flow.

Morgan supports the Investors in People programme and in 2002 Morganite Electrical Carbon Ltd Wales was awarded the 'Investor of the Year' title for Wales in the People in Business Awards for companies with over 250 employees.

### Environmental and Health and Safety matters

As shown in the sections covering the markets we serve, our technology and products play a significant part in promoting sustainability and energy conservation, and we want to ensure that we minimise the environmental impact of the Group's operations worldwide. In 2001 the Board therefore approved an environmental, health and safety (EHS) policy, to govern and harmonise the EHS performance of the Group worldwide, and to ensure two-way communication on EHS performance with all concerned.

During 2002 the Board reiterated its EHS objectives, which are to achieve significant reductions in specific energy consumption, emissions and water use and to reduce the incidence rate of, and working days lost from, work-related injury and ill health. Such objectives are also aimed at ensuring the health and safety at work of the Group's employees, together with the protection of those who have contact with the Group's operations and products. Ensuring environmental care and compliance with environmental laws and regulations is an integral part of the Group's business processes.

As in previous years, the Board reviewed its EHS policy, the main features of which are shown below:

- to comply with EHS legislation, regulations and other applicable requirements;
- to minimise the environmental impact of historic, current and future operations;
- to conduct operations in such a manner in order to avoid unacceptable risk to human health and safety;
- to supply products that will not present unacceptable risk to human health and safety when used in compliance with product safety communications and common safety practices;
- to establish measurement tools for and continuously monitor EHS performance;
- to set objectives for the continuous improvement of EHS performance.

In September 2001 a Manager, Group Environmental, Health and Safety, was appointed, reporting directly to Nigel Howard who, as noted above, has executive authority for Group environmental, health and safety as part of CSR.

In 2002 internal teams continued the programme of EHS audits of the facilities in the Americas on the regular three year cycle that was established in 1992. In Europe, an external firm of professional environmental engineers is now into the third year of a programme complementary to that operated in the Americas. By the end of 2003, all European facilities are planned to have been covered. During 2002, the first audit in India, also carried out by an external firm, was successfully completed and a programme to cover sites in other parts of the world is under development.

During 2002 a rigorous programme was developed to monitor the actions taken by the facilities to respond to and if necessary remedy the issues raised in the audits. Regular six monthly reports are produced and the progress is monitored by the Group Executive Committee.

Further progress has also been made in establishing the reporting of key EHS performance indicators to establish baseline data across the Group and to enable the Global Business Presidents to monitor EHS performance. The Group plans to consolidate the data in 2003 to set quantified targets for future years.

The Group has also a rigorous EHS due diligence process, well established since 1990, to help ensure that it does not acquire unforeseen liabilities and can properly account for and manage any liabilities that it judges appropriate to accept, or retain in the event of a disposal.

Environmental achievements in 2002 include further progress in achieving ISO 14001 status. The largest of the Advanced Ceramics sites, in Stourport, UK, was accredited in 2002; and one of the largest Carbon sites in the US, at Dunn, expects to achieve ISO 14001 accreditation during 2003. In Magnetics, VAC in Germany is already accredited to ISO 14001, and is working towards it at its plant in Slovakia. This will provide all VAC Europe with ISO 14001 accreditation.

There is continuous upgrading of emission control equipment across the Group and an increased focus on waste savings both in terms of prevention and recycling. This is providing significant financial benefits in some companies. Thermal Ceramics in Augusta, for instance, has implemented a programme to recycle non-fibre waste from its fibre production back into the melt process, resulting in major savings.

In Health and Safety, all aspects of noise, vibration, and ergonomics such as manual handling, have come under closer scrutiny in 2002, through internal and external audits. There has also been progress in the Product Stewardship Programme on airborne fibres which was agreed by the US Refractory Ceramic Fibre Coalition (RCFC), of which Thermal Ceramics is a member, and the Occupational Safety and Health Administration (OSHA).

### **Ethical trading**

Morgan is committed to the highest ethical standards in all aspects of its trading. It reinforced this in 2002 by implementing an anti trust compliance training programme and by the end of 2003 it is intended that all appropriate employees will have completed it.

The nature and geographic spread of Morgan Crucible's business means that it has a variety of direct and indirect suppliers across the globe. Therefore it has not yet been possible to confirm that all comply with Morgan's CSR policies, although the Board is not aware of any areas of non-compliance. As noted in the section on Corporate Governance, it is planned to further address this in 2003.

### **Community involvement**

Morgan has always had a strong sense of community responsibility and encourages its businesses around the world to participate in activities which enhance the relationship between the business and the community within which it operates. As noted in the Directors' Report, the total given to charity in 2002 was £173,463. This was in addition to the personal contributions by Morgan employees, who give their time as generously as their money.

There are numerous local initiatives in place, including support for local schools and churches, sponsorship, and fundraising activities. The Group has long been a supporter of the Outward Bound Trust, an organisation that offers and runs adventure based experiences for young people as part of their development. In 1998 Morgan established a bursary, wholly dedicated to funding an annual one week outward bound experience for 36 children who would not normally have this opportunity. In 2002 a three way relationship was established between Morgan, the Outward Bound Trust and Barnardo's (one of the oldest children's charitable trusts in the UK). The aim was to focus the bursary on providing the adventure opportunity for a number of disadvantaged young people who are supported by Barnardo's. The first event, held at the Outward Bound Centre in Aberdovey in Wales, was very successful and the forerunner to further programmes.

### **CSR verification**

Morgan carried out an extensive internal review of its CSR policies and procedures in 2002 with support from an external advisor, and is acting on the resulting conclusions as to areas where policies and procedures could be strengthened. The Board recognises that once it has made further progress in CSR across the Group, external verification may be appropriate. Meanwhile it makes use of professional advice for environmental and health and safety issues, as required.

By Order of the Board

**Nigel Howard** Deputy Chief Executive Officer  
11 March 2003

# Remuneration report

## Composition of the Remuneration Committee

The members of the Committee are Sir Alan Cox, Mr D C Godwin and Mr L Kylberg, all of whom are independent, under the Chairmanship of Sir Clive Whitmore who is the senior independent non-executive Director. The biographies of the Committee members are listed on pages 26 and 27.

## Compliance

The principles applied by the Remuneration Committee in forming their policy for 2002 were consistent with the best practice provisions of the Principles of Good Governance and Code of Best Practice issued by the Financial Services Authority ('the Combined Code') and the Company has throughout the year under review complied with the provisions set out in Section 1 of the Combined Code.

## Policy on remuneration of executive Directors and senior executives

### a) Total level of remuneration

The Remuneration Committee aims to ensure that remuneration packages offered are competitive and designed to attract, retain and motivate executive Directors and senior executives of the right calibre in order to run the Company successfully. The Committee consults with the Chief Executive and has access to external remuneration consultants, which enables appropriate comparisons to be made.

The intention is to ensure rewards are linked to corporate and individual performance. This policy takes account of the decentralised and differing nature of the Morgan businesses in addition to reflecting the technical challenges which the Company faces in a global market place. Performance is assessed against the performance of the relevant global business in respect of the remuneration of senior Global Business Presidents and against the performance of the Group for the Executive Committee.

### b) The main components

The Company has in place performance related reward policies with measurable targets. These are designed to reduce the proportion of fixed remuneration and provide for a growing element of 'at risk' pay, which is only available when good results are achieved. In this way, there is a strong link between reward and performance which should be beneficial to shareholders, employees and the Company. The targets are set on the basis of being challenging performance criteria reflecting the Company's objectives.

The main components are:

#### i) Basic salary

Basic salary for each executive Director is determined by the Remuneration Committee, taking into account the performance of the individual and information taken from independent sources covering 330 of the FTSE 350 companies and some 2,000 directors on the rates of salary for similar jobs in a selected group of comparable companies. The Committee, which has not appointed a particular organisation to provide advice, relies on specific comparator information taken from a relevant Towers Perrin Executive pay review and also from the Incomes Data Services Directors Pay Reports. Given the Group's position a salary review for Directors and senior executives was deferred from 1 January 2002 until 1 July 2002 when it was again deemed inappropriate for Directors to receive any increases and their next review will be in July 2003. Consequent upon the resignation of Mr I P Norris through ill-health, Mr N G Howard was awarded an increase following his appointment as Acting Chief Executive Officer.

#### ii) Annual bonus

The targets for annual bonus are set by the Remuneration Committee balancing the short term and longer term. Superior performance is encouraged by providing challenging performance goals, which must be achieved before the maximum bonus is payable. The bonus scheme includes individual objectives and targets linked to the Group's performance. The Committee believes this 'at risk' element of reward closely relates shareholder and employee ambitions and has chosen the criteria below to reflect such return.

The annual bonus is not pensionable.

As the Group had embarked on a restructuring plan during 2002 it was agreed that it would be inappropriate to implement a bonus scheme during the year. A bonus scheme has been implemented for 2003. This scheme is designed to reward the achievement of 'stretch' targets and foster the continued development of inter-global business co-operation. It is focused upon rewarding outstanding performance in operating profit and free cash flow. It provides the opportunity of earning a bonus of up to 50% of basic salary with 75% of that opportunity being provided through operating profit performance and 25% of the opportunity deriving from free cash flow.

Operating profit for the purposes of the scheme is defined as the profit before tax, net finance charges, goodwill amortisation and all exceptional items at the discretion of the Remuneration Committee. Free cash flow is the operating profit as adjusted for depreciation and amortisation, movement of working capital and provisions, capital expenditure, proceeds and profit/loss on sale of fixed assets, tax and net finance charges but before dividend payments and other such payments at the discretion of the Remuneration Committee.

The mechanism for payment will be based as follows:

Operating profit	% of salary payable
125% of 2002 actual	7.50
Budget 2003	18.75
125% of 2003 budget	37.50
Free cash flow	
125% of 2002 actual	2.50
Budget 2003	6.25
125% of 2003 budget	12.50

In addition to this scheme, a maximum of 10% of salary will be available on the achievement of personal objectives. This criteria is applicable to each of the executive Directors.

The above is considered to be appropriate because it will align executive reward with shareholder return.

*iii) Share schemes*

The Company believes that share ownership by the executive Directors and senior executives strengthens the link between their personal interests and those of the shareholders. Executive share options are not granted at a discount at the time of grant and must be held for a minimum period of three years. Options granted since 1996 to senior and middle management personnel have performance criteria for the exercise of those options based on the growth in the Company's earnings per share over the three year period following grant and will require the growth in earnings per share to outperform inflation by at least 6% in aggregate over that period. No executive share options were granted to Directors in 2002 with the exception of Mr W D Knowlton and Mr N R Young who received options on appointment as shown below. The options granted for each of the Directors which are subject to the above criteria were as follows:

Executive Directors	Options granted	Exercise price	Date of grant
Mr W D Knowlton	1,750,000	59.5p	10.12.02
Mr N R Young	150,000	178.5p	22.05.02

Full details of all options in issue are shown on page 38.

Options issued to Directors, as shown in the share option table on page 38, on 25 October 1993 do not have performance criteria, which was common practice at the time. These options will expire, unless exercised, on 24 October 2003.

Those Directors who received options under the Company employee sharesave scheme is shown in the table below. No performance conditions apply to those options.

The Morgan General Employee Benefit Trust ('the Trust'), relating to the US, holds 142,898 Ordinary shares in the Company and the independent trustees can at their discretion utilise such shares in order to satisfy any obligations which may exist under employee share schemes.

A total of 336,064 shares are held by the Morgan General Employee Trust.

*c) Companies used for comparison*

In assessing all aspects of pay and benefits, Morgan compares the packages offered by similar companies. These companies are chosen having regard to:

- i the size of the company – its turnover, profits and number of people employed;
- ii the diversity and complexity of its businesses;
- iii the geographical spread of its businesses; and
- iv its growth and expansion profile.

*d) Company policy on contracts of service*

Mr W D Knowlton, who joined the Company in December 2002, and was appointed Chief Executive Officer on 6 January 2003 has a two-year service contract which will reduce to one year with effect from the AGM to be held in 2004. Likewise, Mr W E Macfarlane who was appointed a Director on 9 October 2002 has a two-year service contract which will also reduce to one year with effect from the AGM to be held in 2004. All Directors will then be on a one-year notice period from that date. Morgan will continue to apply the principle of mitigation to any payment of compensation on termination. The following table shows details of the contracts currently in place for Directors who have served during the year.

Name	Date of contract	Unexpired term	Notice period	Provisions for compensation
Mr D C Davies	10.02.00	Resigned	N/A	Nil
Mr W D Knowlton	04.12.02	3 yrs 4 mths	2 yrs*	Notice period
Mr N G Howard	15.03.96	2 yrs 4 mths	2 yrs*	Notice period plus pension contribution
Mr W E Macfarlane	09.10.02	5 yrs 0 mths	2 yrs*	Notice period plus pension contribution
Mr I P Norris	17.12.97	Resigned	N/A	See schedule of Directors' benefits on page 39
Mr N R Young	08.04.02	10 yrs 3 mths	2 yrs**	Notice period

\*With effect from AGM to be held in 2004 notice periods reduce to one year.

\*\*The notice period for Mr N R Young reduces to one year with effect from the AGM in 2003.

*e) Company pensions policy regarding executive Directors*

Morgan's executive Directors participate in The Morgan Group Senior Staff Pension and Life Assurance Scheme which is a contributory, Inland Revenue approved, final salary, funded occupational pension scheme. Its main features are:

- i a normal pension age of 60;
- ii pension at normal pension age of two-thirds of final pensionable salary, subject to completion of 15 years' service for those who commenced their employment with the Group on or before 17 March 1987 and 20 years in respect of post March 1987 employment;
- iii life assurance cover of four times basic salary;
- iv dependant's pension on death.

