

James Walker® Group

125 Years of the James Walker Group



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Foreword

'There is something special about James Walker.'

When I joined James Walker in the early 1990s, I was told frequently by employees whom I met that there is something special about James Walker.

We have a unique heritage that traces the evolution of the current product portfolio to the entrepreneurial engineering spirit of our founders.

The ethos captures the way successive chairmen have guarded the family feeling and caring way that has been part of being one of the James Walker team. Our record of long service is testimony to this.

Our reputation is one of high quality and technical excellence. People still turn to James Walker Group companies for technically engineered solutions.

In putting together this record celebrating our 125 years of trading I want not only to recognise the journey that has been made and the changes that have occurred, but also to focus on the future and ensure that we continue to adapt our product offering to meet an ever changing market.

I would like to thank those whose endeavours have contributed to our 125 year journey and know that we will continue to say 'there is something special about James Walker'.

Peter Needham

Chairman & Chief Executive
Summer 2007

1 James Walker® 1882-1913

James Walker was born in 1840. A man of spirit and vision, purpose and determination, he inherited a strong entrepreneurial streak from his Scottish forebears. The engineering manufacturing and exporting company he founded 125 years ago still flourishes today, still owned by the descendants of the founders, still sharing their values, still manufacturing and selling in more than 100 countries around the world.

James never intended to make his fortune from engineering. From the age of 23, he spent 13 years abroad, attempting to make his fortunes from the gold mines in Australia. He came back to England without any gold but armed instead with valuable engineering skills which turned out to be the key to his success. Back in England, he took up a job selling oils and greasy packings for industry but he always wanted to run his own business. By 1882 he was running his own small engineering accessories business from Clapton in London's East End and three years later he was operating from a London railway arch at 4, America Square, Minories, where he set up a small workshop. Britain was the leading shipping nation of the world and London was the leading port. Shipping and shipbuilding supported a whole host of ancillary industries and a wide range of specialists. As ships became bigger and more powerful, these businesses were in the vanguard of technical innovation, finding solutions for ever more demanding technical challenges. James Walker was among them.

James, later a member of the Institute of Marine Engineers, was quick to spot a commercial opportunity using his engineering ingenuity. Almost every type of engineering plant depends for efficient operation on the use of effective packing or jointing to withstand the pressure and processes involved. Packing prevents the leakage of fluid or gases while jointing seals sections of piping. James Walker made his name from developing packing strong enough to withstand the higher pressures of the new triple and quadruple expansions engines which came into use during the 1880s and 1890s. His first patent, No 3675, for improvements in piston and gland packing, was approved in 1888, when he had moved to larger premises in Love Lane, Shadwell, known as Lion Works. 'Lion' was the commercial brand name James Walker gave his innovation and the famous Walker Lion trade mark, for steam and hydraulic packing, first appeared in March 1889. Lion packing was soon widely used in the ships of the British merchant marine. Rapid success required larger premises so in 1896 James Walker bought a disused rope works in Garford Street, off the West India Dock Road in Poplar, and built a modern factory which began operating in 1898. A subsidiary factory was added a decade or so later.



The founder, James Walker (1840-1913), first chairman of James Walker & Co Ltd, 1911-1913.

The earliest James Walker patent for packings and jointings.

From Clapton, James Walker moved to the railway arches in America Square in the east of London.



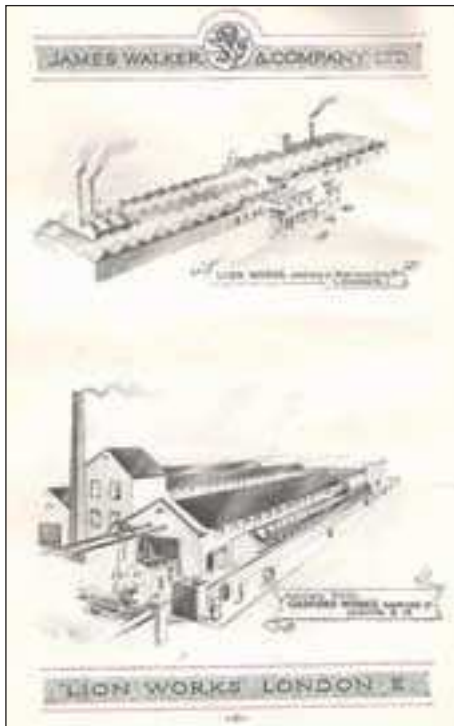
Three early trade marks. The Walker Lion first appeared in 1889.



1 James Walker 1882-1913



James Walker moved to Love Lane in Shadwell, where he is seen with his workforce, before expanding into Lion Works in Poplar, to which Garford Street was later added.



In later years, a successful manufacturer, James Walker returned to Australia, where his packings were already being sold.

The growth of the business led to the opening of branches at the country's principal ports. George Cook, who joined the firm in 1888, helped to develop sales across the country. The Liverpool branch was opened in 1898, followed by Glasgow in 1899, Cardiff in 1902 and Newcastle in 1906. In 1909 William Dixon, who had joined the firm in 1900 and was destined to become chairman and managing director, became manager of the Liverpool branch and opened up branches in Manchester, Sheffield and Leeds. Walkers were winning more and more major customers, from railway companies, water works and power stations to engineering works and steam hammer forges, and were building up important links with government departments, including the Admiralty, the War Office and the India Office.

Success in the UK encouraged expansion overseas. In 1908 George Cook opened up the first overseas branch in Antwerp, with a Frenchman, O Carpentier, as his assistant. Carpentier was the first of many overseas staff employed by the business. While many British companies operating overseas either restricted their activities to the British colonies and other English-speaking parts of the world or refused to employ local managers in countries where English was not spoken, James Walker believed it made sense to take on people who knew how business was done in their own part of the world. Walkers also relied heavily on overseas agents and distributors, building up where possible a close working relationship with them. Some succeeded, lasting for generations, later becoming part of Walkers, while others proved to be short-lived. For instance, agents were appointed in Genoa in Italy and in Tokyo in Japan. In Australia, the firm of W Adams & Co looked after Walker's interests in Sydney, Melbourne and Brisbane. In the USA distributors had the same function in New York until 1912 when A Hardie was sent out to open a small depot at 21, Thames Street, moving later to larger premises at West River Street. The success of James Walker & Co, as the firm was now known, led to a flurry of cheap imitations. By 1910 the firm's catalogue was stating that, 'For the purpose of identifying our Genuine "Lion" Packings, in addition to the well-known Brass Labels, we now manufacture them with a "thin red line" running through the Packings'.

In 1911 James Walker had decided that, given the size of the business and the demand for working capital, it was time to convert the business into a private limited company. The first meeting of James Walker & Co Ltd took place at the Poplar works on Wednesday 29 March 1911. James Walker was appointed chairman and joint managing director, with George Cook, for life. Two years later, on 8 May 1913, James Walker died, having achieved his dream of creating a successful engineering manufacturing company. George Cook became chairman and the founder's widow, Louisa Walker, became the first woman to join the board, although she never attended a single meeting.





James Walker valued his employees and annual outings were a feature from the earliest days.



2 James Walker® 1913-1945

The James Walker Lion receives thanks from the Commander-in-Chief of the Royal Navy, Admiral Beatty, in this advertisement underlining the contribution of the company to the war effort during 1914-1918.



During the First World War Lion products were often indispensable for the British war effort. As a result, James Walker & Co was one of the few companies in its field which did not come under government control during wartime. The list of new branches, featuring Birmingham, Southampton, Swansea, Bristol, Hull, Leeds, Sheffield and Leith, shows how reliant the company still was upon shipping and ship-building but also how it was widening its net to cover key industrial centres. Profits were good and the company prospered in spite of the disruption to overseas trade. In the USA, the New York depot also struggled. Sent out in 1916 to close the business, William Dixon realised it could be turned round with better management so he appointed a new manager, Charles Willis, who remained in charge for 35 years.

The growth of the business during the war made it obvious to George Cook that the company needed to increase the strength of its management. Walkers have always been good at spotting management potential among staff and giving them the opportunities to develop.

Another success factor was the financial strength of the business. There were times when the company could not afford to pay a dividend but it never made a loss, it was asset-rich, with most branches or depots, as they were becoming, owned rather than rented, and it had minimal, if any borrowings. When times really were hard in 1931, at the depths of the international depression, when shipping, still Walker's major market, was deep in the doldrums, the prudence in building up investments in previous years meant any cash-flow problems were easily overcome.



George Cook, chairman and governing director, 1913-1938.

The directors also maintained their vision for the business as an expanding UK manufacturer selling at home and abroad. Part of this vision included the move from the outdated, overcrowded Lion Works in Poplar. George Cook discovered a large redundant factory site for sale on a weekend drive through Woking. The Maybury factory had belonged to Martynside, which had been the second largest aircraft manufacturer in the UK before its collapse in 1923. At the heart of the site lay an extraordinary Victorian Gothic building. This was the Royal Dramatic College, which had opened in 1862 as a home for actors and actresses who had fallen on hard times but struggled to survive. The central hall of the building, with two beautiful stained glass rose windows at each end, one depicting Shakespeare's comedies, the other his tragedies, eventually became James Walker's imposing board room. In November 1925 Walker's offer of £16,000 for the site was accepted. The Poplar works were sold in 1927 for a combined price of £6,100, illustrating how different the two sites were. The move from Poplar to Woking took place in phases throughout 1926. Many of the Poplar staff transferred to the new Lion Works and their descendants were still working for the company eight decades later. To help workers from Poplar return to their London homes at the weekend, the company introduced a five day week (Saturday working was still common nationally) although working hours were increased to compensate.