Pensionable salary is the member's basic salary averaged over the three years prior to retirement. All plan benefits are subject to Inland Revenue limits.

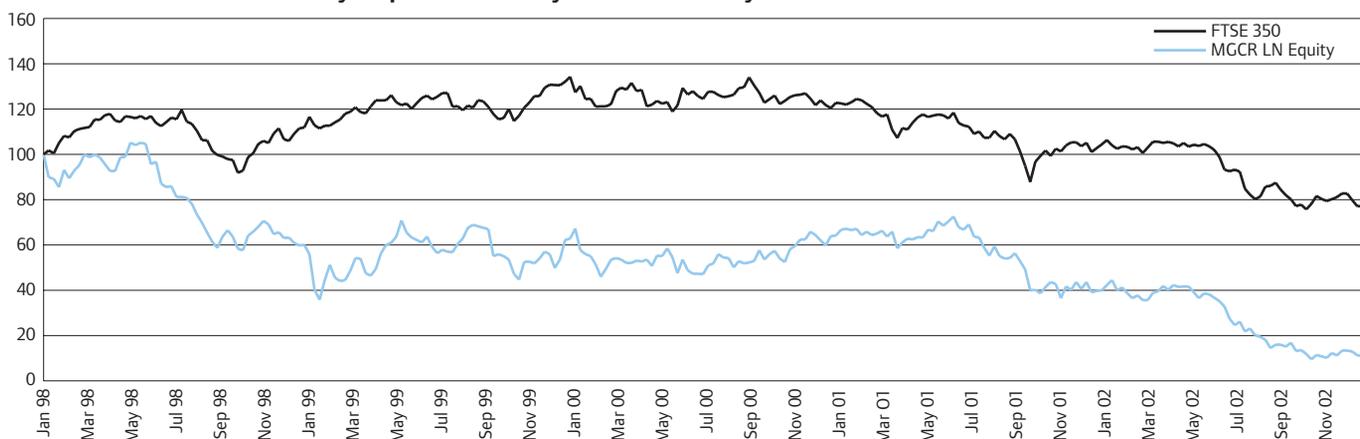
In addition, where an executive Director's benefits in the approved scheme are limited by the 'Earnings Cap' imposed by the Finance Act 1989, the Director may participate in the Morgan Additional Retirement Scheme which is a non-contributory, Inland Revenue unapproved, defined contribution, occupational pension scheme. This scheme provides a tax-free lump sum retirement benefit at a normal pension age of 60, derived from employer contributions based on the approved scheme's pensionable salary. However as the scheme is unapproved by the Inland Revenue, employer contributions are treated as 'benefits-in-kind' for income tax purposes. The Director may also elect to receive life assurance cover of four times basic salary in excess of the 'Earnings Cap', the cost being deducted from the employer contribution.

Mr W D Knowlton who is not a member of the above schemes receives a pension allowance derived from employer contributions based notionally on the approved scheme pensionable salary.

*f) Total shareholder return*

The following graph charts the total cumulative shareholder return for the five-year period to 4 January 2003:

**Shareholder return for the five-year period 9 January 1998 to 4 January 2003**



The index selected was the FTSE 350 as it was considered to be a broad comparator group of companies.

## Directors' interests

Directors' interests in the Ordinary share capital of the Company are as follows:

	As at 4 January 2002 or date of appointment	DRIP <sup>†</sup> shares received 7 January 2002	As at 4 January 2003 or date of resignation
Sir Alan Cox	19,410	–	36,060
Mr D C Davies	26,000	–	26,000
Dr E B Farmer	51,936	1,783	73,719
Mr D C Godwin	35,000	–	85,000
Mr N G Howard	101,973	3,500	125,473
Mr W D Knowlton	20,000	–	100,000
Mr L V Kylberg	11,671	401	32,072
Mr W E Macfarlane	21,436	–	23,436
Mr I P Norris	79,857	2,740	82,597
Mr R N Perle	4,758	98	4,856
Sir Clive Whitmore	2,701	92	2,793
Mr N R Young	–	–	22,500

<sup>†</sup>DRIP: Dividend Reinvestment Plan.

The following Directors purchased shares at the price shown during the year:

Name	Date	Number of shares	Price
Sir Alan Cox	08.11.02	16,650	60p
Dr E B Farmer	07.11.02	20,000	59.5p
Mr D C Godwin	08.11.02	50,000	57p
Mr N G Howard	07.11.02	20,000	60p
Mr W D Knowlton	07.12.02	80,000	50p
Mr L V Kylberg	08.11.02	20,000	58p
Mr N R Young	20.05.02	6,000	179.22p
	07.11.02	16,500	60p

Further, Dr E B Farmer holds 860 7.5p (net) Cumulative Convertible Redeemable Third Preference shares of £1 each (2001: 860 shares) in the Company.

The Auditors are required to report on the following information in this section of the report.

## Directors' share options

	At 5 January 2002	Granted	Exercised	Lapsed	At 4 January 2003	Exercise price	Earliest date of exercise	Expiry date
Mr D C Davies	150,000	–	–	150,000	–	248.00p	05.06.03	04.06.10
Dr E B Farmer	141,570	–	–	–	141,570	320.90p	25.10.96	24.10.03
Mr N G Howard*	46,103	–	–	–	46,103	320.90p	25.10.96	24.10.03
	–	15,281	–	–	15,281	61.84p	01.12.05	31.05.06
Mr W D Knowlton	–	1,750,000	–	–	1,750,000	59.50p	10.12.05	09.12.12
Mr W E Macfarlane*	25,000	–	–	–	25,000	320.90p	25.10.96	24.10.03
	–	15,281	–	–	15,281	61.84p	01.12.05	31.05.06
Mr I P Norris	65,393	–	–	–	65,393	320.90p	25.10.96	24.10.03
Mr N R Young	–	150,000	–	–	150,000	178.50p	22.05.05	21.05.12

Mr N G Howard and Mr W E Macfarlane were granted options on 1 December 2002 under the Morgan Sharesave Scheme.

Mr W D Knowlton will be granted the following options on the dates indicated at an option price being the mid-market price at the close of business on the last business day before the day of grant:

1 January 2004 – 250,000

1 January 2005 – 250,000

1 January 2006 – 250,000

### Schedule of Directors' pay and benefits

Executive Directors	Basic salary £	Annual bonus £	Other benefits £	2002 Total emoluments £	Company pension contribution £	2002 Total remuneration £	2001 Total remuneration £
Mr D C Davies**	65,625	–	6,285	71,910	32,221	104,131	370,046
Mr N G Howard	269,375	–	30,390	299,765	80,812	380,577	364,432
Mr W D Knowlton	30,237	–	–	30,237	–	30,237	–
Mr W E Macfarlane	61,750	–	4,424	66,174	34,307	100,481	–
Mr I P Norris*	341,250	–	27,189	368,439	102,375	470,814	461,503
Mr N R Young	183,547	–	14,595	198,142	34,910	233,052	–
2001 Total**	951,784	–	82,883	1,034,667	284,625	1,319,292	–
	866,250	–	62,523	928,773	267,208	1,195,981	1,195,981

\*Highest paid Director. Mr I P Norris resigned as a Director on 9 October 2002. The above figures include payments made to him after his resignation. Following Mr Norris's resignation through ill-health it was agreed that the sum of £341,250 be paid to him during 2003.

\*\*Mr D C Davies resigned as a Director on 31 March 2002.

Mr N R Young, Mr W E Macfarlane and Mr W D Knowlton were appointed Directors on 8 April, 9 October, and 9 December 2002 respectively.

The other benefits referred to above include private medical insurance, the provision of a company car and fuel.

Other than the payment indicated above for Mr I P Norris, there were no payments made as compensation for loss of office.

### Pension benefits earned by the Directors

The executive Directors listed below participate in The Morgan Group Senior Staff Pension and Life Assurance Scheme which is a contributory, Inland Revenue approved, final salary, occupational pension scheme.

Executive Directors	Accrued benefit at 4 January 2003 £	Increase in accrued benefits excluding inflation (A) £	Increase in accrued benefits including inflation £	Transfer value of (A) less Directors' contributions £	Transfer value of accrued benefits at 5 January 2002 £	Transfer value of accrued benefits at 4 January 2003 £	Increase/ (decrease) in transfer value less Directors' contributions £
Mr D C Davies††	6,563	763	788	2,901	35,977	37,229	(179)
Mr N G Howard	174,358	10,611	13,348	125,609	2,141,892	2,326,846	168,791
Mr I P Norris	235,578	12,635	16,361	203,043	3,544,815	4,167,108	601,818
Mr W E Macfarlane†††	16,125	1,099	1,163	9,279	146,451	157,807	9,898
Mr N R Young	2,150	2,150	2,150	7,084	–	11,458	7,084

††Mr D C Davies was also a member of the Morgan Additional Retirement Scheme (see above). The sum of £25,066 paid to the Morgan Additional Retirement Scheme in respect of Mr D C Davies is included in the Company pension contributions shown above. In addition Mr N R Young and Mr W E Macfarlane are members of the Morgan Additional Retirement Scheme and since their appointment as Directors £13,040 and £27,018 respectively have been paid to the scheme during 2002.

†††Mr W E Macfarlane is entitled to a pension benefit of 60% of his pensionable salary at retirement.

#### Notes to pension benefits

- The pension entitlement shown is that which would be paid annually on retirement based on service to the end of the year.
- The transfer value has been calculated on the basis of actuarial advice in accordance with Actuarial Guidance Note GN 11, less the Director's contributions.
- Members of the scheme have the option to pay Additional Voluntary Contributions. Neither the contributions nor the resulting benefits are included in the above table.

### Non-executive Directors

Non-executive Directors receive a basic fee plus reimbursement of expenses incurred in attending Board, strategy and other meetings. None of the non-executive Directors has a service contract with the Company. The non-executive Directors do not participate in any of the incentive, share or share option plans. The options held by Dr E B Farmer were awarded to him at the time when he was an executive Director of the Company. No further awards have been made to him since he was appointed a non-executive Director.

The fee payable in respect of services provided by each of the non-executive Directors other than the Chairman and who are listed on page 27 and who served throughout the year was £25,000 per annum during 2002. The fee payable in respect of the services provided by Dr E B Farmer, together with the provision of a company car, amounted to £191,373. There are no notice periods for non-executive Directors nor any provisions for payments in lieu of notice.

There are no awards outstanding under the Company's Long Term Incentive Plan.

There has been no change in the interests of the Directors between 4 January 2003 and 10 March 2003.

The share price at the year end was 57 pence and the high and low during the year were 222 pence and 42 pence respectively.

**Sir Clive Whitmore** Chairman, Remuneration Committee

For and on behalf of the Board  
11 March 2003

## Shareholder information

### Analysis of shareholdings as at 4 January 2003

		Number of shareholders	% of total	Number of shares	% of share capital
Size of holding	1–2,000	9,478	75.18	6,285,240	2.71
	2,001–5,000	1,980	15.70	6,252,141	2.69
	5,001–10,000	494	3.92	3,558,611	1.53
	10,001–50,000	368	2.92	7,946,286	3.43
	50,001–100,000	73	0.58	5,199,183	2.24
	100,000 and above	214	1.70	202,752,099	87.40
			12,607	100	231,993,560
Holding classification	Individuals	10,366	82.22	15,393,426	6.64
	Nominee companies	2,032	16.14	212,613,990	91.65
	Insurance	2	0.01	1,055,925	0.45
	Trust (pension funds etc)	22	0.17	147,917	0.06
	Others	185	1.46	2,782,302	1.2
			12,607	100	231,993,560

### Key dates

Dividends	Subject to the relevant detailed terms and approvals of the Board of Directors where applicable	
	5.5% Cumulative First Preference shares of £1 each and 5.0% Cumulative Second Preference shares of £1 each	1 October 2003 and 1 April 2004
	7.5p (net) Cumulative Convertible Redeemable Third Preference shares of £1 each	7 July 2003
Annual General Meeting		6 June 2003
Conversion rights and final redemption	7.5p (net) Cumulative Convertible Redeemable Third Preference shares of £1 each	7 July 2003
	These Third Preference shares are convertible for the final time on 7 July 2003 at the rate of 36.3636 Ordinary shares for every 100 Third Preference shares. Any Third Preference shares in issue on 31 July 2003 will be redeemed for £1 each	
Financial results	The interim results are issued in September with the Report and Accounts for the year normally posted in April	

### Other information

Capital gains tax	The market values of quoted shares and stocks at 31 March 1982 were:	
	Ordinary shares of 25 pence each	122.5 pence
	5.5% Cumulative First Preference shares of £1 each 5.0% Cumulative Second Preference shares of £1 each	30.5 pence 28.5 pence
	For capital gains tax purpose, the cost of Ordinary shares is adjusted to take account of rights issues. Any capital gains arising on disposal will also be adjusted to take account of indexation allowances. Since the adjustments will depend on individual circumstances, shareholders are recommended to consult their professional advisers	
Share price	The price of the Company's Ordinary shares can be obtained through the Financial Times Cityline Service Telephone: 0906 003 3416 or 0906 843 3416 (calls will be charged at premium rates)	

### Company details

Registered office	Morgan House, Madeira Walk, Windsor, Berkshire SL4 1EP Telephone: 01753 837000 Fax: 01753 850872 Website: www.morgancrucible.com	Registered in England No 286773
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### Company registrars

	Capita Registrars, The Registry, 34 Beckenham Road, Beckenham, Kent BR3 4TU Telephone: 0870 162 3100 Website: www.capitaregistrars.com
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## Report of the auditors

### **Independent auditors' report to the members of The Morgan Crucible Company plc**

We have audited the accounts on pages 42 to 66. We have also audited the information in the Directors' remuneration report that is described as having been audited.

This report is made solely to the Company's members, as a body, in accordance with Section 235 of the Companies Act 1985. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditors' report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

### **Respective responsibilities of Directors and auditors**

The Directors are responsible for preparing the Annual Report and the Directors' remuneration report. As described on page 32, this includes responsibility for preparing the accounts in accordance with applicable United Kingdom law and accounting standards. Our responsibilities, as independent auditors, are established in the United Kingdom by statute, the Auditing Practices Board, the Listing Rules of the Financial Services Authority, and by our profession's ethical guidance.

We report to you our opinion as to whether the accounts give a true and fair view and whether the accounts and the part of the Directors' remuneration report to be audited have been properly prepared in accordance with the Companies Act 1985. We also report to you if, in our opinion, the Directors' report is not consistent with the accounts, if the Company has not kept proper accounting records, if we have not received all the information and explanations we require for our audit, or if information specified by law regarding Directors' remuneration and transactions with the Group is not disclosed.

We review whether the statement on pages 30 to 32 reflects the Company's compliance with the seven provisions of the Combined Code specified for our review by the Listing Rules, and we report if it does not. We are not required to consider whether the Board's statements on internal control cover all risks and controls, or form an opinion on the effectiveness of the Group's corporate governance procedures or its risk and control procedures.

We read the other information contained in the Annual Report, including the corporate governance statement and the unaudited part of the Directors' remuneration report, and consider whether it is consistent with the audited accounts. We consider the implications for our report if we become aware of any apparent misstatements or material inconsistencies with the accounts.

### **Basis of audit opinion**

We conducted our audit in accordance with Auditing Standards issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the accounts and the part of the Directors' remuneration report to be audited. It also includes an assessment of the significant estimates and judgements made by the Directors in the preparation of the accounts, and of whether the accounting policies are appropriate to the Group's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the accounts and the part of the Directors' remuneration report to be audited are free from material misstatement, whether caused by fraud or other irregularity or error. In forming our opinion we also evaluated the overall adequacy of the presentation of information in the accounts and the part of the Directors' remuneration report to be audited.

### **Opinion**

In our opinion:

- the accounts give a true and fair view of the state of affairs of the Company and the Group as at 4 January 2003 and of the loss of the Group for the year then ended; and
- the accounts and the part of the Directors' remuneration report to be audited have been properly prepared in accordance with the Companies Act 1985.

### **KPMG Audit Plc**

Chartered Accountants  
Registered Auditor

11 March 2003

8 Salisbury Square  
London  
EC4Y 8BB

## Accounting policies

### Basis of preparation

The accounts are prepared under the historical cost convention, modified to include the revaluation of certain land and buildings, and comply with all applicable accounting standards. The following principal accounting policies have been applied consistently in dealing with items which are considered material in relation to the Group's accounts. The accounts adopt FRS17 *Retirement Benefits* in line with the transitional timetable laid down by the Standard. FRS19 *Deferred Tax* has been adopted in full and required a restatement of prior years results as described in note 23. Compliance with FRS19 has increased the 4 January 2002 deferred tax provision by £21.8 million (as note 23). There is no impact on the tax charge for the year ended 4 January 2002 arising from the change.

The balance sheets for the current year and the comparative period have been drawn up as at 4 January 2003 and 4 January 2002 respectively. The profit and loss, cash flow and total recognised gains and losses statements are for the years ended 4 January 2003 and 4 January 2002. For convenience these periods and balance sheet dates are referred to in the body of the accounts as '2002' and '2001' respectively.

### Basis of consolidation

The Group accounts include the accounts of the Company and its subsidiary undertakings made up to 4 January 2003. Unless otherwise stated, the acquisition method of accounting has been adopted. Under this method, the results of subsidiary undertakings acquired or disposed of in the year are included in the consolidated profit and loss account from the date of acquisition.

Results of material businesses discontinued or sold are included in the results for the year up to the date of relinquishing control and analysed as discontinued operations; the comparatives are restated to reflect those businesses as discontinued. The surplus over the net asset value and the write-off of goodwill is shown as an exceptional item.

Under Section 230(4) of the Companies Act 1985 the Company is exempt from the requirement to present its own profit and loss account.

### Goodwill

Purchased goodwill (both positive and negative) arising on consolidation in respect of acquisitions before 4 January 1998, when FRS10 *Goodwill and Intangible Assets* was adopted, was written off to reserves in the year of acquisition. When a subsequent disposal occurs any related goodwill previously written off to reserves is written back through the profit and loss account as part of the profit or loss on disposal. There is a corresponding credit to reserves for any goodwill which had already been written off to reserves on acquisition.

Purchased goodwill (representing the excess of the fair value of the consideration given and associated costs over the fair value of the separable net assets acquired) arising on consolidation in respect of acquisitions since 4 January 1998 is capitalised. Positive goodwill is amortised to nil by equal annual instalments over its estimated useful life, normally 20 years.

Negative goodwill arising on consolidation in respect of acquisitions since 4 January 1998 is included within fixed assets and released to the profit and loss account in the periods in which the fair values of the non-monetary assets purchased on the same acquisition are recovered, whether through depreciation or sale.

On the subsequent disposal or termination of a business acquired since 4 January 1998, the profit or loss on disposal or termination is calculated after charging/crediting the unamortised amount of any related positive goodwill/negative goodwill.

In the Company's financial statements, investments in subsidiary undertakings, associates and joint ventures are stated at cost less any impairment in value.

Goodwill arising on shares of associated undertakings and joint ventures acquired up to 4 January 1998 have been written off to reserves. Goodwill arising on subsequent acquisitions is capitalised.

### Foreign currencies

The results and cash flows of overseas subsidiary undertakings are translated using average exchange rates for the year. The assets and liabilities of overseas subsidiary undertakings at the balance sheet date are translated at year end rates of exchange. All exchange differences arising on consolidation have been dealt with through reserves. Gains and losses on the disposal of businesses are calculated using exchange rates applicable on the date that the transaction took place. Exchange differences arising on foreign currency borrowings taken out to hedge against foreign currency assets have been dealt with through reserves, to the extent permitted by SSAP20 *Foreign Currency Translation*.

### Turnover

Turnover represents the invoiced value of sales by Morgan companies to third parties, exclusive of sales taxes, less returns and allowances given in the normal course of trade.

### Depreciation

Depreciation and amortisation are provided to write off the costs less the estimated residual value of assets by equal annual instalments over the expected useful lives of fixed assets. The principal useful lives used for depreciation are:

Buildings	50 years
Plant – Presses, Kilns and Furnaces	10 – 20 years
– Other	10 years
Fixtures	10 – 20 years
Computer Software	3 – 10 years
Motor Vehicles	3 years
Purchased Goodwill	20 years

### **Government grants**

Government grants on capital expenditure are credited to a deferred income account and are released to revenue over the expected useful life of the relevant asset by equal annual instalments. Grants of a revenue nature are credited to income in the period to which they relate.

### **Fixed assets**

Following the introduction of FRS15 *Tangible Fixed Assets* the transitional provisions for revalued land and buildings were adopted. The relevant properties will be carried at the revalued amount and no further revaluations will take place. Additional information can be found in note 13 on page 55.

### **Leasing and hire purchase agreements**

Assets held under finance leases, which are leases where substantially all the risks and rewards of ownership of the asset have passed to the Group, and hire purchase contracts are capitalised in the balance sheet and are depreciated over their useful lives. The capital elements of future obligations under the leases and hire purchase contracts are included as liabilities in the balance sheet.

The interest elements of the rental obligations are charged in the profit and loss account over the periods of the leases and hire purchase contracts and represent a constant proportion of the balance of capital repayments outstanding.

Rentals payable under operating leases are charged in the profit and loss account on a straight line basis over the lease term.

### **Stocks**

Stocks and work in progress have been valued at the lower of cost and net realisable value. For this purpose 'cost' means direct cost and direct expenses including applicable overheads less provisions for obsolescence and for inter-company profit on unsold stocks.

### **Deferred taxation**

In accordance with FRS19, deferred tax is provided on all liabilities where the transactions or events that give rise to an obligation to pay more tax in the future has occurred at the balance sheet date. Deferred tax assets are recognised to the extent that the Directors consider that it is more likely than not that they will be recovered. Deferred tax assets and liabilities have not been discounted.

### **Research and development**

Expenditure on research and development is written off in the year in which it is incurred.

### **Pensions**

Contributions are made to the UK pension schemes in accordance with actuarial advice and are charged to the profit and loss account so as to spread the pension cost over the anticipated period of service of the pension scheme members. The actuarial surpluses on the UK schemes are being spread over the expected remaining service lives of current employees. Contributions and charges to profit and loss in respect of overseas schemes have been determined in accordance with SSAP24 *Accounting for Pension Costs* or local best practice. Where the local best practice is followed, the resulting charge is not materially different from the charge which would arise under SSAP24. Post retirement medical care costs are accounted for on an accruals basis with the estimated actuarial liability being amortised over the average life of the relevant employees.

### **Derivative instruments**

The Group uses derivative instruments from time to time in order to hedge exposure to changes in interest rates and exchange rates. The receipts and payments on interest rate derivatives are recognised over the lifetime of the relevant instrument. Forward foreign exchange contracts are used to give certainty to the value of future foreign currency flows or to the value of foreign currency assets and liabilities. The positions covered by such contracts are translated at the contracted rate of exchange.

### **Cash and liquid resources**

Cash, for the purpose of the cash flow statement, comprises cash in hand and deposits repayable on demand, less overdrafts payable on demand.

Liquid resources are current asset investments which are disposable without curtailing or disrupting the business and are either readily convertible into known amounts of cash at or close to their carrying values or traded in an active market. Liquid resources comprise term deposits of less than one year other than cash.

## Consolidated profit and loss statement

for the year ended 4 January 2003

	Note	2002 Total £m	2001 Restated Total £m
<b>Turnover</b>			
Continuing operations		878.4	990.0
Acquisitions		1.0	–
Discontinued operations		0.9	34.5
<b>Group turnover</b>	2	880.3	1,024.5
Other operating income		3.7	4.0
		884.0	1,028.5
<b>Operating profit before goodwill amortisation and operating exceptionals</b>			
Continuing operations		34.3	63.5
Acquisitions		0.1	–
Discontinued operations		(0.3)	0.8
Operating exceptionals	4	34.1 (57.3)	64.3 –
Operating (loss)/profit before goodwill amortisation		(23.2)	64.3
Goodwill amortisation		(7.7)	(7.7)
<b>Operating (loss)/profit</b>			
Continuing operations		(30.7)	55.8
Acquisitions		0.1	–
Discontinued operations		(0.3)	0.8
<b>Group operating (loss)/profit</b>	2	(30.9)	56.6
<b>Corporate exceptional items</b>			
Discontinued operations			
– Loss on sale of businesses		(8.6)	–
Continuing operations			
– Disposal of fixed assets		(3.4)	(6.4)
– Loss on partial disposal of business		(3.0)	(8.5)
– Loss on closure of business		–	(2.7)
	6	(15.0)	(17.6)
<b>(Loss)/profit on ordinary activities before interest and taxation</b>		(45.9)	39.0
Net finance charges and similar items	7	(12.8)	(19.2)
<b>(Loss)/profit on ordinary activities before taxation</b>		(58.7)	19.8
Taxation credit/(charge)(including exceptional tax credit of £6.9 million)	8	0.5	(12.5)
<b>(Loss)/profit on ordinary activities after taxation</b>		(58.2)	7.3
Equity minority interest		(1.2)	(1.4)
<b>Net (loss)/profit attributable to The Morgan Crucible Company plc</b>		(59.4)	5.9
Preference dividends on non-equity shares	10	(2.1)	(2.1)
Ordinary dividends on equity shares	10	–	(17.2)
<b>Retained (loss) for the year</b>	25	(61.5)	(13.4)

	2002		2001	
	Before goodwill amortisation	After goodwill amortisation	Before goodwill amortisation	After goodwill amortisation
<b>(Loss)/earnings per share (note 11)</b>				
– underlying	5.0p	1.7p	12.5p	9.2p
– basic	(23.2p)	(26.5p)	5.0p	1.6p
– diluted		(26.2p)		1.6p
– underlying diluted		1.7p		9.2p

## Consolidated and Company balance sheet

as at 4 January 2003

	Note	The Group		The Company	
		2002 £m	2001 Restated* £m	2002 £m	2001 Restated* £m
<b>Fixed assets</b>					
Intangible assets – goodwill	12	130.5	138.4	–	–
Tangible assets	13	433.6	490.3	1.7	1.9
Investment in subsidiary undertakings	14	–	–	908.5	888.4
Investment in associated undertakings	15	1.2	1.2	–	–
Other investments	15	6.0	21.9	1.2	16.0
		571.3	651.8	911.4	906.3
<b>Current assets</b>					
Stocks	16	156.6	185.0	–	–
Debtors – due within one year	17	188.2	199.4	29.1	23.5
– due after one year	17	22.9	23.8	8.2	8.3
Total debtors		211.1	223.2	37.3	31.8
Cash at bank and in hand		60.5	72.7	17.1	12.4
		428.2	480.9	54.4	44.2
<b>Creditors – amounts falling due within one year</b>	18	331.5	321.6	115.1	91.7
<b>Net current assets/(liabilities)</b>		96.7	159.3	(60.7)	(47.5)
<b>Total assets less current liabilities</b>		668.0	811.1	850.7	858.8
<b>Creditors – amounts falling due after more than one year</b>					
Amounts payable to subsidiary undertakings		–	–	218.6	203.0
Borrowings	19	177.1	255.2	142.5	172.4
Exchangeable redeemable preference shares	21	1.5	4.5	–	–
Grants for capital expenditure		0.8	1.5	–	0.6
		179.4	261.2	361.1	376.0
<b>Provisions for liabilities and charges</b>	22	138.2	128.4	8.8	8.3
		317.6	389.6	369.9	384.3
<b>Net assets</b>		350.4	421.5	480.8	474.5
<b>Capital and reserves</b>					
Equity shareholders' funds					
Called up share capital	24	58.0	58.0	58.0	58.0
Share premium account	25	44.4	44.4	44.4	44.4
Revaluation reserve	25	7.4	10.4	–	–
Merger reserve	25	–	–	91.6	91.6
Other reserves	25	1.4	1.4	–	–
Special reserve	25	–	–	41.7	41.7
Profit and loss account	25	198.6	265.8	214.8	208.5
		309.8	380.0	450.5	444.2
Non-equity shareholders' funds					
Called up share capital	24	30.3	30.3	30.3	30.3
		340.1	410.3	480.8	474.5
<b>Minority interest</b>					
Equity		10.2	11.1	–	–
Non-equity		0.1	0.1	–	–
		10.3	11.2	–	–
<b>Capital employed</b>		350.4	421.5	480.8	474.5

\*Restated comparatives – FRS19 note 23.