From 350 employees when the company moved to Woking in 1926, numbers grew to 555 by the time of the Second World War. James Walker had always taken a paternal interest in his staff and this continued under George Cook. At his expense every employee enjoyed an annual outing, usually to a seaside resort, Ryde on the Isle of Wight being particularly popular. Entire trains were chartered for the day, with the itinerary carefully prescribed but with sufficient free time for everyone to let their hair down.

George Cook died on 30 July 1938, his fellow directors recording that Walker's 'present fame throughout the world owes so much to his zealous untiring efforts from its pioneer days until the time of his death'. William Dixon, by now George Cook's personal assistant as well as a director, was to realise his early ambition and become chairman and managing director.

With more employees, the company's range of social and sporting activities multiplied. Shown here are the 1927 men's giant pushball team, the cast of the Squirrels' Concert Party at the Works' Christmas Social in 1935, and the Ladies' Football Team promoting their match against Woolworths in 1940.





William J Dixon, chairman and managing director, 1938-1962.

William Dixon, a genial man and talented salesman, reinforced the paternal spirit which governed the welfare of Walker's employees. He was influenced by his own humble beginnings. His father had lost his job as a docker because he had joined the union, the money earned by his mother from taking in washing was never enough to keep the family from being hungry, and he had started work at the age of eleven. He knew how important decent working conditions were. By the end of 1938 he had introduced a contributory pension scheme not just for staff but for every employee in the factory as well. He also ushered in a sickness and accident benefit scheme and pioneered a greater concern with health and safety, establishing a 'Safety First Committee'. This was combined with a Works Management Committee which met monthly to discuss working conditions, inequalities of service, staff welfare and improved production methods. On top of this, Lion Works boasted a social club with its own hall where billiards was played, children's concerts and Christmas parties were held. Football, cricket and tennis teams played competitively in local leagues, and for many years the company held a Gala Day each summer at the ground of Woking Town FC.

In the UK, by far and away the company's largest market, there were 15 depots by 1927 and a handful more were opened, for example, in Leicester, Middlesbrough and Falmouth, despite the generally hostile economic climate. After the company left London for Woking, an office was opened in the City in Leadenhall Street, traditionally the location for the shipping industry. Overseas there was an expanding list of agents covering almost every part of the globe, from Buenos Aires and Valparaiso in South America, Shanghai in China, Port Natal and Johannesburg in South Africa, to Saigon in Indo-China, Calcutta in India, Halifax and Montreal in Canada, Tallin in Estonia and Riga in Latvia. It was an impressive list but many of these agencies kept changing and there was not always consistent coverage of every country or continent.

The biggest export market for Walkers was in Belgium and France. By the late 1920s, either under British representatives or French agents, the company had a presence in Dunkerque, Marseilles, La Rochelle, Le Havre and St Nazaire as well as Nantes and Rouen. In Australia and New Zealand, the business was incorporated as James Walker & Co (Australasia) Ltd in 1930, when an office was opened in Sydney. Offices were opened in Melbourne in 1933 and Wellington in 1937. In 1938, following one of George Cook's last overseas visits, it was decided that Australia should become the first place outside the UK

to make Lion products. As it turned out, that was an enlightened decision, for when war broke out again in 1939, the company had secured an important market with plenty of potential which would otherwise have been severely disrupted without easy access to UK made goods. In the US, the business was incorporated as James Walker Packing Co Inc in 1933.

The company's plans, discussed in late 1938, for 'the worldwide expansion of the Company's business' were dashed by the Second World War. Once again exports to Europe were cut off by the war. Across the Continent depots were closed and agencies were terminated. In the UK several depots were damaged by bombing but the company in general escaped lightly. A 'shadow' factory, Bishop's Works in Godalming, down the road from Woking, was acquired in 1940, originally in case Lion Works was put out of action by bombing. In the event, the demand for Lion products soared, with sales doubling in the first year of the war. Since part of Lion Works had been taken over by aircraft manufacturers Vickers Armstrong, the Woking and Godalming factories were both working around the clock, as once again James Walker & Co became an essential contributor to the national war effort.

The workforce increased from 555 in 1940 to 1203 four years later. The growth in the size of the workforce brought changes in factory management, with the directors encouraging the development of shop-floor management by delegating greater responsibilities to foremen. Yet as the war went on, so labour became more and more difficult to find. This made meeting delivery dates difficult yet the company still managed time after time to deliver goods in double-quick time to prevent delays in turning round naval and merchant vessels on convoy duty. Every effort was made to keep standard packings in stock at the company's national depot network. In January 1943, as delays in making prompt deliveries became more acute, the government stepped in and gave Walkers priority in the allocation of available labour.

The splendid Victorian Gothic premises of the former Royal Drama College can still be seen as the company head offices at the heart of Lion Works, Woking, seen from the air in 1936.



2 James Walker 1913-1945

Labour was not the only thing in short supply. The scarcity of traditional materials taxed the company's ingenuity but the Walker instinct for innovation rose to the challenge. Many of the products developed for wartime would have widespread potential for use in peacetime. One innovation, synthetic rubber bonded cork, was produced under the name Nebar by a new company, the Flexible Cork Company, set up at Godalming in April 1945. It would turn out to be much more successful than anyone could have anticipated.



Supplying the Royal Navy and the Royal Air Force, among others, made James Walker & Co a manufacturer of national importance during the Second World War.

Making a delivery - two smartly dressed van drivers with their solid-tyred Leyland vehicle complete with James Walker Lion on the cab roof.



3 James Walker® 1945-1969

This was an era of renewal and consolidation for James Walker & Co. The devastation of the war at home and overseas, coupled with the long period of austerity which came with peace, was a mixed blessing for the business. In a time of reconstruction, Walker's products were in huge demand, benefiting from wartime research and development, and accompanied by a reputation for durability and quality. On the other hand, the company had to start almost from scratch with much of its overseas business. While the company was always alive to the need to meet the requirements of emerging industries, its UK sales organisation was still based on the pre-war dominance among the company's UK customers of shipping and ship-building, an industry now in decline. By 1969, however, as a new factory was opened at Cockermouth, in northern England, James Walker & Co could look back on a generally successful period of post-war progress.

The return to normal began in Woking with the reappearance of the five day working week in early 1946, accompanied at the same time by the introduction ahead of national agreements of a reduction in weekly hours to 40. Vickers vacated the Woking works, allowing a larger canteen and extra storage to be created. Although William Dixon continued as chairman and managing director, it was Frank Watson, who had joined the company in 1920 and became assistant managing director in 1946, who played the leading role in the company's affairs until his untimely death in 1958. Reading through the board minutes for the period, one has the clear impression of a competent management constantly reviewing the business, striving for improvement and expansion, encouraging innovation and keeping a close eye on labour and costs. Borrowing was always minimal and the first phase of post-war expansion was financed by raising capital through the issue of more shares, an exercise repeated in 1960. These were quickly taken up by a body of shareholders who continued to provide unstinting support for the board's long-term vision of the business.



Since James Walker's trademark was the lion, the directors could not resist acquiring this stuffed version, seen here en route from the museum in Weston super Mare for his new home in the Lion Works board room in Woking in 1947.

Walker's early world-wide organisation.





UK depots map.

This determination was stated clearly at the annual general meeting in 1967 which resolved that 'this Company should continue as a Private Company with the family connections which have been established over so many years, and which are of great value also from the point of view of those who work in it with such enthusiasm and loyalty'.

Through the 1950s and 1960s sales rose steadily, exceeding £1 million for the first time in 1950, reaching £2 million in 1952, surpassing £4 million in 1961 and reaching £7 million in 1969. One of the most eagerly awaited messages over the Lion Works tannoy was hearing William Dixon calling on his 'fellow workers' with news of their annual bonus.

Although for most of this period market conditions favoured the manufacturer, James Walker & Co capitalised on this advantage by continuing to adapt to advances being made in industry around the world, characterised by innovation, investment and enthusiastic salesmanship.

One of the most striking successes came from the Flexible Cork Company and its new synthetic rubber bonded cork product. It proved surprisingly adaptable. A future was predicted for it in the fashion shoe trade as part of the new wedge and platform shoes being introduced from the USA. But it was industrial applications which proved most successful. During the 1950s, as well as its use for seals and gasket, it was also developed, under the Treadmaster name, as safety flooring for use in industry and in public transportation, notably buses and trains. The greatest success was achieved with anti-vibration rail track pads for the rail sector and by the 1960s the company was supplying millions of pads every year for the rail network in the UK and in Holland. Bob Hargreaves, who had joined the company in 1931, became chief chemist and joined the board in 1947, was one of the main architects behind this and other key technical developments until his retirement in 1977.

Another was Bob Turner, who joined Walkers in 1942 and joined the board in 1968 as director for technical development, a post he held until he retired in 1988. Bonded cork was an outstanding example of a product developed in response to a specific problem which turned out to have wider applications. This principle also applied to the extensive core range of jointings, packings and moulded sealing rings. Within the range there was a process of constant review and improvement, often in response to requests from particular customers, extending the capacity of items to withstand more extreme conditions.

The company made the most of the strong relationships it had developed with government departments during the war and became involved with the latest technological projects, such as the development of jet engines and atomic energy. So during the 1950s and the 1960s, Walkers supplied seals for Calder Hall, the first atomic power station in the world to produce electricity on an industrial scale, for the Jodrell Bank Telescope, for the Vulcan jet bomber and for HMS Dreadnought, Britain's first nuclear-powered submarine. Walkers products also featured in the Comet, the world's first commercial passenger jet, in Concorde, the world's first supersonic passenger jet, and in the prestigious new transatlantic passenger liner, the QE2, launched in 1969. The company was also eager to enter new markets, particularly the oil industry. In the late 1940s, for instance, Walkers were already supplying packings to Shell for well-head seals. The successful perpetuation of this pioneering zeal, handed down from the founder onwards, meant that Walkers seals continued to be found almost anywhere where power or pressure was involved.

There was one major factor why so many customers were extremely loyal – they simply could not find the same quality of product anywhere else. There were a number of reasons for this. The company controlled its own materials, compounding its own rubbers and employing its own chemists, and it had its own technical department, offering designs to suit individual customers, willing to investigate any problem and, from the 1960s, carrying out in-house testing. While some competitors might compete strongly with Walkers in a particular sector of their product ranges, there were none who could compete across the board.

This series of photographs featuring the Lion Works was taken around 1950 and shows (1) women at work on the small presses and (2) men making up, both in the Central Works; with women (3) hand-making special copper joints and (4) inspecting finished products. Finally there is (5) an evocative view of workers streaming out of the factory at the end of their shift.



People were also important. The chances were that any one who enjoyed working at Walkers was likely to stay with the company a long time. The company looked after its employees, through the social club, with its sports teams, gala days, concerts, parties and outings, as well as decent pay and working conditions. Workplace training was available. An apprenticeship scheme had been in place for many years and this was complemented in 1949 by the introduction of a management training scheme for school leavers taking up administrative and technical posts

William Dixon, who celebrated 60 years of service in 1960, gave up his posts as chairman and managing director through illness in 1962. Reginald Strong, who had joined the company in 1946 as an accountant and later became finance director, took over as managing director. The post of chairman was taken by Donald Cook, the son of George Cook, who handed over to Reginald Strong in 1970.

Another rising star who had joined the business after the war was Dorian Davies who joined the board in 1962 as sales director. He was a great believer in the established national network of depots. This reflected the fact that throughout this period the business was very reliant on the UK, with exports representing an average of only 20 per cent of sales. Other than in Australasia and the USA, the company had to start almost from scratch overseas after the war. Agencies were steadily revived across the world, from Copenhagen and Oslo to Singapore and Shanghai, while new ones were set up in places like Hong Kong, Durban and Vancouver. Among the new agents who would build a long-term relationship with Walkers were Andersen & Odegaard in Oslo and C Haacke & Sohne in Hamburg. Business began again in countries like Belgium, the Netherlands and France. In Belgium James Walker & Co (Belgium) was formed in 1945.

The Netherlands business, revived in 1946, became James Walker & Co (Nederland) in 1962. A company was formed in France in 1959, based in Paris, developing new and larger depots across the country. New markets were also opened up and James Walker & Co (Italiana), based in Milan, was formed in 1958 to encourage sales in northern Italy. Business grew steadily in Australasia and the USA. In Australia the original factory was expanded and then replaced while an office was opened at Newcastle in New South Wales. In the USA the manufacturing of packings and gaskets began in 1947 in a rented factory in Mannheim, Pennsylvania. The American company's head office moved to Chicago in 1953 to be closer to

These three photographs of Gala Day at Woking Football Ground in the early 1950s show just what a major event it was during the heyday of Lion Works.





Lion Works FC 1948-1949, runners-up in the Woking & District League, Division II (Eastern) - L to R (standing) E Collyer, V Cook, N Wheeler, A Russell, A Frost, A Bonner, G Hamm, W Shears & E Bailey; L to R (seated) A Butler, R Page, D Russell, W J Dixon, W Gale, E Stevens, K Davis & A Lake.



Lion Works Tennis Team, Woking & District League Champions (Men's Doubles) 1957 - L to R (standing) B Halligan, F Gibson, N Palmer, A K Gibbs, V Keely & R N Johnson; L to R (seated) G Hamm, F Skilton, J H Collier, K K Gibbs and K Caunce.

major customers and for the same reason the factory followed, to Chicago Heights, in early 1956. At the end of that year both the offices and the factory moved to completely new premises in nearby Glenwood. Walkers at this time were still among the few British exporting companies who saw the advantage wherever possible of recruiting local staff to run the business overseas. The company understood the importance of having staff on the ground who understood how business was done locally while ensuring they also understood the Walker way of doing things through training carried out at Woking.



Donald Cook, chairman, 1962-1970.

As the economy boomed in the late 1950s, Walker's UK manufacturing facilities were snowed under with orders. Customers were often prepared to wait a long time for delivery because of the quality of the product. To improve delivery times, the company built a new factory at Hoe Bridge in Woking, not far from the Lion Works, in 1961. An extension was added a few years later. But Hoe Bridge did not cure the problem. Things were aggravated because there was a growing shortage of suitable labour in and around Woking, which in any case had never been a strong centre for manufacturing. As the single most important local employer, Walkers had a reputation for good rates of pay, but this did not help matters because every other local employer, taking Walkers as their benchmark, offered similar rates. With growing demand, it became clear by the late 1960s that if the company wanted to expand production even further, it would have to look for a new location beyond Woking, Surrey and the south-east of England.

4 **James Walker®** 1969-1993

Cockermouth on the edge of the Lake District in northern England, was the location chosen for Walker's new factory. Situated in an economically disadvantaged area, Cockermouth was the focus of government assistance to attract new jobs. There was also a nearly completed factory in the town which the intended occupiers no longer needed. Above all, there was an ample pool of reliable labour. The factory was acquired in 1969 and began production in September the same year. The first employees, many of whom continued the company's tradition of long service, calling themselves the '69-ers', were given comprehensive training in Woking. Tony Gibbs was transferred from the Birmingham depot as the factory manager. The British prime minister, Harold Wilson, officially opened the factory on 20 February 1970.



The Cockermouth factory was completed in 1969 and opened by the Prime Minister, Harold Wilson, in February 1970. Bob Turner, the technical director, is on his right and Reg Strong on his left.



Cockermouth, with hindsight, was a marker for the future, a sign of wider horizons. The success of Cockermouth encouraged the company to look further afield for other manufacturing opportunities, not just in the UK, but overseas, not just in traditional areas but in new fields, achieved mainly through the acquisition of willing partners. This was a trend which emerged slowly, over the next 20 years, only after detailed consideration, carefully financed, in the prudent Walker way. Cockermouth made an enormous difference to Walkers. There was a huge rise in productivity – some of the plant was new and the best of Woking's working practices were adopted. The workforce rose rapidly and the factory was extended twice, doubling in size by 1974.

But the 1970s and the 1980s were troubled times economically, both in the UK and around the world. In the UK several traditional heavy industries were in decline although Walkers benefited from the continued prosperity of the steel industry and the rise of North Sea oil. But each recession chipped away, bit by bit, at the viability of Lion Works and each recession accelerated the flight of labour from Lion Works and Hoe Bridge. There were always other jobs for workers who had to leave the company during a downturn. The difficulty was getting them back afterwards. The difficulties in meeting customer orders, which Cockermouth had begun to solve, began to reappear. As a result, more and more work was transferred to Cockermouth, where there was never a problem in recruiting workers.

The Lion Works board room, complete with stuffed Walker Lion. The rose windows at each end of the room, a relic of the original use of the building, were devoted respectively to Shakespeare's comedies and tragedies.



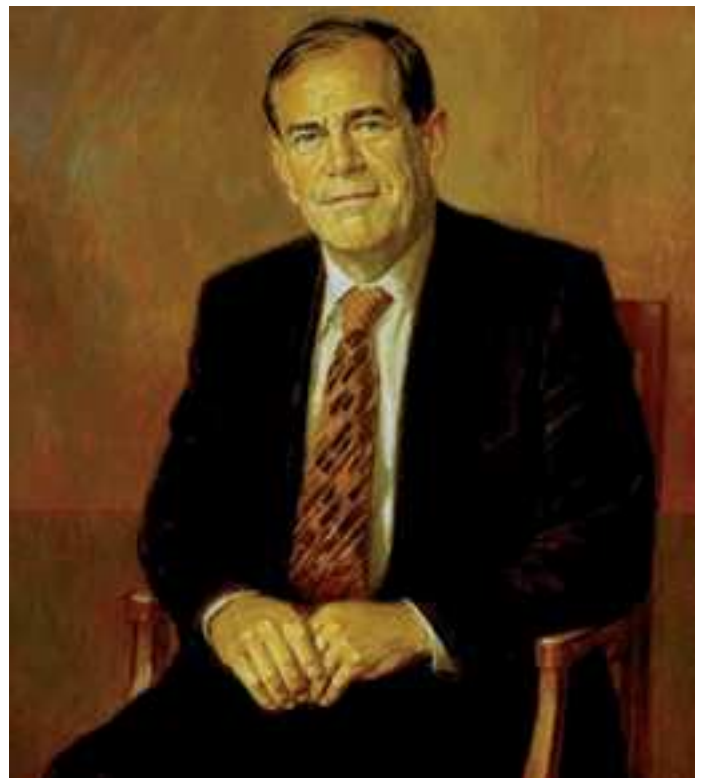
The same problem hindered the expansion of other parts of the company's output, specifically Metaflex and bonded cork products. The solution was two-fold. Firstly, Walkers found extra capacity for metallic gaskets and seals, destined principally for the booming North Sea oil industry, by acquiring a long-term supplier of similar goods, the Moorside Machining Company, based at Bingley in West Yorkshire, in 1977. Secondly, the Surrey Grinding Company moved from Woking to Tavistock in Devon, another area with no shortage of labour, in 1979. In the same year a site was also acquired at Liskeard in Cornwall where a new factory was built to house the relocated operations of Flexible Cork, which began production in June 1980. Ultimately Flexible Cork would be merged under the name Tiflex with another Walker company, Textile Industrial Components, or Tico, founded in 1950 to supply roller coverings to the textile industry. By the late 1990s all the operations of the merged company would be centralised at Liskeard.