The accounts on pages 42 to 66 were approved by the Board of Directors on 11 March 2003 and were signed on its behalf by:

**Warren Knowlton** Chief Executive Officer  
**Nigel Young** Finance Director

## Consolidated cash flow statement

for the year ended 4 January 2003

	Note	2002		2001	
		£m	£m	£m	£m
<b>Net cash inflow from operating activities</b>	(a)		<b>75.2</b>		109.4
<b>Returns on investments and servicing of finance</b>					
Interest received		2.7		3.2	
Interest paid		(16.1)		(22.9)	
Preference dividends paid		(2.1)		(2.1)	
<b>Net cash (outflow) from returns on investments and servicing of finance</b>			<b>(15.5)</b>		(21.8)
<b>Taxation</b>			<b>(10.8)</b>		(14.1)
<b>Capital expenditure and financial investments</b>					
Purchase of tangible fixed assets		(35.0)		(57.6)	
Other proceeds on sale of tangible fixed assets		8.4		13.6	
Purchase of investments		(5.8)		(5.7)	
Disposal of investments		20.8		0.4	
<b>Net cash (outflow) from capital expenditure and financial investments</b>			<b>(11.6)</b>		(49.3)
<b>Acquisitions and disposals</b>					
Acquisition of subsidiary undertakings	(b)	(0.1)		(41.5)	
Net cash acquired		-		(0.6)	
Deferred consideration for prior year acquisitions		(3.4)		(3.8)	
Disposal of businesses	(c)	(0.7)		(3.8)	
<b>Net cash (outflow) from acquisitions and disposals</b>			<b>(4.2)</b>		(49.7)
<b>Equity dividends paid</b>			<b>(17.2)</b>		(36.9)
<b>Cash inflow/(outflow) before use of liquid resources and financing</b>			<b>15.9</b>		(62.4)
<b>Management of liquid resources</b>			<b>3.4</b>		24.1
<b>Financing</b>					
Increase in share capital	(e)	-		0.1	
Increase in bank loans		26.5		89.6	
Repayment of bank loans		(49.6)		(42.4)	
Repurchase of exchangeable redeemable preference shares	(e)	(3.9)		(4.1)	
			<b>(27.0)</b>		43.2
<b>Net (decrease)/increase in cash in the year</b>			<b>(7.7)</b>		4.9
<b>Reconciliation of net cash flow to movement in net borrowings</b>					
Net (decrease)/increase in cash in the year			(7.7)		4.9
Cash flow from decrease/(increase) in loans			23.1		(47.2)
Cash flow from (decrease) in deposits			(3.4)		(24.1)
Cash flow from repurchase of exchangeable redeemable preference shares			3.9		4.1
<b>Change in net borrowings resulting from cash flows</b>	(d)		<b>15.9</b>		(62.3)
Issue of exchangeable redeemable preference shares	(d)		(0.9)		(1.1)
Bank loans acquired with acquisitions			(0.5)		(0.7)
Bank loans reduced with disposals			0.2		8.6
Exchange movement	(d)		9.8		(0.6)
Movement in net borrowings during the period			<b>24.5</b>		(56.1)
Opening net borrowings			<b>(276.1)</b>		(220.0)
<b>Closing net borrowings</b>			<b>(251.6)</b>		(276.1)

## Consolidated free cash flow

for the year ended 4 January 2003

	Note	2002 £m	2001 £m
<b>Net cash inflow from operating activities</b>	(a)	<b>75.2</b>	109.4
Net interest paid		<b>(13.4)</b>	(19.7)
Taxation		<b>(10.8)</b>	(14.1)
<b>Cash earnings</b>		<b>51.0</b>	75.6
Dividends paid		<b>(19.3)</b>	(39.0)
<b>Post dividend cash flow</b>		<b>31.7</b>	36.6
Capital expenditure		<b>(35.0)</b>	(57.6)
Proceeds on sale of tangible fixed assets		<b>8.4</b>	13.6
<b>Free cash flow</b>		<b>5.1</b>	(7.4)
Net outflow in respect of acquisitions	(b)	<b>(0.1)</b>	(42.1)
Deferred consideration for prior year acquisitions		<b>(3.4)</b>	(3.8)
Disposal of businesses		<b>(0.7)</b>	(3.8)
Net (acquisition)/disposal of investments		<b>15.0</b>	(5.3)
<b>Cash inflow/(outflow) after acquisitions and disposals</b>		<b>15.9</b>	(62.4)
Increase in share capital	(e)	–	0.1
<b>Change in net borrowings resulting from cash flows</b>	(d)	<b>15.9</b>	(62.3)
Exchange movement	(d)	<b>9.8</b>	(0.6)
Bank loans acquired with acquisitions		<b>(0.5)</b>	(0.7)
Bank loans reduced with disposals		<b>0.2</b>	8.6
Issue of exchangeable redeemable preference shares	(d)	<b>(0.9)</b>	(1.1)
Movement in borrowings during period		<b>24.5</b>	(56.1)
Opening net borrowings		<b>(276.1)</b>	(220.0)
<b>Closing net borrowings</b>		<b>(251.6)</b>	(276.1)

## Notes to the cash flow statement

### (a) Reconciliation of operating (loss)/profit to net cash inflow from operating activities

	2002			2001		
	Continuing £m	Discontinued £m	Total £m	Continuing £m	Discontinued £m	Total £m
Operating (loss)/profit	<b>(30.6)</b>	<b>(0.3)</b>	<b>(30.9)</b>	55.8	0.8	56.6
Depreciation	<b>46.6</b>	<b>0.1</b>	<b>46.7</b>	45.9	2.1	48.0
Amortisation of goodwill	<b>7.7</b>	–	<b>7.7</b>	7.7	–	7.7
Loss on sale of plant and machinery	<b>0.4</b>	–	<b>0.4</b>	0.3	–	0.3
Exceptional operating costs	<b>17.2</b>	–	<b>17.2</b>	–	–	–
(Increase)/decrease in stocks	<b>18.6</b>	<b>(1.0)</b>	<b>17.6</b>	6.5	0.2	6.7
(Increase)/decrease in debtors	<b>3.5</b>	<b>0.5</b>	<b>4.0</b>	20.8	1.7	22.5
Increase/(decrease) in creditors	<b>(2.8)</b>	<b>(0.1)</b>	<b>(2.9)</b>	(31.9)	(1.6)	(33.5)
Increase/(decrease) in provisions	<b>15.4</b>	–	<b>15.4</b>	0.6	0.5	1.1
<b>Net cash inflow from operating activities</b>	<b>76.0</b>	<b>(0.8)</b>	<b>75.2</b>	105.7	3.7	109.4

**(b) Acquisitions**

	2002 £m	2001 £m
Fixed assets		
– Land and buildings	–	2.1
– Plant, equipment and fixtures	1.4	6.6
Net working capital	(0.1)	4.5
Provisions	–	(1.3)
Taxation	–	(0.2)
Net cash/(overdrafts)	0.2	(0.6)
Loans	(0.5)	(0.7)
Minority interest	(0.3)	–
	0.7	10.4
Goodwill	2.3	36.7
Total consideration	3.0	47.1
Satisfied by:		
Cash payments	0.3	41.5
Amounts deferred	2.7	5.6
	3.0	47.1
The effect of acquisitions on borrowings is:		
Cash payments	0.3	41.5
Net (cash)/overdrafts acquired	(0.2)	0.6
Loans acquired	0.5	0.7
	0.6	42.8

**(c) Disposal of businesses**

The net outflow relates mainly to the disposal of Morgan Matroc SA, the disposal of the ULTRAGARD operation and the dense calcium silicates business of Thermal Ceramics Deutschland GmbH.

**(d) Analysis of net borrowings**

	At 5 January 2002 £m	Cash flow £m	Acquisitions (excluding cash and overdrafts) £m	Disposals £m	Non-cash movements £m	Exchange differences £m	At 4 January 2003 £m
Cash at bank and in hand	43.0	(7.9)	–	–	–	(0.6)	34.5
Overdrafts	(3.2)	0.2	–	–	–	–	(3.0)
Short-term deposits	29.7	(3.4)	–	–	–	(0.3)	26.0
Term loans	(336.7)	22.5	(0.5)	0.2	–	10.7	(303.8)
Finance leases	(4.4)	0.6	–	–	–	–	(3.8)
Exchangeable redeemable preference shares	(4.5)	3.9	–	–	(0.9)	–	(1.5)
Total borrowings	(276.1)	15.9	(0.5)	0.2	(0.9)	9.8	(251.6)

**(e) Analysis of changes in financing during the year**

	Share capital and share premium £m	Exchangeable redeemable preference shares £m
At 4 January 2001	132.6	7.5
Cash inflow from financing	0.1	–
Repurchase of exchangeable redeemable preference shares	–	(4.1)
Increase in exchangeable redeemable preference shares	–	1.1
At 4 January 2002	132.7	4.5
Repurchase of exchangeable redeemable preference shares	–	(3.9)
Increase in exchangeable redeemable preference shares	–	0.9
At 4 January 2003	132.7	1.5

The exchangeable redeemable preference shares issued currently outstanding are disclosed in detail in note 21. Only share issues which resulted in cash receipts have been disclosed in the cash flow statement.

## Consolidated statement of total recognised gains and losses

for the year ended 4 January 2003

	2002 £m	2001 £m
<b>Net (loss)/profit attributable to shareholders</b>	<b>(59.4)</b>	5.9
Deficit on revaluation of investments	(0.3)	–
Foreign currency translation	(13.2)	(1.4)
Total recognised gains and (losses) relating to the year	<b>(72.9)</b>	4.5
Prior year adjustment	<b>(21.8)</b>	
Total recognised gains and (losses) since last annual report	<b>(94.7)</b>	

## Consolidated note of historical cost profits and losses

for the year ended 4 January 2003

	2002 £m	2001 £m
Reported (loss)/profit on ordinary activities before taxation	<b>(58.7)</b>	19.8
Difference between historical cost depreciation charge and book values for disposals and the actual charge/profit calculated on the revalued amount	<b>0.1</b>	0.1
Historical cost (loss)/profit on ordinary activities before taxation	<b>(58.6)</b>	19.9
Historical cost (loss)/profit for the year retained after taxation, equity minority interests and dividends	<b>(61.4)</b>	(13.3)

## Consolidated reconciliation of movement in shareholders' funds

for the year ended 4 January 2003

	2002 £m	2001 Restated £m
Net profit attributable to shareholders	<b>(59.4)</b>	5.9
Repayment of capital investment	–	(0.2)
Deficit on revaluation of investments	<b>(0.3)</b>	–
Goodwill written back to profit and loss	<b>4.8</b>	–
Dividends	<b>(2.1)</b>	(19.3)
	<b>(57.0)</b>	(13.6)
New share capital	–	0.1
FRS19 prior year adjustment	–	(21.8)
Foreign currency translation	<b>(13.2)</b>	(1.4)
Net decrease to shareholders' funds	<b>(70.2)</b>	(36.7)
Opening shareholders' funds (originally £432.1 million before FRS19 adjustment)	<b>410.3</b>	447.0
Closing shareholders' funds	<b>340.1</b>	410.3

## Notes to the accounts

### 1 Segmental information

	Net operating assets		Turnover		Operating profit	
	2002 £m	2001 Restated £m	2002 £m	2001 £m	2002 £m	2001 £m
<b>Product Group</b>						
Electrical Carbon	141.8	175.4	199.9	210.0	14.6	17.0
Magnetics	168.6	181.6	186.2	215.1	(2.9)	5.8
Engineered Carbon	94.8	112.8	111.3	127.3	3.8	8.4
Technical Ceramics	108.2	104.9	125.2	149.9	5.0	13.5
Insulating Ceramics	152.1	190.9	256.8	287.7	13.9	18.8
Continuing operations	665.5	765.6	879.4	990.0	34.4	63.5
Discontinued operations			0.9	34.5	(0.3)	0.8
Central assets	8.8	11.7				
	674.3	777.3	880.3	1,024.5	34.1	64.3
Operating exceptionals					(57.3)	–
Goodwill amortisation					(7.7)	(7.7)
Group operating profit					(30.9)	56.6

The central assets include land and buildings, prepayments and other creditors of the non operating and holding companies. The discontinued operation in 2002 is Barcelona.

The operating exceptionals of £57.3 million comprise, Electrical Carbon £6.9 million, Magnetics £7.8 million, Engineered Carbon £7.2 million, Technical Ceramics £5.2 million, Insulating Ceramics £17.9 million, and £12.3 million referred to in note 4.

Goodwill comprises, Electrical Carbon £1.0 million, Magnetics £4.1 million, Engineered Carbon £0.5 million, Technical Ceramics £0.9 million and Insulating Ceramics £1.2 million.

#### Geographical area

The analysis shown below is based on the location of the contributing companies:

	Net operating assets		Turnover		Operating profit	
	2002 £m	2001 Restated £m	2002 £m	2001 £m	2002 £m	2001 Restated £m
United Kingdom						
Sales in the UK			41.2	48.5		
Sales overseas			42.6	47.8		
Total United Kingdom	98.1	102.2	83.8	96.3	2.2	4.4
Rest of Europe	241.8	258.4	320.2	342.8	11.9	26.3
The Americas	265.8	340.0	380.5	460.9	12.2	24.9
Far East and Australasia	55.4	61.6	83.5	79.3	6.4	6.0
Middle East and Africa	4.4	3.4	11.4	10.7	1.7	1.9
Discontinued operations	665.5	765.6	879.4	990.0	34.4	63.5
Central assets	8.8	11.7	0.9	34.5	(0.3)	0.8
	674.3	777.3	880.3	1,024.5	34.1	64.3
Operating exceptionals					(57.3)	–
Goodwill amortisation					(7.7)	(7.7)
Group operating profit					(30.9)	56.6

	Average number of employees	
	2002	2001
United Kingdom	1,795	2,036
Rest of Europe	4,566	4,915
The Americas	5,385	5,965
Far East and Australasia	2,799	2,525
Middle East and Africa	281	293
Discontinued operations	14,826	15,734
	36	359
	14,862	16,093

## 1 Segmental information (continued)

The analysis shown below is based on the location of the customer:

	Turnover	
	2002 £m	2001 £m
United Kingdom	65.3	73.7
Rest of Europe	301.0	341.4
The Americas	372.5	433.7
Far East and Australasia	122.8	123.0
Middle East and Africa	17.8	18.2
Discontinued operations	879.4	990.0
	0.9	34.5
	880.3	1,024.5

	2002 £m	2001 Restated £m
<b>Analysis of net operating assets</b>		
Capital and reserves	350.4	421.5
Closing net borrowings	251.6	276.1
Current taxation	46.0	50.7
Deferred tax	25.2	10.7
Dividend	1.1	18.3
Net operating assets	674.3	777.3

## 2 Group operating (loss)/profit

	2002			2001		
	Continuing £m	Discontinued £m	Total £m	Continuing £m	Discontinued £m	Total £m
Turnover	879.4	0.9	880.3	990.0	34.5	1,024.5
Operating costs	(845.0)	(1.2)	(846.2)	(926.5)	(33.7)	(960.2)
Group operating (loss)/profit before operating exceptionals and goodwill amortisation	34.4	(0.3)	34.1	63.5	0.8	64.3
Operating exceptionals	(57.3)	-	(57.3)	-	-	-
Group operating (loss)/profit before goodwill amortisation	(22.9)	(0.3)	(23.2)	63.5	0.8	64.3
Goodwill amortisation	(7.7)	-	(7.7)	(7.7)	-	(7.7)
Group operating (loss)/profit	(30.6)	(0.3)	(30.9)	55.8	0.8	56.6

**3 Operating costs before exceptional items**

	2002			2001		
	Continuing £m	Discontinued £m	Total £m	Continuing £m	Discontinued £m	Total £m
Change in stocks of finished goods and work in progress	6.4	–	6.4	12.7	(0.2)	12.5
Raw materials and consumables	232.7	0.3	233.0	263.5	18.1	281.6
Other external charges	115.3	–	115.3	128.2	2.3	130.5
Employee costs:						
– wages and salaries	269.8	0.5	270.3	298.2	8.0	306.2
– social security costs	51.0	0.2	51.2	54.6	0.5	55.1
– other pension costs	20.8	–	20.8	19.4	–	19.4
Total	341.6	0.7	342.3	372.2	8.5	380.7
Depreciation:						
– owned assets	46.1	0.1	46.2	45.2	2.1	47.3
– assets held under finance leases	0.5	–	0.5	0.7	–	0.7
Total	46.6	0.1	46.7	45.9	2.1	48.0
Rentals under operating leases:						
– hire of plant and machinery	3.7	–	3.7	5.2	–	5.2
– other operating leases	5.7	–	5.7	6.1	–	6.1
Total	9.4	–	9.4	11.3	–	11.3
– other charges and income	93.0	0.1	93.1	92.7	2.9	95.6
– amortisation of goodwill	7.7	–	7.7	7.7	–	7.7
Other operating charges	100.7	0.1	100.8	100.4	2.9	103.3
Total operating costs before exceptional items	852.7	1.2	853.9	934.2	33.7	967.9

Operating costs for continuing operations include the release of government grants £0.7 million (2001: £0.5 million) and research and development expenditure, £20.0 million (2001: £19.0 million).

The following items are also included in operating costs:

	2002 £m	2001 £m
Auditors' remuneration		
KPMG	0.9	0.9
Other auditors	–	–
	0.9	0.9
Non audit fees paid to KPMG in the UK	0.1	0.1

**4 Operating exceptionals**

The Group has incurred and provided for the costs of restructuring, £45.0 million, and the costs and fines associated with the final Department of Justice enquiry in the USA, £12.3 million.

**5 Directors' emoluments**

The remuneration of all Executive Directors, including bonus schemes, is shown within the Report of the Remuneration Committee on pages 35 to 39.

**6 Corporate exceptional items**

The corporate exceptional items relating to the sale of businesses, £11.6 million, include disposals of Morgan Matroc SA, the ULTRAGARD operation and the dense calcium silicates business, and the disposal of the Kesteren operation. The goodwill written off as part of the business disposals is £3.5 million. The £3.4 million relates to various property disposals.

**7 Net finance charges and similar income**

	2002 £m	2001 £m
Exchangeable redeemable preference shares	–	0.1
Bank and other loans	13.8	21.2
Overdrafts and other short term loans	0.9	1.3
Finance leases	0.3	0.3
	15.0	22.9
Less – interest receivable	(2.2)	(3.2)
– investment income	–	(0.5)
Net finance charges	12.8	19.2

**8 Taxation charge/(credit)**

	2002 £m	2001 Restated £m
United Kingdom corporation tax:		
Corporation tax on (loss)/profit for the period at 30% (2001: 30%)	6.1	10.7
Prior year adjustment	(1.9)	(0.8)
	4.2	9.9
Overseas current tax	2.7	9.0
Total current tax	6.9	18.9
Deferred tax:		
United Kingdom	0.3	0.3
Overseas	(7.7)	(6.7)
Total deferred tax	(7.4)	(6.4)
Total taxation	(0.5)	12.5

Overseas tax includes a credit of £5.7 million (2001: £0.1 million debit) arising on total exceptional losses of £58.5 million (2001: losses of £15.0 million). United Kingdom tax includes a tax credit of £1.2 million (2001: £0.1 million credit) arising on total exceptional losses of £13.8 million (2001: £2.6 million).

*Factors affecting the tax charge for the period*

The tax assessed for the period is higher than the standard rate of corporation tax in the UK. The differences are explained below.

	2002 £m	2001 £m
(Loss)/profit on ordinary activities before taxation	(58.7)	19.8
Taxation on (loss)/profit on ordinary activities at standard rate of UK corporation tax of 30% (2001: 30%)	(17.6)	5.9
Difference comprises:		
Exceptional items not deductible for tax purposes	9.7	5.3
Goodwill amortisation not deductible for tax purposes	2.3	2.3
Overseas losses not utilised	4.0	1.7
Overseas rate differences	1.9	1.5
Effect of reversal of timing differences	7.4	0.6
Other	(0.8)	1.6
Current tax charge for the period	6.9	18.9

**9 Net profit**

	2002 £m	2001 £m
Profit/(loss) dealt with in the accounts of The Morgan Crucible Company plc	8.4	(1.6)

In accordance with the exemptions allowed by Section 230 of the Companies Act 1985 the Company has not presented its own profit and loss account.

## 10 Dividends

	2002 £m	2001 £m
Interim: 0.0 pence per Ordinary share (2001: 7.4 pence)	–	17.2
Proposed final: 0.0 pence per Ordinary share (2001: 0.0 pence)	–	–
Total: 0.0 pence per Ordinary share (2001: 7.4 pence)	–	17.2
Preference dividends on non-equity shares	2.1	2.1
	2.1	19.3

## 11 (Loss)/earnings per Ordinary share

### a) Basic and underlying (loss)/earnings per share

	2002		2001	
	Before goodwill amortisation £m	After goodwill amortisation £m	Before goodwill amortisation £m	After goodwill amortisation £m
(Loss)/profit after tax and minority interest	(51.7)	(59.4)	13.6	5.9
Preference dividend	(2.1)	(2.1)	(2.1)	(2.1)
<b>Basic (loss)/earnings</b>	<b>(53.8)</b>	<b>(61.5)</b>	11.5	3.8
Adjusted by all post tax exceptional items	65.4	65.4	17.6	17.6
<b>Underlying earnings</b>	<b>11.6</b>	<b>3.9</b>	29.1	21.4
Weighted average number of Ordinary shares		231,990,704		231,958,292
<b>Basic (loss)/earnings per share</b>	<b>(23.2p)</b>	<b>(26.5p)</b>	5.0p	1.6p
<b>Underlying earnings per share</b>	<b>5.0p</b>	<b>1.7p</b>	12.5p	9.2p

The Directors have disclosed an underlying (loss)/earnings per share as, in their opinion, this gives a better indication of the underlying performance of the Group and assists comparison with the results of earlier years.

### b) Diluted earnings

	2002 £m	2001 £m
Basic (loss)/earnings	(61.5)	3.8
Preference dividend to be eliminated on conversion of preference shares	–	–
<b>Diluted (loss)/earnings</b>	<b>(61.5)</b>	3.8
Adjusted by all post tax exceptional items	65.4	17.6
<b>Underlying diluted earnings</b>	<b>3.9</b>	21.4
Weighted average number of Ordinary shares	231,990,704	231,958,292
Dilutive effect of share option schemes	2,718,929	292,752
	234,709,633	232,251,044
<b>Diluted (loss)/earnings per share</b>	<b>(26.2p)</b>	1.6p
<b>Diluted underlying earnings per share</b>	<b>1.7p</b>	9.2p

## 12 Intangible assets – goodwill

	2002 £m
<b>Cost</b>	
At 5 January 2002	153.6
Exchange movements	(2.9)
Acquisition of subsidiary undertaking/business (see note 26)	2.3
Disposal of business	0.1
Goodwill adjustments arising on prior year acquisitions	0.1
At 4 January 2003	153.2
<b>Amortisation</b>	
At 5 January 2002	15.2
Exchange movements	(0.2)
Provided during the year	7.7
Eliminated in respect of disposals	–
At 4 January 2003	22.7
Net book value at 4 January 2003	130.5
Net book value at 4 January 2002	138.4

**13 Tangible assets**

	The Group			The Company		
	Land and buildings £m	Plant, equipment and fixtures £m	Total £m	Land and buildings £m	Plant, equipment and fixtures £m	Total £m
<b>Cost or as valued*</b>						
At 5 January 2002	224.9	585.3	810.2	1.8	2.3	4.1
Exchange movements	(6.5)	(23.8)	(30.3)			
Fair value of assets in acquired businesses	–	1.2	1.2			
Other additions	9.7	22.8	32.5			
Less: Disposals and write-offs	(12.0)	(47.8)	(59.8)			
At 4 January 2003	216.1	537.7	753.8	1.8	2.3	4.1
<b>Made up of</b>						
– Assets valued in 1989	25.2	–	25.2	–	–	–
– Other revaluations	4.3	–	4.3	–	–	–
– Other items at cost	186.6	537.7	724.3	1.8	2.3	4.1
	216.1	537.7	753.8	1.8	2.3	4.1
<b>Aggregate depreciation</b>						
At 5 January 2002	34.2	285.7	319.9	0.4	1.8	2.2
Exchange movements	(1.0)	(10.9)	(11.9)			
Amount provided for year	4.5	42.2	46.7	–	0.2	0.2
	37.7	317.0	354.7	0.4	2.0	2.4
Less: Eliminated in respect of disposals and write-offs	(4.8)	(29.7)	(34.5)			
At 4 January 2003	32.9	287.3	320.2	0.4	2.0	2.4
<b>Net book amounts at 4 January 2003</b>	183.2	250.4	433.6	1.4	0.3	1.7
<b>Net book amounts at 4 January 2002</b>	190.7	299.6	490.3	1.4	0.5	1.9

\*The transitional arrangements for revalued land and buildings have been adopted in line with FRS15. The relevant properties will be carried at the revalued amount and no further revaluations will take place.

Land and buildings at cost or as valued comprise the following:

	The Group £m	The Company £m
– Freehold	190.4	–
– Long leases	7.2	–
– Short leases	18.5	1.8
	216.1	1.8

The freehold and leasehold properties owned by the Group, other than those in the United States of America (of which the majority were valued on acquisition), Brazil and Mexico, were revalued by the Directors in 1989 based on professional valuations by Messrs Gerald Eve, Chartered Surveyor (i.e. on an open market valuation). The Directors reviewed the 1989 valuations in 1991 and, where necessary, reduced them after taking into consideration information supplied by the independent advisers. Group land and buildings, shown above at valuation of £29.5 million (2001: £33.9 million), would have been stated under historical cost rules at cost £20.2 million (2001: £23.2 million) and at net book amount £11.1 million (2001: £12.9 million).