The original move to Liskeard came as another recession began to bite, laying waste to large parts of UK heavy industry. Dorian Davies, who had succeeded Reginald Strong as chairman and managing director in 1977, noted in 1983 how the shrinking market for traditional products made it essential not just to expand and improve the existing product range but to become more innovative as well. A series of acquisitions made during this period not only strengthened the group but also showed its willingness to be adaptable in the face of changing conditions and receptive to new ideas. The first came in 1979 when Flemings Seals, makers of moulded plastic seals, based at Brighouse in West Yorkshire, became part of the company. Perhaps the acquisition with the most far-reaching consequences for James Walker, and one which epitomised the vision of those who led the business, was Edilon in 1981. This was also the company's first acquisition of an existing overseas manufacturing business. By this time, Walker's rail sector business was well-established, supplying rail track pads to British Rail through Flexible Cork. The development work done by the company for one of the many abortive Channel Tunnel

Reginald Strong, chairman and managing director, 1970-77.



Dorian Davies, chairman, 1977-87.



projects (although ultimately the company would supply rail tracks pads for the successful project) had also led to rubber bonded cork materials being supplied to the Hong Kong Mass Transit Railway in 1977, the largest single contract ever awarded to the company at that time. Walkers had been working since the late 1960s in association with Edilon, a long-established and highly profitable business, based in the Netherlands. The two businesses were complementary, Flexible Cork producing dry-based elastomeric bonded cork materials while Edilon made liquid-based polymer products. By combining the two, Walkers could offer a complete technical solution for the many light rail systems being developed throughout Europe. It was an exciting deal. In 1983 a completely different new business, based at Dudley, near Wolverhampton, became part of Walkers. The company took its name, Rotabolt, from the revolutionary bolt it had devised. The inventors had received widespread publicity and many awards for technological innovation, which later included the Queen's Award for Technological Achievement in 1985.

Other advances included investment in a stock system and central stores, which eliminated the cost of frequent small production runs of cheaper items. Stock control, order processing and company accounting became computerised. Production was changing, accelerated by health and safety legislation, from the dirty mixing of rubber in open mills to the use of internal mixers, which also helped to improve processes and procedures. Materials technology was changing as well, driven by offshore exploration. But too much time was spent on the continuous refinement of existing items and too little on launching new products to take their place as they became obsolescent. The Lion Works was becoming an inefficient and costly work space and labour shortages in Woking seemed intractable. By the 1980s, a sea-change was also occurring among many of the company's major customers. Nationalised industries were being privatised and the more competitive, market-led approach they adopted was beginning to alter the way government departments, such as the Ministry of Defence, conducted business. Quality alone was no longer guaranteed to win sales. These challenges were tackled under the leadership of

These four photographs are taken from a series shot in the Woking offices in 1971, illustrating how different things were before the advent of computers.

*They show (1) the drawing office
(2) comptometer operators
(3) the order department and
(4) the purchasing department.*



Chris Higgins, who became executive chairman in 1987, with Mike Kelly as managing director. They were affecting the financial performance of the business. The company had already begun to invest extensively in computer-controlled plant and machinery and this continued. Computerisation also extended to the drawing office, finance and administration where traditional clerks and draughtsmen with their ledgers and drawing boards were becoming a thing of the past. An emphasis was placed on innovation, launching unique products in the market more quickly, making the most of the undoubted skills and talents employed within the business. But the most pressing issue was the future of Lion Works. In that measured, considered way it had always taken major decisions, the company eventually decided that Lion Works had to close. The site was finally vacated in 1993, 67 years after the company had moved to Woking from Poplar. The welfare of employees was paramount in winding down the factory and many had nothing but praise for the way it was handled.

The great sales success story of this period is the trebling of exports in real terms. This achievement, which earned the company the Queen's Award for Export Achievement as early as 1972, masked what was a real decline in UK sales. All the hard work done after the war in rebuilding overseas markets began to pay off in the 1970s and 1980s. The UK remained the largest single market for the company but by 1990 exports accounted for more than half of James Walker's turnover. Although the traditional depot network was beginning to reach the end of its days in the UK, such a system was almost unheard of in many of the company's export markets and made a huge impact. Through its overseas depots, the company was bringing to export customers a much appreciated local service they had never experienced before. Business was strengthened in existing markets and new territories were opened up, particularly in the Middle East and Far East. New agents and distributors were appointed while, when the opportunity arose, several well-established ones were acquired by the company, particularly in France, where new depots were opened and existing ones enlarged. New companies were formed to take over existing



Reg Strong as chairman receives the Queen's Award for Export Achievement from the Lord Lieutenant of Surrey in 1972.



3



4

businesses in Ireland, based in Dublin, as James Walker (Ireland), in 1972 and in Spain, based in Bilbao, as James Walker (Iberica), in 1980. In Australia and New Zealand, the business continued to expand. The Australian factory benefited from continued investment and, with the opening of the Perth office in 1980, the Australian company had a base in each of the country's states. The New Zealand branch became a separate company in 1977, with the Australian company changing its name to James Walker (Australia). In 1983 the first depot on South Island in New Zealand was opened. In the USA, a new factory at Glenwood began production in 1969 and was extended in 1979, two years after the original US company, James Walker Packing Co Inc, was merged into a new company, James Walker Manufacturing Co Inc. A further extension was added in 1991.

In 1990 James Walker Group was formed as the group parent company, with the intention that over time the management of the group would become entirely separate from the management of James Walker & Co. The latter became the main UK manufacturer and supplier to overseas businesses. Group control increased over subsidiaries with greater accountability and transparency.

Other changes were also made under the leadership of Chris Higgins to strengthen the James Walker Group in the light of a rapidly changing business environment. While continuing to develop management potential within the group, there was a willingness to look outside the group for skills and experience existing staff did not possess. Another strength of the group was the serious consideration it had always given to management succession with the smooth transition from one generation of managers to another. During the 1980s the group went a step further and progressively developed a comprehensive scheme of management training. This was particularly important as the group modernised and also helped to reinforce a sense of group identity that was still in its infancy, bringing together for the first time managers from different parts of the group.

By 1993, as the Lion Works finally closed, the James Walker Group had demonstrated once again that mix of innovation, entrepreneurialism and adaptability which had made it so successful in its own field. The challenges of the next decade would place a premium on all three qualities.

5 James Walker® 1993-Onwards

The James Walker Group drew on all its key strengths in facing up to the challenges of the next decade. More than ever it needed that quality of adaptability which had seen it through good times and bad, in war and peace, over the preceding century. This time it was faced with the necessity of making radical alterations to the business even more quickly than ever before in response to market changes and higher customer expectations. It had to match up its talent for innovation and reputation for technical expertise and high quality manufacturing with improved levels of customer service. To expand as a global business, it had to foster those innate entrepreneurial instincts while developing a more coherent group identity. In the face of difficult international trading conditions, it had to rely on the financial strength prudently built up in the past and on the continued long-term commitment of the shareholders to the business. All this had to be achieved in partnership in the UK and overseas, not just with shareholders, but with a body of skilled and talented employees, with agents and distributors, and above all with customers.

The 1990s were trying times for business all over the world. Conditions for real growth would come only in the new millennium. Fighting for business in an increasingly competitive marketplace revealed not only the continued challenge of improving customer service; the financial pressures also made it twice as difficult to implement continuing change. But with a strong cash-flow and balance sheet, the group was able to withstand the slow-down in trade and finance further rationalisation and reform.

In the meantime Cockermouth benefited from new investment as well as the transfer of plant from Woking. A new face at Cockermouth in 1994 was Peter Needham who took over as director from Tony Gibbs. Combining an engineering background with extensive management experience in multinational businesses, he was one of the first external senior management appointments within the group. Another external appointment came in 1997 when David Galloway joined the group, becoming group finance director in 1999. His extensive experience of financial management in major engineering companies was invaluable in the modernisation of the group's financial systems, including the imperative requirement for a modern business of comprehensive and current management information.

Graham Bullock, who had had joined the group board in 1997 along with Peter Needham, succeeded Chris Higgins as chairman in 1999. He had joined Walkers in 1966, developing a career in sales, becoming sales director for James Walker & Co in 1990 and then managing director in 1995. He appreciated the values of the company. 'Walkers,' he said, 'just gets into your blood.' He had been taught the Walker values and the Walker way of doing things, of never knowingly acting without integrity in any aspect of business, by an older generation who themselves had been handed down the tradition when they too started. Like many others before and since, he believed that these values lay at the heart of the business, had been part of the key to its success for more than a century and had a central role in the group's future development. His role was to facilitate change while retaining the character of the business – the Walker way was evolution rather than revolution.