The net book value of the Group's fixed assets includes £4.5 million (2001: £6.4 million) in respect of assets held under finance leases.

#### 14 Investment in subsidiary undertakings

	The Company		
	Shares £m	Loans £m	Total £m
<b>Cost</b>			
At 5 January 2002	583.8	399.3	983.1
Additions	20.5	60.9	81.4
Less: Disposals/loan repayments	(40.2)	(19.4)	(59.6)
At 4 January 2003	564.1	440.8	1,004.9
<b>Amounts provided</b>			
At 5 January 2002	86.3	8.4	94.7
Provided in year	6.4	–	6.4
Less: Released in year	–	(4.7)	(4.7)
At 4 January 2003	92.7	3.7	96.4
<b>Net book amounts at 4 January 2003</b>	471.4	437.1	908.5
<b>Net book amounts at 4 January 2002</b>	497.5	390.9	888.4

A list of principal subsidiary undertakings is shown on page 67.

#### 15 Associated undertakings and other investments

	Associated undertakings £m	Unlisted investments £m	Other investments £m	Own shares £m	Total £m
<b>The Group</b>					
At 5 January 2002	1.2	0.6	20.6	0.7	23.1
Exchange adjustment	–	–	(0.6)	–	(0.6)
Additions	–	–	6.7	–	6.7
Distributions	–	(0.1)	(21.3)	–	(21.4)
Revaluation of investments	–	–	(0.3)	–	(0.3)
Other loss from investments	–	–	(0.3)	–	(0.3)
At 4 January 2003	1.2	0.5	4.8	0.7	7.2

	£m	£m	£m
<b>The Company</b>			
At 5 January 2002	15.3	0.7	16.0
Additions	5.5	–	5.5
Distributions	(20.3)	–	(20.3)
At 4 January 2003	0.5	0.7	1.2

Name of associated undertaking	Holding	Proportion of voting rights and shares held	Nature of business
Shinagawa Thermal Ceramics (Pty.) Limited	Ordinary shares	49%*	Refractory products

\*Held by a subsidiary undertaking

Unlisted investments are stated at cost less provisions. The Directors consider that the value of unlisted investments is not less than the book value. Under own shares, a total of 336,064 shares, with a nominal value of 25 pence, are held by The Morgan General Employee Trust (the 'Trust'). These shares are the residue of those shares purchased to satisfy awards made under the Long Term Incentive Plan. These remaining shares will be used to satisfy awards granted under share or share option schemes. The shares were acquired at an average cost of 208.1 pence, and at 4 January 2003 had a market value of £191,556. Dividends on the shares owned by the Trust have not been waived. All expenses incurred by the Trust are settled directly by The Morgan Crucible Company plc and charged in the accounts as incurred. The cost of the shares will be expensed to profit and loss account upon the grant of awards under share or share option schemes.

## 16 Stocks and work in progress

	2002 £m	2001 £m
Raw materials	42.5	58.0
Work in progress	62.0	64.8
Finished goods	52.1	62.2
	<b>156.6</b>	185.0

The Group holds consignment stock amounting to £9.2 million (2001: £6.3 million) which is not reflected in the balance sheet. The majority of this balance is for precious metals which are held on consignment by a subsidiary and for which it is invoiced only when the material is required for production.

## 17 Debtors

	The Group		The Company	
	2002 £m	2001 £m	2002 £m	2001 £m
<b>Due within one year:</b>				
Trade debtors	162.2	171.9	–	–
Other debtors	13.1	14.6	1.0	2.2
Prepayments and accrued income	12.9	12.0	5.1	4.4
Amounts receivable from subsidiary undertakings	–	–	23.0	16.9
Properties held for resale	–	0.9	–	–
	<b>188.2</b>	199.4	<b>29.1</b>	23.5
<b>Due after more than one year:</b>				
Prepaid pension contributions	22.9	23.8	8.2	8.3
	<b>211.1</b>	223.2	<b>37.3</b>	31.8

## 18 Creditors

	The Group		The Company	
	2002 £m	2001 £m	2002 £m	2001 £m
<b>Due within one year:</b>				
Borrowings	133.5	89.1	99.3	55.5
Trade creditors	77.2	80.2	1.9	2.8
Amounts payable to subsidiary undertakings	–	–	2.1	1.6
Other creditors, including social security	37.1	38.5	2.3	1.1
Taxation	46.0	50.7	–	7.6
Accruals and deferred income	36.6	44.8	8.4	4.8
Dividends	1.1	18.3	1.1	18.3
	<b>331.5</b>	321.6	<b>115.1</b>	91.7

**19 Borrowings**

	The Group		The Company	
	2002 £m	2001 £m	2002 £m	2001 £m
Variable Rate Demand Note 2018	25.0	52.0	–	–
8.76% US Dollar Senior Notes 2006	4.2	5.9	–	–
9.11% US Dollar Senior Notes 2003	3.1	6.9	–	–
7.93% US Dollar Senior Notes 2004	6.2	10.4	–	–
Bank and other loans	265.3	261.5	233.7	216.7
Bank overdrafts	3.0	3.2	8.1	11.1
Obligations under finance leases	3.8	4.4	–	0.1
Less: Amount repayable within one year included within current liabilities	310.6 (133.5)	344.3 (89.1)	241.8 (99.3)	227.9 (55.5)
Total repayable after more than one year	177.1	255.2	142.5	172.4

	The Group	
	2002 £m	2001 £m
<b>Analysis of maturities</b>		
Within one year	133.5	89.1
In more than one year but less than two years	58.8	140.6
In more than two years but less than five years	117.3	113.8
In more than five years	1.0	0.8
	310.6	344.3

Bank and other loans include £0.6 million (2001: £1.6 million) of loans secured on assets of the Group.

Included within Bank and other loans are short term drawings of £142.5 million (2001: £183.4 million). These were repayable between 29 January 2003 and 22 February 2003 but have been classified as long term loans as they are drawn down under committed facilities which extend to various dates up to November 2006.

The Variable Rate Demand Note 2018 can be repaid at short notice without penalty. The interest charged is based on US LIBOR plus a margin.

The 9.11% US Dollar Senior Notes 2003 are repayable on 1 October 2003. The 7.93% US Dollar Senior Notes 2004 are repayable in two yearly instalments on 16 July 2003 and 16 July 2004. The 8.76% US Dollar Senior Notes 2006 are repayable in four yearly instalments from 1 December 2003 to 1 December 2006.

During the year the Group entered into an asset securitisation programme (currently a \$50.0 million facility) in respect of certain of its US trade receivables. Under the terms of this programme an interest in a pool of debtors is sold to a financial institution in exchange for cash, on which interest is payable. A security interest has been granted to the bank over the pool which as at 4 January 2003 consisted of \$58.0 million (£36.2 million) of third party trade debtors against which cash received was \$40.0 million (£25.0 million). These amounts have not been netted off against debtors.

The Financial institution does not have recourse to the Group for any receivables that default, and where that default cannot be met from the balance of the pool of debts against which the original loan was made. The Group is responsible for the eligibility of the receivables that it sells.

**20 Derivatives and other financial instruments**

An explanation of the Group's objectives, policies and strategies for the role of derivatives and other financial instruments in creating and changing the financial risk profile of the Group in its activities can be found in the Financial Review on pages 24 and 25. The disclosures below exclude short term debtors and creditors except for the table showing the currency exposures.

*Interest rate risk profile of financial liabilities*

The interest rate profile of the financial liabilities of the Group as at 4 January 2003 was as follows:

	Fixed rate financial liabilities				Floating rate financial liabilities £m	Total £m
	£m	Weighted average interest rate %	Weighted average period for which rate is fixed years			
United States Dollar	29.3	6.4	1.8	157.1	186.4	
Euro	5.2	6.0	5.0	66.1	71.3	
Sterling	–			48.0	48.0	
Other currencies	–			6.4	6.4	
Total – at 4 January 2003	34.5			277.6	312.1	
Total – at 4 January 2002	62.3			286.5	348.8	

The floating rate financial liabilities consist primarily of short term drawings under committed, multi-currency, multi-borrower revolving credit facilities. The interest is determined by reference to LIBOR. The amounts shown in the table above take into account various interest rate swaps to manage the interest rate profile of financial liabilities.

**20 Derivatives and other financial instruments (continued)***Interest rate risk profile of financial assets*

The Group held the following financial assets as at 4 January 2003.

	2002 £m	2001 £m
Cash at bank and in hand	60.5	72.7
Other investments (see note 15)	4.8	20.6
	65.3	93.3

The Group holds principally dollar, sterling and euro cash, which is invested in AAA rated money funds. The other investments consist primarily of Pension Trust investments to fund retirement benefits in the United States.

*Currency exposures*

As explained in the Financial Review on pages 24 and 25, the Group's objectives in managing the currency exposures arising from its net investment overseas (its structural currency exposures) are to maintain a low cost of borrowings and to retain some potential for currency-related appreciation while partially hedging against currency depreciation. Gains and losses arising from these structural currency exposures are recognised in the statement of total recognised gains and losses.

The table below shows the Group's main currency exposures at 4 January 2003 that may give rise to net currency gains and losses being recognised in the profit and loss statement in future periods. Such exposures comprise the monetary assets and monetary liabilities of the Group that are not denominated in the operating (or 'functional') currency of the operating unit involved.

As at 4 January 2003, these currency exposures were as follows:

Functional currency of Group operations	Net foreign currency monetary assets/(liabilities)				
	Sterling £m	US Dollar £m	Euro £m	Australian Dollar £m	Total £m
Sterling		10.9	11.4	–	22.3
US Dollar	(0.1)		(0.2)	–	(0.3)
Euro	–	12.5		–	12.5
Australian Dollar	–	(0.2)	(0.2)		(0.4)
Total – at 4 January 2003	(0.1)	23.2	11.0	–	34.1
Total – at 4 January 2002	(1.3)	11.5	10.7	0.3	21.2

The amounts shown in the table above take into account the effect of forward foreign currency contracts entered into to manage these currency exposures.

*Borrowing facilities*

The Group has various borrowing facilities; the undrawn committed facilities available at 4 January 2003 in respect of which all conditions precedent had been met at that date are as follows:

	2002 £m	2001 £m
Expiring in one year or less	32.6	12.0
Expiring in more than one year but not more than two years	8.4	48.2
Expiring in more than two years	13.9	39.6
	54.9	99.8

*Fair values of financial assets and financial liabilities*

The table below shows a comparison by category of book values and fair values of all the Group's financial assets and financial liabilities as at 4 January 2003.

	2002		2001	
	Book value £m	Fair value £m	Book value £m	Fair value £m
<b>Primary financial instruments held or issued to finance the Group's operations</b>				
Bank and other loans	(303.8)	(304.7)	(336.7)	(337.9)
Bank overdrafts	(3.0)	(3.0)	(3.2)	(3.2)
Obligations under finance leases	(3.8)	(3.8)	(4.4)	(4.4)
Exchangeable redeemable preference shares	(1.5)	(1.5)	(4.5)	(4.5)
Cash at bank and in hand	60.5	60.5	72.7	72.7
Other investments	4.8	4.8	20.6	20.6
<b>Derivative financial instruments held to manage the interest rate profile</b>				
Interest rate swaps	–	(0.7)	–	(0.9)

Fair values have been calculated by discounting the expected future cash flows at prevailing interest rates. Where the difference between the book value and fair value is not material the book value has been used as the fair value.

**20 Derivatives and other financial instruments (continued)***Hedges*

As explained in the Financial Review on pages 24 and 25, the Group has hedged interest rate risk using interest rate swaps and transactional currency exposures using forward foreign currency contracts. There are no unrecognised gains/(losses) against hedged foreign currency assets and liabilities as these have been translated at the forward contract rates.

The unrecognised gains/(losses) set out below relate only to the interest rate swaps.

	2002 £m	2001 £m
Net unrecognised (losses) on hedges at the start of the year	(0.9)	(0.3)
Less: Net (losses) arising in previous years that were recognised in the year	(0.6)	(0.2)
Net (losses) arising not recognised in year	(0.3)	(0.1)
Net (losses) arising in the year that were not recognised	(0.4)	(0.8)
Net unrecognised (losses) on hedges at year end	(0.7)	(0.9)
Of which:		
Net (losses) expected to be recognised in the next year	(0.5)	(0.6)
Net (losses) expected to be recognised in the year after next	(0.2)	(0.3)

**21 Exchangeable redeemable preference shares**

Since 1997, the Group has made a number of acquisitions where part of the consideration was satisfied by the issue of exchangeable redeemable preference shares, or their equivalent, in Morgan's wholly owned subsidiaries. These shares may be exchanged for Ordinary shares in the Company or redeemed at the issue price. Until the option to exchange these preference shares is exercised, they have been classified as debt in accordance with FRS4 *Capital Instruments*. Unless the exchangeable redeemable preference shares carry a dividend coupon, the original value of the consideration has been discounted at appropriate interest rates and interest charged to the profit and loss account. The amount shown as debt at year end is the discounted amount plus attributable interest expense to date. Certain of the shares shown as debt at 4 January 2002 have since been repurchased by the Group, hence are no longer included as debt. Movements in the value of the exchangeable redeemable preference shares are shown in the notes to the cash flow statement.

The table below sets out the exchangeable redeemable preference shares which are held by a third party as at 4 January 2003.

Name of issuer	Acquisition	Consideration represented by issue of shares	Number of Ordinary shares that can be issued on exchange	Value shown as debt £m
Morgan Holding GmbH	TC Deutschland GmbH & Co. KG Minority	€2.4m	327,169	1.5

The options to exchange may be exercised on dates ranging from 4 June 2001 to 31 December 2005 at the discretion of either the Company or the holder. There is no premium payable on redemption. At 4 January 2003, exchangeable redeemable preference shares which had been treated as debt amounted to £1.5 million, and could have been converted into 327,169 Ordinary shares in the Company.

**22 Provisions for liabilities and charges**

	Closure and restructuring provisions £m	Pension and similar obligations £m	Other provisions £m	Environmental provisions £m	Deferred taxation £m	Total £m
<b>The Group</b>						
At 4 January 2002						
as previously reported	1.0	85.1	5.7	4.1	10.7	106.6
FRS19 restatement					21.8	21.8
At 4 January 2002 (as restated)	1.0	85.1	5.7	4.1	32.5	128.4
Exchange movements	(0.1)	2.6	–	(0.2)	0.1	2.4
Provided in year	16.2	4.5	8.2	1.5	(7.4)	23.0
Utilised in year	(6.8)	(5.2)	(2.2)	(1.4)	–	(15.6)
At 4 January 2003	10.3	87.0	11.7	4.0	25.2	138.2
<b>The Company</b>						
At 4 January 2002						
as previously reported	–	–	0.6	0.3	1.2	2.1
FRS19 restatement					6.2	6.2
At 4 January 2002 (as restated)	–	–	0.6	0.3	7.4	8.3
Provided in year	–	–	0.6	–	0.3	0.9
Utilised in year	–	–	(0.1)	(0.3)	–	(0.4)
At 4 January 2003	–	–	1.1	–	7.7	8.8

Pension provisions are for various schemes outside the UK which are generally not funded on an ongoing basis.

**22 Provisions for liabilities and charges (continued)**

Other provisions include long service leave for employees in Australia, Germany and Italy, as well as amounts provided for the Department of Justice fines in the US.

Environmental provisions are for known environmental issues which the Group will rectify over the next few years. In a number of jurisdictions companies have a constructive obligation to remedy any known environmental problems.

**23 Deferred taxation**

	The Group			The Company		
	2002 £m	2001 Restated £m	2001 Before restatement £m	2002 £m	2001 Restated £m	2001 Before restatement £m
United Kingdom:						
Accelerated capital allowances	9.5	9.1	0.3	5.3	5.3	–
Pension	4.5	4.2	2.5	1.7	1.4	0.4
Other timing differences	2.7	3.1	1.5	0.7	0.7	0.8
	16.7	16.4	4.3	7.7	7.4	1.2
Overseas:						
Accelerated capital allowances	37.3	40.4	29.4			
Pension	(6.3)	(6.4)	(4.6)			
Other timing differences	(22.5)	(17.9)	(18.4)			
	25.2	32.5	10.7	7.7	7.4	1.2

The Group adopted FRS19 in the year under review. As a result, a prior year adjustment of £21.8 million was required.

**24 Called up share capital**

	Authorised		Issued	
	2002 £m	2001 £m	2002 £m	2001 £m
<b>Equity share capital</b>				
315,314,172 (2001: 315,308,854) Ordinary shares of 25 pence each	78.8	78.8		
Fully paid: 231,993,560 (2001: 231,988,242) Ordinary shares of 25 pence each			58.0	58.0
	78.8	78.8	58.0	58.0
<b>Non-equity share capital</b>				
125,327 authorised and issued 5.5% Cumulative First Preference shares of £1 each, fully paid	0.1	0.1	0.1	0.1
311,954 authorised and issued 5.0% Cumulative Second Preference shares of £1 each, fully paid	0.3	0.3	0.3	0.3
28,175,021 (2001: 28,189,654) authorised and issued 7.5 pence net Cumulative Convertible Redeemable Third Preference shares of £1 each, fully paid	28.2	28.2	28.2	28.2
6,636,620 (2001: 6,583,406) authorised and issued Non Voting Deferred shares of 25 pence each	1.7	1.7	1.7	1.7
Total non-equity share capital	30.3	30.3	30.3	30.3
<b>Total share capital</b>	<b>109.1</b>	109.1	<b>88.3</b>	88.3

During the year, the authorised Ordinary share capital of the Company was increased to 315,314,172 shares by virtue of the conversion of 14,633 7.5 pence (net) Cumulative Convertible Redeemable Third Preference shares of £1 each into 5,318 Ordinary shares in July 2002.

*Ordinary shares issued*

During the year, the Company issued the following Ordinary shares:

Number	Description
5,318	On the conversion of 7.5 pence (net) Cumulative Convertible Redeemable Third Preference shares of £1 each
Nil	In respect of options exercised under the various Morgan share option schemes

As at the date of this report, 231,993,560 Ordinary shares have been issued (2001: 231,988,242). There have been no further issues of Ordinary shares between the year end and the date of this report.

**24 Called up share capital (continued)**

The following options were outstanding in respect of Ordinary shares:

Number of shares		Exercise price(s)	Normal exercise dates ranging	
			from	to
386,983	The Morgan Executive Share Option Scheme (1984)	320.90p	25 October 1996	24 October 2003
129,015	The Morgan Overseas Executive Share Option Scheme (1987)	320.90p	25 October 1996	24 October 2003
3,100,000	The Morgan Executive Share Option Scheme 1995	52.00p-477.50p	17 October 1999	12 December 2012
4,405,966	The Morgan Sharesave Scheme 1995	61.84p-389.20p	1 December 2001	31 May 2006

In addition, there are further options outstanding over Ordinary shares in respect of the exchangeable redeemable preference shares which are disclosed in note 21.

The 5.5% Cumulative First Preference shares of £1 each and the 5.0% Cumulative Second Preference shares of £1 each confer on the holders thereof the right to receive a cumulative preferential dividend at the rate of 5.5% and 5.0% respectively, calculated up to 30 June and 31 December respectively in every year. The First and Second Cumulative Preference shares shall not entitle the holders thereof to attend or vote at any general meeting unless either:

- i the meeting is convened to consider any resolutions for reducing the capital, or authorising any issue of debentures or debenture stock, or increasing the borrowing powers of the Board under the Articles of Association of the Company, or winding up, or sanctioning a sale of the undertaking, or altering the Articles in any manner affecting their respective interests, or any other resolutions directly altering their respective rights and privileges; or
- ii at the date of the notice convening the general meeting the Preference dividend is upwards of one month in arrears from the payment date of any half yearly instalment.

The 7.5 pence (net) Cumulative Convertible Redeemable Third Preference shares of £1 each confer on the holders thereof the right to receive a cumulative preferential dividend at the rate of 7.5 pence per share per annum. The 7.5 pence (net) Cumulative Convertible Redeemable Third Preference shares shall not entitle the holders thereof to attend or vote at any general meeting unless either:

- i the meeting is convened to consider any resolution for winding-up the Company or any resolution proposed to abrogate, vary or modify the rights or privileges of the holders; or
- ii at the date of the meeting, the dividend is in arrears for six months or more from the date fixed for payment.

The 7.5 pence (net) Cumulative Convertible Redeemable Third Preference shares of £1 each may be converted on 6 July in each year up to and including the year 2003 into fully paid Ordinary shares of 25 pence each on the basis of 36.3636 Ordinary shares and 363.636 Non Voting Deferred shares of 25 pence each for every £100 in nominal value of the Convertible Preference shares. The 7.5 pence (net) Cumulative Convertible Redeemable Third Preference shares in issue on 31 July 2003 shall be redeemed for £1 each.

On a return of capital on a winding-up the assets of the Company available for distribution shall be applied:

First, in payment to the holders of the First Preference shares of the amounts paid up on such shares, together with interest at the rate of 5.5% per annum.

Second, in payment to the holders of the Second Preference shares of the amounts paid up on such shares, together with interest at the rate of 5.0% per annum.

Third, in payment to the holders of the Convertible Redeemable Third Preference shares of the amounts paid up on such shares, plus any unpaid dividends.

Fourth, in repaying the capital paid up or credited as paid up on the Ordinary shares.

Fifth, any surplus shall be distributed rateably amongst the holders of the Ordinary shares and the holders of the Convertible Redeemable Third Preference shares in proportion to the nominal amount paid up on their respective holdings of shares in the Company, the Convertible Preference shares being treated as though conversion into fully paid Ordinary shares occurred immediately prior to the commencement of the winding-up.

The holders of the Non Voting Deferred shares of 25 pence each have no rights to dividends, no voting rights and shall not participate on a winding-up of the Company.

**25 Reserves**

	Share premium £m	Merger reserve £m	Revaluation reserve £m	Other reserves £m	Special reserve £m	Profit and loss £m
<b>The Group</b>						
At 4 January 2002 as previously reported	44.4	–	10.4	1.4	–	287.6
FRS19 adjustment re deferred tax						(21.8)
At 4 January 2002 (as restated)	44.4	–	10.4	1.4	–	265.8
Goodwill written back on disposals	–	–	–	–	–	3.5
Goodwill written back to profit and loss account	–	–	–	–	–	1.3
Transfers between reserves	–	–	(2.6)	–	–	2.6
Revaluation of investments	–	–	(0.3)	–	–	–
Foreign currency translation	–	–	(0.1)	–	–	(13.1)
Retained (loss) for the year	–	–	–	–	–	(61.5)
	44.4	–	7.4	1.4	–	198.6
<b>The Company</b>						
At 4 January 2002 as previously reported	44.4	91.6	–	–	41.7	214.7
FRS19 adjustment re deferred tax						(6.2)
At 4 January 2002 (as restated)	44.4	91.6	–	–	41.7	208.5
Retained profit for the year	–	–	–	–	–	6.3
	44.4	91.6	–	–	41.7	214.8

A Special Resolution to cancel the Share Premium Account was passed at the Annual General Meeting of the Company held on 11 June 1993. This cancellation was confirmed by an Order of the High Court of Justice, Chancery Division, on 14 July 1993. The amount of £88.9 million standing to the credit of the Share Premium Account on 14 July 1993 was transferred to the Special Reserve against which goodwill on consolidation can be written off. This reserve, together with the amounts standing to the credit of the Share Premium Account on 12 October 1990 of £71.5 million, on 19 June 1987 of £38.9 million and on 27 July 1989 of £12.3 million which were transferred following previous Orders of the High Court, becomes distributable to the extent of subsequent increases in issued Share Capital and Share Premium Account.

The amount of reserves of The Morgan Crucible Company plc that may not be distributed under Section 264(3) of the Companies Act 1985 is £179.5 million (2001: £179.5 million).

The cumulative amount of goodwill eliminated against reserves in respect of subsidiary undertakings continuing to trade as members of the Group and which has not subsequently been written off through the profit and loss account is £216.8 million (2001: £221.6 million). The £216.8 million has been debited against the Merger reserve £77.7 million, Special reserve £133.3 million and Profit and Loss account £5.8 million.

**26 Acquisitions**

Profits and losses of businesses acquired, adjusted as necessary to conform with Group accounting policies, are dealt with in the consolidated profit and loss account from the dates of acquisition. During the year £3.0 million was paid to acquire assets with a fair value of £0.7 million. Goodwill of £2.3 million (2001: £36.7 million) has been capitalised and is being amortised in the profit and loss account over a period of 20 years.

**27 Capital commitments**

Commitments for tangible fixed asset expenditure for which no provision has been made in these accounts amounts to £3.0 million (2001: £7.7 million) for the Group and £Nil (2001: £Nil) for the Company.

**28 Leasing commitments**

Operating leasing commitments during the next year, for which no provision has been made in these accounts, are:

	The Group		The Company	
	Land and buildings £m	Other £m	Land and buildings £m	Other £m
2003	1.0	0.7	–	0.1
2004	0.5	0.5	–	0.1
2005	0.2	1.1	–	–
2006	1.3	0.7	0.3	–
2007	0.2	0.5	–	–
2008 and thereafter	4.7	0.2	1.5	–
	7.9	3.7	1.8	0.2

## 29 Pensions and other retirement costs

The Group operates a number of pension schemes throughout the world. The major schemes are of the funded defined benefit type. The assets of the schemes are held in separate trustee administered funds. The trustee of The Morgan Group Senior Staff Pension and Life Assurance Scheme ('SSS') is Law Debenture MC Senior Pension Trust Corporation, the trustee of The Morgan Pension Scheme ('MPS') is Morgan Crucible Pension Trustees Limited, both of which are wholly owned subsidiary undertakings of The Law Debenture Trust Corporation Plc. Both have been trustees of the UK schemes since 1986. Neither of the UK schemes holds any shares in the Company or any of its subsidiary undertakings, has loaned or will loan any scheme assets to the Company or its subsidiary undertakings or made or will make any cash loan to the Company or its subsidiary undertakings.

The total pension cost for the Group was £20.8 million (2001: £19.4 million) of which £16.4 million (2001: £14.9 million) relates to the overseas schemes. The pension cost relating to the UK schemes, The MPS and The SSS is assessed in accordance with the advice of a qualified actuary using the projected unit credit method. The latest actuarial valuations of The MPS and The SSS were on 6 April 2002 and 1 April 2001 respectively. At those dates the market values of the assets of the two schemes were £150 million and £80.5 million respectively and the actuarial values of the assets were sufficient to cover 106% of the benefits that had accrued to members of The MPS and 114% of the benefits that had accrued to members of The SSS after allowing for expected future increases in earnings. The surpluses have been allocated towards the reduction of employer contribution rates over the average remaining service lives of members of the schemes which is approximately 13 years for The MPS and 12 years for The SSS.