It was in the UK where perhaps most change was needed. By the late 1990s the national depot network had already been reduced to a dozen regional centres divided into northern and southern regions. Advancing technology and improving transport links no longer made doing business down the road as important. The cost of implementing information technology was also driving



Christopher Higgins, chairman, 1987-1999.



Graham Bullock, chairman, 1999-2004.



The James Walker national customer services centre at Crewe.

rationalisation, with lower costs stemming from fewer IT hubs. Ultimately, the choice was whether to maintain the revised network or concentrate customer services in one national centre. The review which took place in the spring of 1999 recommended the latter which was ultimately developed at Crewe.

At the same time major investment was also being planned in the advanced information technology seen as essential in improving customer service. In the short run, underestimating the cost, time and trouble that would be involved in installing the Oracle business system, the group let down many customers and it was a traumatic time for the UK business. But now customers are able to use the system, saving them and group distribution companies much time, with an ability for customers to configure products not in stock. A simpler system is being chosen during 2007 for smaller group businesses, plus an effective interface between the two. Improved systems and improved information gathering is all part of increasing cohesion within the group.

During the late 1990s Cockermouth had become the main seal production centre and it was clear that Hoe Bridge could no longer be sustained if the group was serious about



reducing unit costs in the pursuit of better value for money for customers. Hoe Bridge was closed in May 2003, ending all production by the group in Woking. Closure was achieved with the respect for the dignity of the individual which was such an essential part of the group's ethos. Most employees either took early retirement or found alternative employment. The group received plaudits for the way it had handled the closure from the unions, the local council and employees themselves.

James Walker acquired Sedra, based in Wiesbaden in Germany, in 2004. Founded in 1885 as an asphalt producer, Sedra had developed as a supplier of track-bed systems and services for light rail, installing systems in cities all over Europe, from St Petersburg to Barcelona. Sedra worked in co-operation with Edilon, the Dutch track system business founded in 1945 which became part of Walkers in 1981, and in March 2007 the two companies came together to form edilon)(sedra. Lighter and more cost effective than traditional systems, their products have major advantages in terms of safety, maintenance, construction speed, noise and vibration. At the cutting edge of technological innovation, the company conducts research in association with universities across Europe and its systems can be found in projects such as the Channel Tunnel, the Madrid Metro, the Erasmus Bridge in Rotterdam and in downtown Manila. edilon)(sedra contracting is the contracting arm of the business, formed from AM Technobeton BV, acquired in 2005.



Peter Needham, chairman and chief executive, 2005-.



NAME	DATE STARTED	50 YEARS SERVICE	TOTAL YEARS OF SERVICE
ED Woodhouse	1937	1987	50
REJ Chipping	1939	1989	50
RF Fisher	1939	1989	51
FA Shears	1939	1989	51
RW Freeman	1939	1989	50
JR Drudge	1939	1989	50
JH Brain	1940	1990	50
RE Woodham	1940	1990	50
FJ Russell	1941	1991	50
JHRD Prett	1941	1991	51
SP Shoe	1941	1991	50
D Rackley	1945	1995	51
GR Atkinson	1945	1995	50
JH Cole	1946	1996	50

The James Walker Group has an outstanding tradition for long-service among its staff. A long service award scheme for employees with 25 to 50 years of service was started in 1953. These three illuminated pages records the names of all those employees who have completed their half-century of service to the James Walker Group, from W J Dixon in 1950 to J H Cole in 1996.



James Walker Group

James Walker

James Walker Flemings

James Walker Keaflex

James Walker Moorflex

James Walker RotaBolt

James Walker Townson

edilon **sedra**

Tiflex

The application of the James Walker name as a prefix to almost every part of the group's global sealing operations was a clear indication of the strengthening identity of the James Walker Group. Graham Bullock was particularly keen to cement the various disparate parts of the group into an identifiable and coherent whole. The vast array of differing styles of letterheads and logos around the world illustrated only too well the gulf which separated any one part of the business from another. So the simple idea of using a common corporate identity throughout the companies involved with sealing products was a visible way of encouraging people to think of themselves, wherever they worked, as part of the same group.

With an evolving group structure, it became possible in 2003 to create two strategic business units, one covering seals (Sealing Products & Services) and related products, the other the group's involvement in the rail sector (Rail Systems & Products). This was pioneered by Peter Needham, who took over as chairman and chief executive from Graham Bullock in 2005, and David Galloway, who became deputy chief executive at the same time. With their own management boards, these units enabled a specific focus on improving the performance and expanding the business of these two core parts of the group. Among the advantages these units have brought to the business are the delegation by the group board to the units of many operational matters, better cooperation between the constituent parts of each unit and a sharper focus within each unit on business development and sales and marketing. They have been an important step towards creating a global perspective for the group.

Overseas generally the group has been advocating a 'think global, act local' policy, combining the growing strength of the group's identity, coupled with the traditional Walker's approach. This has led, for instance, to a successful new venture in the USA, with James Walker Oil & Gas, based in Houston, Texas. Elsewhere the group has strengthened its position in markets around the world, from Singapore, where James Walker Singapore was formed in 1998, and China, where an office in Shanghai was opened in 2006, to South Africa, where the group's long-standing distributors, Rhesco, became James Walker South Africa in 1999. Then in 2006 the group formed James Walker Marine Transportation to supply fluid sealing products to the global marine transportation industry, selling to more than 100 countries and some thousand ports. A century ago James Walker's sales came almost entirely from this industry; today it forms just one part of a multi-faceted international business.

The hard work achieved during the 1990s and early 2000s has paid off for the James Walker Group as the restructured business has been able to take advantage of better times. Sales rose from £86 million in 2004 to £125 million in 2007. The rise in export sales demonstrated the truly global nature of the business, with record overseas sales. This is still a work in progress. Feedback from customers in recent surveys shows that the group has made huge progress in recent years. With the creation of a customer service task force, aimed at monitoring and improving customer satisfaction across the group, the focus remains on developing service excellence, essential in today's competitive business environment.

6 James Walker® Group

The James Walker Group is made up of two key parts – Sealing Products & Services and Rail Systems & Products.

Sealing Products & Services

James Walker & Co

Focused on Cockermouth, which employs c. 400 staff, James Walker & Co is involved in the design, manufacture and supply of all types of sealing components, supplying power generators, steel manufacturers, oil refineries and many other users around the world. A new Materials Technology Centre was opened at Cockermouth in 2003, placing all materials development and production facilities under one roof. New investment has included several new computer-controlled vacuum presses, giving a more accurate mould, as well as water-jet cutters. In 2005 one of the largest vacuum presses in Europe, a giant 2.1m Terenzio press, was installed at the factory. Producing its own rubber compounds and other materials allows the company to control the quality and composition of all its products. There are five main product areas – compression packings, 'O' rings, hydraulic seals, rotary seals and large mouldings – covering a range of more than 200,000 items. Many of these are regarded as industry leading products, such as the rotary sealing cartridges used in power stations all over the world. The company also provides engineered solutions for specific clients. Key to all these product areas is the innovative use of materials technology. UK customer care is provided from a dedicated centre located at Crewe, which opened in November 1999. Ten million items are held in stock at Cockermouth which operates a next-day delivery service. Cockermouth also offers a gasket cutting service, using the latest materials and cutting technology, which is also available locally in Australia and New Zealand, Norway, Germany, Belgium and Spain. For its record since all production was transferred from Woking in 2003, the company was awarded the Manufacturing Institute Business Improvement Award in 2007.



Modern water jet cutters at the Cockermouth factory.



Terenzio press at Cockermouth.



The integrated Materials Technology Centre

Vacuum moulding at Cockermouth

James Walker Rotabolt

Ever since its inception in 1983, Rotabolt has been the world leader in bolted joint technology and tension control. Delivering tension control on installation and throughout the life of a bolted joint, Rotabolt products have set new standards for safety, reliability and reduced operating costs; they are widely used in the oil and gas, chemical processing, power generation, civil engineering, transport and defence industries.

Rotabolts.



James Walker Moorflex

James Walker Moorflex, producing static gaskets and metallic seals under the brand names of James Walker, Moorside and Metaflex, was formed in 2001 from the merger of Metaflex with Moorside Machining. Quality of service, quality of product and quality of people set JW Moorflex apart from its many competitors. Products are manufactured to the highest specifications for use in the most demanding applications and Moorflex is particularly well-regarded in the oil and gas industry. Moorflex also holds an extensive range of gaskets at strategic global locations to meet their customers' needs.



Custom design gaskets



*Twin hardness
hydraulic seals.*



James Walker Flemings

James Walker Flemings joined Walkers in 1979 and produces hydraulic and pneumatic seals, diaphragms, hot cast polyurethane components and high volume injection mouldings. Industries served include water treatment, tube testing, food processing and bottling & filling.



Samples of Keaflex mouldings.