The average annual assumptions used for calculating the pension cost under SSAP 24 are:

	MPS	SSS
Investment return	7.0%	7.0%
Pay increases	5.0%	5.0%
Retail Price Index increases	3.0%	3.0%

The Group operates approximately 60 overseas schemes with some 30% of these schemes being defined contribution schemes. Most of the defined benefit schemes are operated in the USA, Australia, Italy and Germany. A review of the major overseas schemes was carried out during 2002 and no material surpluses, or unprovided deficiencies on a current funding level, were identified which required adjustment in the accounts. A further review is planned for 2003. The charge to the profit and loss account in respect of the overseas schemes has been determined in accordance with SSAP24 or local best practice. Where local best practice is followed the resulting charge is not materially different from SSAP24. The disclosure requirements under FRS17 are in note 32.

Three of the US subsidiary undertakings provide post retirement medical care to former employees. These costs are accounted for on an accruals basis with the estimated actuarial liability being amortised over the average life of the relevant employees. The cost for the year was £0.4 million (2001: £0.5 million). The estimated actuarial liability is £1.9 million (2001: £1.7 million).

## 30 Guarantees and contingent liabilities

Guarantees by The Morgan Crucible Company plc have been given for bank facilities of subsidiary undertakings totalling £40.0 million (2001: £214.8 million) of which £40.0 million (2001: £136.1 million) have been utilised, and the Company has also guaranteed the performance by certain subsidiary undertakings of obligations under leases.

There are contingent liabilities on bills discounted by the Group amounting to £0.3 million (2001: £0.2 million).

The Group has incurred and provided, in 2002, for costs in relation to the final US Department of Justice enquiry into competition issues. The Group has been notified of a number of class actions in the US subsequent to the conclusion of this enquiry. Competition issue investigations are also in progress in the European Union and Canada. The Board are of the opinion that these ongoing actions/investigations will have no material impact on the Group's financial position and any claims would be vigorously defended.

In an international group a variety of claims arise from time to time. Provision has been made in these accounts against those claims which the Directors consider meet the requirements of FRS12 *Provisions, Contingent Liabilities and Contingent Assets* and are likely to result in significant liabilities.

## 31 Related parties

The Directors have reviewed transactions with related parties (as defined in FRS8 *Related Party Disclosures*) and have concluded that there are no material transactions which require disclosure which have not been acknowledged elsewhere in the Annual Report and Accounts.

## 32 FRS17 (Retirement benefits) transitional disclosure

The transitional disclosures required by FRS17 are based on the assumptions stated below.

Assumptions 2001	Discount rate %	Salary increase %	Inflation %	Deferred pension increase %	Increase pension payments %
UK	6.00	4.50	2.50	2.50	2.50 – 3.00
Germany	5.75	2.75	1.75	2.75	1.75
Rest of Europe	5.75	2.75	1.75	N/A	N/A
USA	7.25	4.25	N/A	N/A	N/A
Rest of the World	6.50	4.00	N/A	N/A	N/A

Assumptions 2002	Discount rate %	Salary increase %	Inflation %	Deferred pension increase %	Increase pension payments %
UK	5.75	3.75	2.25	2.25	2.25 – 3.00
Germany	5.00	2.00	1.00	2.00	1.00
Rest of Europe	5.00	2.00	1.00	N/A	N/A
USA	6.75	3.25	N/A	N/A	N/A
Rest of the World	5.75	3.25	N/A	N/A	N/A



**32 FRS17 (Retirement benefits) transitional disclosure (continued)**

						2002
	Funded and unfunded defined benefit schemes UK £m	Funded and unfunded defined benefit schemes Germany £m	Funded and unfunded defined benefit schemes Rest of Europe £m	Funded and unfunded defined benefit schemes USA £m	Funded and unfunded defined benefit schemes Rest of the World £m	Total £m
<b>Profit and loss account</b>						
<b>Amounts charged to operating profit</b>						
Current service cost	(5.0)	(1.3)	(1.0)	(4.8)	(1.7)	<b>(13.8)</b>
Past service cost	–	–	–	(0.1)	–	<b>(0.1)</b>
Gains and losses on settlements and curtailments	–	1.7	–	(0.5)	–	<b>1.2</b>
<b>Total operating charge</b>	<b>(5.0)</b>	<b>0.4</b>	<b>(1.0)</b>	<b>(5.4)</b>	<b>(1.7)</b>	<b>(12.7)</b>
<b>Amounts charged to net finance costs</b>						
Expected return on pension scheme assets	17.7	–	–	6.1	0.4	<b>24.2</b>
Interest on pension scheme liabilities	(14.0)	(3.9)	(0.3)	(6.3)	(0.3)	<b>(24.8)</b>
<b>Net return</b>	<b>3.7</b>	<b>(3.9)</b>	<b>(0.3)</b>	<b>(0.2)</b>	<b>0.1</b>	<b>(0.6)</b>
<b>Total charged to profit and loss account</b>	<b>(1.3)</b>	<b>(3.5)</b>	<b>(1.3)</b>	<b>(5.6)</b>	<b>(1.6)</b>	<b>(13.3)</b>
<b>Statement of total recognised gains and losses</b>						
Actual return less expected return on pensions scheme assets	(49.3)	–	–	(17.1)	(0.8)	<b>(67.2)</b>
<i>As percentage of scheme assets</i>	(26.63%)	N/A	N/A	(29.95%)	(7.62%)	<b>(26.58%)</b>
Experience gains/(losses) arising on scheme liabilities	14.0	1.3	–	2.1	0.7	<b>18.1</b>
<i>As percentage of present value of scheme liabilities</i>	5.86%	1.84%	N/A	2.18%	6.54%	<b>4.29%</b>
Changes in assumptions underlying the present value of scheme liabilities	(7.2)	(1.3)	–	(4.7)	–	<b>(13.2)</b>
<b>Actuarial gain/(loss) recognised in STRGL</b>	<b>(42.5)</b>	<b>–</b>	<b>–</b>	<b>(19.7)</b>	<b>(0.1)</b>	<b>(62.3)</b>
<b><i>As percentage of present value of scheme liabilities</i></b>	<b>(17.79%)</b>	<b>0%</b>	<b>N/A</b>	<b>(20.48%)</b>	<b>(0.93%)</b>	<b>(14.77%)</b>
<b>Movement in surplus/(deficit) in the year</b>						
Surplus/(deficit) at beginning of year	(12.6)	(66.1)	(5.2)	(19.0)	0.4	<b>(102.5)</b>
Current service cost	(5.0)	(1.3)	(1.0)	(4.8)	(1.7)	<b>(13.8)</b>
Employer contributions	2.6	3.3	1.6	3.8	1.3	<b>12.6</b>
Gains and losses on settlements and curtailments	–	1.7	–	(0.5)	–	<b>1.2</b>
Past service costs	–	–	–	(0.1)	–	<b>(0.1)</b>
Finance charges	3.7	(3.9)	(0.3)	(0.2)	0.1	<b>(0.6)</b>
Actuarial gains/(losses) recognised in STRGL	(42.5)	–	–	(19.7)	(0.1)	<b>(62.3)</b>
Foreign exchange	–	(4.3)	(0.4)	1.4	(0.2)	<b>(3.5)</b>
<b>Surplus/(deficit) at end of year</b>	<b>(53.8)</b>	<b>(70.6)</b>	<b>(5.3)</b>	<b>(39.1)</b>	<b>(0.2)</b>	<b>(169.0)</b>

If FRS17 had been fully implemented then the net liability would be shown separately on the face of the balance sheet. The Group would need to provide a further £82.0 million on this basis. It would also need to write back to reserves the SSAP24 prepayment of £22.9 million. Deferred tax at the balance sheet date would be reduced by £16.7 million.

These adjustments have no effect on present bank covenants.

## Principal subsidiary undertakings

### The Morgan Crucible Company plc

	Country of Incorporation and principal place of business
<b>Carbon companies</b>	
* M Krug SA Industria & Comercia Limitada	Brazil
Morganite Electrical Carbon Limited	England
Morganite Special Carbons Limited	England
* Morgan Rekofa GmbH	Germany
* Elettrolitica Del Basso Nera SpA	Italy
* Morganite Luxembourg S.A.	Luxembourg
* National Electrical Carbon B.V.	Netherlands
* Morganite South Africa Pty Limited	South Africa
* Karahm Company Limited (93.2% interest)	South Korea
* Morgan Advanced Materials and Technology Inc.	USA
* Morganite Inc.	USA
* National Electrical Carbon Products Inc.	USA
* Morgan Chemical Products, Inc.	USA

	Country of Incorporation and principal place of business
<b>Magnetics company</b>	
*Vacuumschmelze GmbH	Germany
*VAC Magnetics Corporation	USA

	Country of Incorporation and principal place of business
<b>Ceramics companies</b>	
* Morganite do Brasil Industrial Limitada	Brazil
Shanghai Morgan Matroc Technical Ceramics Company Limited (90% interest)	China
Dalian Morgan Refractories Limited (70% interest)	China
Morgan Advanced Ceramics Limited	England
Morgan Electro Ceramics Limited	England
Morganite Crucible Limited	England
* Thermal Ceramics UK Limited	England
* Thermal Ceramics de France S.A.	France
* Carl Nolte Söhne GmbH & Co K.G.	Germany
* Thermal Ceramics Deutschland GmbH & Co K.G.	Germany
* W. Haldenwanger Technische Keramik GmbH & Co K.G.	Germany
* Murugappa Morgan Thermal Ceramics Limited (51% interest)	India
* Thermal Ceramics Italiana S.r.l.	Italy
Shinnika Thermal Ceramics Corporation (50% interest)	Japan
Grupo Industrial Morgan S.A. de C.V.	Mexico
* Thermal Ceramics South Africa Pty. Limited	South Africa
* Morgan Advanced Ceramics Inc.	USA
* Thermal Ceramics Inc.	USA

	Country of Incorporation and principal place of business
<b>Other subsidiary undertakings</b>	
* Morganite Canada Corporation	Canada
* Morganite Industries Inc.	USA

\*Denotes companies some or all of whose shares are owned by a subsidiary.

The following German subsidiaries which are included in the Group consolidated accounts are utilising the regulations of article 264 paragraph III and article 264b German Commercial Code to be liberated from preparing audited statutory accounts:

- W. Haldenwanger Technische Keramik GmbH & Co K.G.
- Thermal Ceramics Deutschland GmbH & Co K.G.

A full list of subsidiary companies will be included in the annual return to Companies House.

## Statistical information

	1998 £m	1999 £m	2000 £m	2001 £m	2002 £m
<b>Turnover</b>	900.4	862.4	1,051.1	1,024.5	<b>880.3</b>
<b>Operating profit/(loss) before goodwill amortisation and operating exceptionals</b>	107.1	94.6	104.4	64.3	<b>34.1</b>
<b>Operating profit/(loss) before goodwill amortisation</b>	107.1	77.1	104.4	64.3	<b>(23.2)</b>
Goodwill amortisation	(0.6)	(2.0)	(5.8)	(7.7)	<b>(7.7)</b>
Exceptional goodwill write-off	106.5 (57.0)	75.1 –	98.6 –	56.6 –	<b>(30.9)</b> –
<b>Group operating profit/(loss)</b>	49.5	75.1	98.6	56.6	<b>(30.9)</b>
Corporate exceptional items	(0.2)	32.6	10.2	(17.6)	<b>(15.0)</b>
Net finance charges and similar items	(15.4)	(13.5)	(16.2)	(19.2)	<b>(12.8)</b>
<b>Profit/(loss) on ordinary activities before taxation</b>	33.9	94.2	92.6	19.8	<b>(58.7)</b>
Taxation	(29.0)	(32.7)	(30.5)	(12.5)	<b>0.5</b>
<b>Profit/(loss) on ordinary activities after taxation</b>	4.9	61.5	62.1	7.3	<b>(58.2)</b>
Minority interests and preference dividends	(3.4)	(2.9)	(3.8)	(3.5)	<b>(3.3)</b>
<b>Profit/(loss) attributable to the ordinary shareholders</b>	1.5	58.6	58.3	3.8	<b>(61.5)</b>
Ordinary dividends	(36.9)	(36.9)	(36.9)	(17.2)	–
<b>Retained profit/(loss) for the period</b>	(35.4)	21.7	21.4	(13.4)	<b>(61.5)</b>
<b>Assets employed</b>					
Goodwill	24.9	107.9	112.6	138.4	<b>130.5</b>
Tangible fixed assets	434.4	489.2	493.4	490.3	<b>433.6</b>
Investments	6.2	6.2	18.5	23.1	<b>7.2</b>
Net current assets	138.2	288.5	142.0	159.3	<b>96.7</b>
<b>Total assets less current liabilities</b>	603.7	891.8	766.5	811.1	<b>668.0</b>
Term loans and exchangeable redeemable preference shares	227.5	334.2	188.7	261.2	<b>178.6</b>
Provisions and other items*	45.8	127.0	116.6	128.4	<b>139.0</b>
	330.4	430.6	461.2	421.5	<b>350.4</b>
<b>Financed by</b>					
Shareholders' funds*	316.1	414.7	447.0	410.3	<b>340.1</b>
Minority interests	14.3	15.9	14.2	11.2	<b>10.3</b>
	330.4	430.6	461.2	421.5	<b>350.4</b>
<b>Dividends per share</b>	15.9p	15.9p	15.9p	7.4p	–
<b>(Loss)/earnings per share</b>					
– basic	0.7p	25.3p	25.1p	1.6p	<b>(26.5p)</b>
– basic before goodwill amortisation	0.9p	26.1p	27.6p	5.0p	<b>(23.2p)</b>
– diluted	0.6p	25.1p	24.9p	1.6p	<b>(26.2p)</b>
– underlying	25.5p	22.4p	22.5p	9.2p	<b>1.7p</b>
– underlying before goodwill amortisation	25.8p	23.2p	25.0p	12.5p	<b>5.0p</b>

\*2001 has been restated for FRS19 – see notes 22 and 23.





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