James Walker Keaflex

Kea-Flex Mouldings was founded in 1973 to meet the demand for small - medium quantities of high quality, non-standard seals and mechanical rubbers into the "Food Processing", "Defence" and "Chemical Processing" markets. Part of the James Walker Group since 1984 the business has developed its core competencies to include complex 3-dimensional moulding and a fully equipped CNC toolroom. Through continuous R&D its strength lies in the manufacture of compression and / or injection moulding tools and components. A quality conscious organization providing competitive solutions across a wide range of materials; from natural rubber to liquid silicone the products are especially suited to its established markets whilst developing new territories such as "Military Communication", "Specialist Automotive" and "Pharmaceutical".



James Walker Townson

James Walker Townson was created in 2003 through the merger of the group's bellows division with another well-established company, Townson Ltd, based in Hyde in Cheshire. Townson brought an expertise in metalworking, elastomers and advanced polymers developed over 75 years, latterly specialising in flexible expansion joints and associated products. James Walker Townson is the leading UK specialist designer, manufacturer and supplier of expansion joints and bellows.

Townson



Overseas Manufacturing & Distribution

Local manufacturing continues in Australia, the United States, Holland, Belgium, Norway, France and Spain, where continued investment is planned, while in recent years two new manufacturing ventures, with local partners, have been established in India (Teekay Metaflex) and in Thailand (James Walker Thailand) for volume items no longer cost-effective to produce in the UK. Outside the UK, the group has 40 production, engineering, distribution and customer support sites, spread across Continental Europe, Australia, New Zealand, South-East Asia, South Africa and the USA.

Distribution continues to be carried out by a combination of group companies and agents. Group companies operate under the James Walker name in France, Germany, Belgium, the Netherlands, Spain, Italy, Ireland and Norway; in the United States, Australia, New Zealand, South Africa and Singapore. The largest of the overseas companies are those in Australia, France, Belgium and the Netherlands. James Walker Australia, based in Sydney, has five branches, in Adelaide, Brisbane, Melbourne, Newcastle and Perth. James Walker Benelux, covering Belgium and the Netherlands, has offices in Antwerp, Naninne and Wachtebeke in Belgium and in Rotterdam and Nieuwleusen in the Netherlands. James Walker France is based in Lyon, and there are agencies covering Dunkirk, Marseille, Metz and Nantes. In the United States James Walker Oil & Gas provides technical support and acts as stock holder for the oil and gas sector. James Walker Marine Transportation, formed in 2006, supplies fluid sealing products to the global marine transportation industry. The group is represented in nearly 70 countries worldwide as diverse as Azerbaijan and Madagascar, Iceland and the Philippines, Senegal and Venezuela.



Overseas Distributor & Manufacturer in New Zealand, Thailand and Sydney, Australia.



Rail Systems & Products

Rail Systems & Products has been a key growth area for the group in recent years, rapidly accounting for nearly a third of group turnover, achieved mainly in Europe. Rail Systems & Products covers every sector of the rail industry, from high speed lines and heavy freight routes to metros, light rail and guided buses.

edilon)(sedra

edilon)(sedra, formed in March 2007, is the key product offering and supplies products for railway infrastructure projects around the world. The company develops products and markets innovative and highly durable rail fastening systems for train, tram, metro and crane tracks. A highly responsive and flexible business, edilon)(sedra also benefits from the expertise of highly trained technicians. With the experience of many major railway projects, the company is regularly consulted or employed by local government, project developers, construction companies and consultants.

Products include embedded rail solutions both using pourable Corkelast® and solid “kamerfil” systems. Other rail fastening systems include Edilon direct fixation and block systems for light rail application. In addition, edilon)(sedra supplies level crossing systems, insulated joints for track application and adhesive and wear resistant materials.

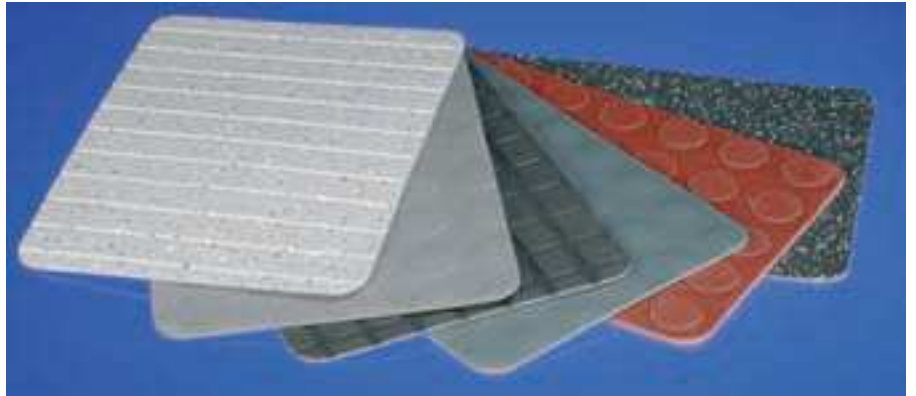
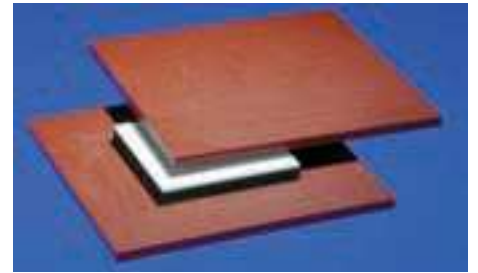
Reference sites include Madrid, Barcelona, Paris, Amsterdam, Munich, Oslo and Blackpool.



Tiflex

Tiflex began life in 1946 as the Flexible Cork Co, producing the successful Nebar synthetic rubber bonded cork rail pads. It took its present name in 1990 when it was combined with another established James Walker company, Textile Industrial Components. Through constant research and development, Tiflex has remained at the forefront in the production of railtrack products but this makes up only 35 per cent of Tiflex's production. The company has the most diverse product range in the group, from marine flooring to gasket materials, rail pads to acoustic barriers, anti-vibration mounts to cricket balls. The Tiflex brand names - Trackelast, Treadmaster, Tico, Nebar and Oxbridge - are brand leaders in their own market sectors.

Samples of the Treadmaster range.



1888-1918

The first Walker packing, Lion Block Semi-Metallic Packing, appeared in 1888. The block type of packing was made like a concertina, with endless folds, so steam, as it passed between the folds, created expansion under pressure. A key feature was the insertion of metal studs so that the moving piston or rod of the machinery would rub against the studs rather than the packing fabric, reducing wear and tear and making it more durable.

Walkers steadily extended the range. In 1895 waterproof Lion Automatic Packing, for hydraulic machinery, capable of withstanding high temperatures, was introduced, followed by elastic packing in 1900, Walker's Golden Walkerite, a form of sheet packing for general use which proved a bestseller, in 1907, spiral packing in 1910 and moulded fabric packing rings in 1913. All these products made a vital contribution to Britain's war effort from 1914 to 1918.

JAMES WALKER & Co., Ltd., "Lion" Works.

**WALKER'S
(PATENT)
"KERKO" AMMONIA PACKINGS.**



Fig. 144. BLOCK TYPE



Fig. 145. CUSHION TYPE

THE extreme importance of satisfactory Packing for use in Ammonia-Plant is such that we have taken the utmost care to investigate, and to meet every possible requirement before offering "KERKO" (Patent) as a Packing that may be successfully relied upon by Refrigerating Engineers.

"KERKO" is made (as shown by the illustration, Fig. 144) in layers; each layer being a combination of White Metal and Fabric, and the alternate layer being composed of a specially prepared composition, in which the finest Fluor-Graphite is introduced. In the manufacture of this Composite Packing, we use only those High-grade Materials which experience has proved to be pre-eminently suitable for the work that is required from it.

For use in Ammonia Plant it is compressed.

Garford Street, West India Dock Rd., London, E.

One very essential feature in "KERKO" (Patent) Packing is that it is in itself a Perfect Lubricant. The fluid working on the face of the compression layers, acquires a glasslike surface, and will keep in splendid condition while the amount of friction being reduced to the lowest possible minimum, with great efficiency in working is effected.



Fig. 146.

We have recently introduced a new type of Ammonia Packing which we will under the name of "KERKO" Cushion Packing. This is composed of high grade rubber with various fabric inter-layers as shown in illustration Figure 145 and it is extremely resilient in use.

We recommend "KERKO" Cushion Packing to be used in conjunction with "KERKO" Block as shown in Fig. 145, and we use with confidence recommend this combination giving a perfect packing for refrigerating plants.

The "KERKO" Cushion Packing should always be used next to the bottom. It adapts itself to whatever level there might be, as shown in illustration Fig. 145.

In some instances a combination of "KERKO" Packing and Pre-pressed Fluted Packing is preferred, and if this style of packing the stuffing box is used, we recommend aluminium liners as shown in Figure 146.

Fig. 146.

PRICES:
 "KERKO" Cushion Packing, 8/- per lb.
 "KERKO" Ammonia Block Packing, 4/6 per lb.
 "KERKO" Ammonia Fluted Packing, 4/6 per lb.

Error style of Packing implied in such lengths as made up into Packs.

Garford Street, West India Dock Rd., London, E.



Fig. 147. Section of Ring.

**"LION" (PATENT)
PACKING IN AUTOMATIC
SPIRAL FORM.**

SP. Packing can not be used here, but it can be put into the gland in spiral form.



Fig. 148.

Stuffing Box showing application of "Lion" (Patent) Automatic Packing. This must be noted.

Fig. 149.

IMPORTANT TO ENGINEERS.

A "THIN RED LINE" which is fully protected by Copyright, and runs through the bottom "Lion" (Patent) Metallic Packings. Also there are Brass Trade Mark Letters and Red started, without which there are no goods.

BEWARE OF IMITATIONS.

Lion Metallic Packing and Jointing was how James Walker made his name. Before the First World War he had to add a thin red line to demonstrate their authenticity, so frequently were they imitated. By then the company was also developing products for specific applications, such as Kerko for ammonia plant, and Golden Walkerite for high temperatures and pressures.

A bad Boiler-door Joint is not only troublesome—it is dangerous.

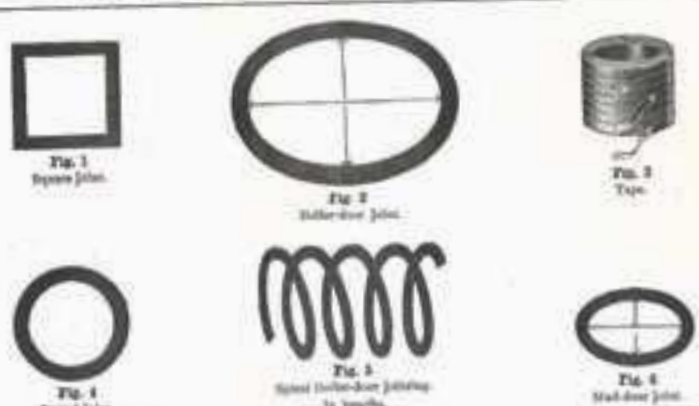


Fig. 1
Square Joint.

Fig. 2
Rubber-door Joint.

Fig. 3
Tape.

Fig. 4
Round Joint.

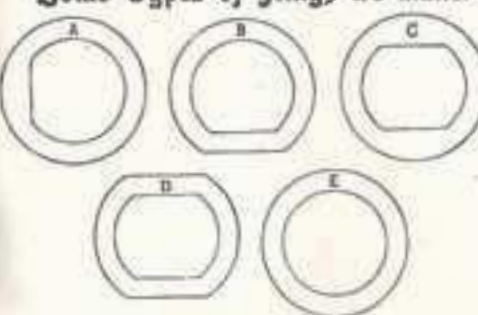
Fig. 5
Spiral Rubber-door Jointing in lengths.

Fig. 6
Stud-door Joint.

JAMES WALKER & CO., LION WORKS, GARFORD ST., WEST INDIA DOCK ROAD, LONDON, E.


Prevents water dropping on the Forging.

Some Types of Rings we make.



A B C D E

SPECIAL ORDER FORM ON APPLICATION.



JAMES WALKER & CO., LION WORKS, GARFORD ST., WEST INDIA DOCK ROAD, LONDON, E.

Durability is the truest Economy.

The Patent "Lion" Steam Hammer Packing.

OWING to the great difficulty experienced in obtaining a satisfactory packing for steam hammers, we have set to direct attention to the construction of a packing specially for this purpose, and as the result we are able to offer types of "Lion" Packing as a delivery department item which has been subjected to the attention of packing for Steam Hammers.

Most Hammers have one or two flat sides on the end or face, and it is very evident that having an angled packing upon a Packing that the two sides will not fit the other. In our Patent Packing we mould the rings to suit the flat and the angle, so that a perfect fit is obtained and a slight gland secured.

Further this, the Packing has a metallic mounting surface, and it will be found a source of relief to those who have hitherto been troubled with steam hammer packing. We have packed some of the largest Hammers in the Kingdom, and you kindly reference regarding efficiency to anyone who will communicate with us.

LARGELY USED IN FORGES AND ENGINEERING WORKS.

Price 4/6 per lb.

JAMES WALKER & CO., LION WORKS, GARFORD ST., WEST INDIA DOCK ROAD, LONDON, E.

The Walker's packings and jointings seen in these advertisements from the 1930s were displayed with a full range of products at the 1938 Glasgow Empire Exhibition.

1918-1945

Between the wars the pattern of production remained largely unchanged, albeit with minor innovations. Under the Golden Walkerite name, a type of compressed fibre for high pressure steam and water joints was developed and fitted to both the 'Queens', the *Queen Elizabeth* and the *Queen Mary*, as they were being built on Clydeside in the 1930s. One of the magnificent but ultimately ill-fated airships, the *R100*, also used Lion packing. The range also included Sentinel oil packing, Kerko packing for application on ammonia plant, Star packing for intermediate steam pressures and Overlap jointing for pump work. In fact, wherever power was used, from railways and motorcars to aircraft and shipping, Lion packings and joints could be found.

It was the stimulus of another war, from 1939, that led to a renewed flow of new products. Among them were fabricated synthetic rubber sealing rings for flame-throwers, leak-proof oil fuel valves for submarines, and special rubberised fabric jointing for torpedo gyro frames.



1945-1969

Many wartime products had peacetime potential. Lion Chevron Packing, devised for tank suspension units, was used by the motor industry with shock absorbers. Nebar, a synthetic rubber bonded cork, with advanced sealing qualities, used extensively as jointing by the Air Ministry, found a market in the electrical and allied trades, in shoe manufacturing and above all with the railways.

Nebar proved ideal for use as anti-vibration rail track pads, supporting the concrete sleepers the railways had been compelled to introduce in place of timber sleepers during a wartime shortage of timber. Traditional rail pads, made from bitumen and cowhair, were not up to the job so Flexible Cork applied the Walker ability to find effective solutions for specific problems. Approached by Southern Railways, Flexible Cork devised a special bonded cork. Known as FC2, this, with its successors in the series, was widely used. The company continued to work closely with UK railways to develop improved rail track pads and by the late 1960s supplied some two million pads each year.

Continuing peacetime links with the Admiralty stimulated the design and development of a new edge-wound gasket, known as Metaflex, through the Surrey Grinding Company, formed in Woking in 1948. This turned out to be very successful, once again finding wider application throughout industry. It was extremely effective, for instance, in sealing acidic gases at high temperature under difficult conditions.

By 1963, Walker products covered a huge range of applications, for steam, water, oil and light hydrocarbons, acids and alkalis, air, refrigerants and other specialities, with various types of packings, jointings, gaskets and related products. There were proofed fabric, plaited or braided lubricated yarn, chrome leather lubricated, metallic, rubber and plastic packings; bonded cork, rubber, proofed fabric and compressed asbestos fibre jointings; plus gaskets, seals, valves and rings; and, among specialities, bonded rail pads, crane rail strips, Lion fabric foundation pads, Twilstele bellows, Tico bellows and machinery mounting pads and Treadmaster industrial safety mats.

A series of advertisements from 1953 under the slogan 'A Tradition of Service'.





1969-1993

The increasing use of new materials was a feature of product development and by the mid-1970s materials included metals and alloys, yarns and fabrics, synthetic and natural rubbers, graphite, polyurethane and other plastics. PTFE, or Fluo-lion, became a standard engineering material.

One innovation which was a major departure for the company was Rotabolt, acquired in 1983. By accurately indicating the correct setting tension, Rotabolt made a huge contribution towards improved safety and reliability in countless applications. A completely unrelated innovation from the same period, the Rota-Lion non-contacting rotary shaft seal, made a major impact in the fluid sealing sector.



The rail business steadily expanded with the development of the Corkelast embedded rail system (with the rail embedded in a pourable elastomeric cork compound, eliminating the need for fastenings and tie bars, and improving the environment) for specific areas of tram track in Holland, Belgium and Switzerland. For the Ministry of Defence during the 1980s, Walkers helped to ensure production of the new Challenger tanks by designing and developing the durable and resilient seals needed for the tanks' hydra-gas suspension. The company later used this experience to develop seals for high-speed suspensions. To the booming oil industry, Walkers supplied a range of Tico pipe clamping products, and in the early 1990s developed a product, Elasto-O-Lion, for wellheads and petro-chemical plants in arctic environments, effective for valve seal duties at low temperatures.

A range of Walker packings, jointings and seals from the 1970s.



1993-

By the mid-1990s the James Walker Group made a huge range of products. Sealing components included industry leading products such as rotary sealing cartridges, used in power stations worldwide. Plastic seals for use in the food and drink, ceramics and sewage industries, were produced by Flemings, and metallic static seals for the oil and gas industries by Moorside. These were complemented by the wide range of polymer-based products from Tiflex, encompassing anti-vibration materials, non-slip flooring, and jointing materials.

The versatility of the group has been demonstrated by the many new products launched in recent years. Covering a wide range of areas, many of them are pioneering and innovative, often developed in association with customers. They are designed for extreme operating conditions, for low maintenance and a long life, using the latest materials technology, Comflex flexible expansion joints, for instance, are capable of handling turbine or exhaust fumes of up to 750 degrees C, with lighter versions for general industrial and marine duties; while the Halo manlid seal can be used with all bulk liquids at temperatures from -50 to 150 degrees C. The HydroSele innovative shaft cartridge seal, for use with water turbines in



The diverse range of products from James Walker





hydropower plants, has a long and reliable service life, reducing maintenance costs and increasing reliability; while Arasele gland packing, high specification, long life and low maintenance, was developed to replace hard-fibre 'yellow' products, eliminating shaft wear in conditions involving highly abrasive slurries or aggressive chemical solutions in the mineral, pulp, paper, wastewater and chemical processing industries. Other products have included the Walkersele Ultraglide longer-lasting rotary lip seal, using a hydrogenated nitrile elastomer, specially developed for lip seals running for long periods in hot abrasive conditions; the Tiflex Micro-Max flat electrically-resistant rail track pads designed to attenuate the impact between rails and sleepers; and the ultra-tough Flemthane FQ range, made of new food quality polyurethane, ideal for granular foodstuff grading screens and for meat recovery diaphragms used for bone stripping. Rotabolt maintained its reputation for innovation by introducing the Rotabolt Vision safety bolt with a visible indicator of loss of tension. But the range of products from the group is huge.

Edilon and Sedra have been in cooperation since 2004 and operating as edilon (sedra since 2007, internationally active and represented in most European countries.

Our Rail Systems and Products portfolio includes Embedded Rail Systems (ERS) for fastening by embedding the rails in Edilon Corkelast®, which brings continuous support and isolation of vibration, Embedded Block Systems, which provide the same dynamic spring and dampening behaviour of a ballasted track, direct fastening systems, slab track and turf track for railway, tramway and metro solutions.

Specialist solutions have been developed for crane track where there are enormous wheel loads, insulated rail joints, joint sealing compounds and high quality epoxy anchor joints.

The solutions that we are able to offer to infrastructural projects continue to be developed by our technologists.



8 **James Walker**® Constant Values & Future Goals

In 2007 the James Walker Group is a global, industry leading, privately owned, UK-based manufacturer and exporter with a history of innovation and success stretching back 125 years. This achievement owes much to successive generations of committed employees, managers, directors and shareholders. The values of the founders, handed down and reinforced from one generation to another, have been and remain a cornerstone of the group's past and present.

James Walker brought an entrepreneurial zeal, coupled with a commitment to innovation and manufacturing quality, which still characterises the business today. His willingness to give opportunities to the next generation, combined with the support of the shareholders for the long-term independence of the business, ensured that the company continued after his death. This lesson in forward planning for management succession was learned by George Cook and all those who have followed him.

Under George Cook and his successor, William Dixon, the company built up a reputation for caring about its employees, providing social facilities, medical care, pension and sickness schemes. The result was a long-serving workforce, with many employees staying with the company for 25 years or more. This too has been sustained, even in changing social conditions, with a strong core of long-serving staff.

This was all about creating a long-term and fruitful partnership, a quality the group has brought to its relationship with its overseas interests, with its shareholders and, with increasing success, with its customers. A recent survey of the group's European customers rated the group highly for quality, consistency, performance, quality assurance, and the helpfulness of staff.

The group has always been aware of the need to adapt. Without that, James Walker would either have disappeared long ago or been a much smaller business bounded by narrower horizons. There came a point when it was no longer possible to rely on UK and European marine engineering as the company's main markets with the result that today Walker products are to be found around the world in industries ranging from oil and petrochemicals to defence and rail. In the same way Walkers has also embraced new manufacturing techniques and new materials and invested in the latest plant and equipment. Much of this flows from the group's characteristic approach of continuously searching for new ways of doing things to meet the increasingly exacting demands of customers.

Financial independence has also been an integral part of the group's progress. Expansion is based on the reinvestment of profits, assets are owned, borrowing is minimal and cashflow is strong. The financial prudence advocated from the founder onwards has created financial strength, enabling the group to weather recessions and forge ahead in better times. It is a policy which has benefited successive generations of shareholders, staff and customers.

The consequence of all this has been to create in the James Walker Group a financially strong, entrepreneurial, innovative, caring and constantly evolving business, committed to long-term partnerships, which has stood the test of time and looks ahead to a future where the group has ambitious plans to ensure that James Walker remains in the vanguard of the industry around the world.

The development of global sales business units, following the success of the strategic business units, is a key part of this strategy. As well as stimulating further growth by more effective coordination and management, this will also provide greater opportunities for the development of senior management and contribute further to the creation of a culture appropriate for an international business.

Wherever possible, opportunities for the development of employees will also be expanded. This will come not only from closer international co-operation between all parts of the group but also through constant improvements in the way in which employees are recruited, managed and developed to ensure that in the future, as in the past, potential is rewarded and management succession safeguarded.

The group is also committed to the continuous improvement of customer service, supported by effective customer and market information systems, intended to enhance the reputation of the group's long-established and well-known brands. The group remains committed to manufacturing in the UK, but will develop overseas production to ensure it can supply profitable yet price-competitive products to customers, while enhancing a capability which can offer everything from commodity products to dedicated responses to individual customer requests.

There will be a focus on offering a wider range of products across major industries, including defence, aerospace, pharmaceuticals, iron and steel, oil and gas. Investment will continue in developing new and innovative products. This will utilise the latest materials technology, featuring innovation in elastomerics, plastics and polyurethane, to create products capable of high performance in a wide range of working conditions. In an age when the impact of pollution on the natural environment and concerns about climate change are paramount, a high priority for the group will be working with industry to improve pollution control, from the suppression of fugitive emissions in refineries to noise attenuation in rail systems, while aiming for longer lasting products costing less to maintain. Through the global sales business units, the group will seek not only to expand in countries like China, but also to develop projects across industries with worldwide applications.

This exciting vision is being planned with the support of the group's shareholders to ensure, through the future growth and prosperity of the business, their continued support in future, thus securing the private and independent ownership of the group, and with it the values and heritage which have driven the business with such success for the last 125 years.

Chronology

1840	Birth of James Walker.	1940	Reserve works acquired in Godalming.
1882	Foundation of James Walker & Co. Premises at America Square, Minories.	1942	Long service awards introduced.
1888	First Lion packing made. James Walker's patent submitted for improvements in packings. 7 staff employed at Love Lane works. George Cook joins the firm.	1945	Flexible Cork Company formed. James Walker & Co (Belgium) Ltd formed.
1896	Garford Street premises bought for new factory.	1947	Manufacturing begins in the USA.
1898	Poplar Works in operation. First depot opened in Liverpool.	1948	Surrey Grinding Company formed.
1899	Glasgow depot opened.	1950	Textile Industrial Components founded.
1900	First US & Australian distributors appointed. William Dixon joins the firm.	1953	US company moves offices to Chicago.
1907	Golden Walkerite introduced.	1956	US factory moves to Chicago - Glenwood offices and factory opened.
1910	Branch formed in Antwerp.	1958	James Walker (Italiana) formed.
1911	James Walker & Co Ltd formed.	1959	James Walker (France) Ltd formed.
1912	Branch opened in New York.	1961	Hoe Bridge factory opened.
1913	Death of James Walker. George Cook becomes Governing Director.	1962	Donald Cook succeeds William Dixon as chairman.
1918	Walker packings advertised as the King of Packings following its wartime success.	1969	Cockermouth factory opened.
1920	Paris office opened.	1970	Reginald Strong succeeds Donald Cook as chairman and managing director. New Glenwood factory opened in USA.
1925	Martynside's Maybury Works, Woking, acquired.	1972	Company receives Queen's Award for Export Achievement. James Walker (Ireland) formed.
1926	Lion Works, Woking, begins production.	1977	Dorian Davies takes over from Reginald Strong as executive chairman. James Walker (New Zealand) formed from the existing business and the Australian company is renamed James Walker (Australia). James Walker Manufacturing Inc replaces existing US company. Moorside Machining Co acquired.
1930	James Walker & Co (Australasia) Ltd formed.	1979	Fleming Seals Ltd acquired. Surrey Grinding transferred to Tavistock.
1933	James Walker Packing Inc formed. Rotterdam branch opened.	1980	James Walker (Iberica) started trading. Flexible Cork's Liskeard factory in operation.
1938	Death of George Cook. William Dixon becomes chairman and managing director. Contributory pension scheme for all employees plus sickness benefit scheme introduced. Manufacturing begins in Australia.	1981	Edilon acquired.
		1983	Rotabolt acquired.

Chronology

1984	Kea-Flex Mouldings acquired.	2001	James Walker Moorflex formed from Moorside and James Walker Metaflex. James Walker Engineering Services formed from Engineering Division of James Walker & Co Ltd and KW Packseal.
1985	Tico Manufacturing acquired.		
1987	Christopher Higgins succeeds Dorian Davies as chairman.		
1988	James Walker Metaflex formed.	2002	Joint manufacturing venture started in Thailand. James Walker (Benelux) formed from James Walker (Netherlands) and James Walker (Belgium).
1990	James Walker Group formed. Tiflex formed from Flexible Cork and Textile Industrial Components.	2003	Strategic business units, Sealings Products & Services and Rail Products & Systems, formed. Hoe Bridge closed, Bellows Division merged with Townson Ltd to form James Walker Townson Ltd, and Materials Technology Centre opened at Cockermouth. James Walker Oil & Gas Inc formed in Houston, Texas.
1991	Sealing Services acquired.		
1991	Tico Manufacturing becomes Tiflex.		
1993	Lion Works closed.	2004	Sedra acquired.
1997	C Haacke & Sohne acquired		
1998	James Walker Singapore started trading. KW Packseal acquired.	2005	Graham Bullock retires and Peter Needham becomes chairman and chief executive. AM Technobeton acquired and becomes edilon)(sedra Contracting.
1999	Graham Bullock succeeds Christopher Higgins as chairman. Packing & Seals Division of Andersen & Odegaard, Norway, acquired.	2006	James Walker Marine Transportation formed.
2000	UK Customer Support Centre opened at Crewe. First international group conference.	2007	edilon)(sedra formed

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