

THOS BEGBIE & CO



Photo of the Current Thos Begbie plant (circa 2018)

History

History of a more than 130-year-old company with a culture for excellence that refused to lie down and die.

Thos Begbie's history begins with its entrepreneurial founder and master engineer, Thomas Begbie, who was born in Glasgow, Scotland, on 19 March 1845.

Thomas Begbie received his early training in Glasgow, where his strong inclinations in the engineering field led to his apprenticeship with Messrs. Denny Bros, engineers and shipbuilders of Dumbarton. On completion of his apprenticeship, he toured most of England and Scotland.

He became a mariner and, as a ship's engineer, served a number of steamship companies and visiting most parts of the world.

After securing his engineer's ticket, he decided to make his home in South Africa, settling in Cape Town in 1877. All reports during these early years refer to his 'honorable bearing and exceptional ability'.

Having relinquished the sea and with strong desires to find more scope for his energy and profession, he turned his mind to marine and general shipbuilding work and later to agricultural machinery in the district of Riebeeck West. But, being filled with the desire to see more of the country, he moved first to Port Elizabeth and then to Port Alfred in 1881 where he was engaged in harbour work.

Among his recorded work was the refloating of the SS Welcombe off the rocks, about 29 km from Port Alfred, where he directed the salvage operation and also did a considerable amount of the diving work. The vessel was ultimately repaired and refloated only to be dashed further on the rocks through the non-arrival of the tug which was to tow her out to sea.

In 1884, he was appointed as locomotive superintendent to the Grahamstown and Port Alfred Railway Company. After completion of the railway and start-up of traffic.

1887

In 1887 Thomas Begbie left for the Witwatersrand goldfields. His ambition increased with the ever-developing construction of the mines, which only the pioneers of those early days could fully appreciate.

About three years of contracting was followed by the establishment of a general engineering workshop and foundry, so needful in those days. The new undertaking was established in Commissioner street, Johannesburg, and named Begbie and Holleman-Vulcan Foundry and Engineering Works, the start of Thos Begbie. At this time, the Witwatersrand was one of the main gold producing areas in the world and to quote from Pictorial Johannesburg published in 1892, by H Longland:

“Though the land be a veritable land of Ophir and the district beladen as it is with boundless wealth of the precious ore, these facts in themselves would be of little or no value to mankind were they not aided by the cunningly devised machinery, product of the brains of our modern engineers.”

The article goes on to say that one of the largest and best known firms of engineers was that of Messrs. Begbie and Holleman.

“. . . who have made it possible to perfect machinery to work the gold mines at a minimum cost and at a price which ensured the maximum dividend.”

The quality of the products turned out was described as “perfectly finished as from any engineering establishment at home”. The firm patented a ‘Tailings Pump’ a great improvement on the old-fashioned system of raising tailings and it proved a great success at the Durban Roodepoort Mine. It had the further advantage of avoiding slushing and filth.

Time came when the firm outgrew its Commissioner street premises and a new company; Messrs. Thos Begbie & Co was formed and relocated to the City of Suburban Township, where a modern machine shop employing steam, electricity and hydraulic power was soon in operation.

This innovative approach marked Thomas Begbie as one of the most professional engineers of that time and his engineering works probably employed the largest number of hands of any engineering works, playing a key role in the development of our early mining history – until 11 October 1899, when an ultimatum delivered to Britain marked the start of the Anglo Boer War.

At this time, the works was locked up and the staff discharged. Thomas Begbie travelled to Cape Town where he found employment as chief engineer to the Steam Road Transport Company, where he served until the end of the war.

The Transvaal Government, headed by President Paul Kruger, took over the business and successfully produced munitions until British saboteurs dynamited the plant in April 1901.



Photo of Thos Begbie works after the explosion (Circa 1901)

On returning to the Witwatersrand after the war, Thomas Begbie re-established an engineering works, salvaging what little remained of his plant and machinery. This time he named the business Thos Begbie & Sons, and his two sons became partners in the business.

Their premises were in the Maxwell building, in Harrison street, Johannesburg, and comprised a steel building with a 6 t traveller and a small workshop which was equipped to overhaul fans, tools and other equipment.

The business was a success and an extract from an article in the Commercial and Industrial Transvaal, Her Resources, Industries and Finance, published for the Transvaal Publishing Co in 1905 by Eyre & Spottiswoode; His majesty's Publishers, recorded:

“Messrs. Begbie’s principal lines are steel and fans. For steel, they hold Messrs. Beard Shaw’s representation throughout South Africa. Their business is done principally in the profile tool steel, high velocity quality.”

“Its profile form enables its being easily ground, thus obviating the smith’s time. The savings in weight of the various profiles averages 50%. The greatest appreciation has been shown by engineers during the past six months from the fact that the sales in this special line have increased 300%, which is indicative of good business in the future when more is known about the advantages of profiles.”

Begbie also represented Messrs. Davidson & Co of Belfast, makers of Sirocco fans for mine and building ventilation. This fan apparently had a good reputation overseas and was adopted as a great success by many of the early mines, including De Beers Consolidated Company, Kimberley; De Beers Dynamite factory, Cape Town; the Vereeniging Estates Collieries; and many other leading producers of the day.

Gradually, as it had so many times before, Thos Begbie expanded: a machine shop was added, then a bronze foundry, pattern shop, drawing office and a boiler shop.

During 1905, Thomas Begbie decided to sell the entire business to Messrs. E W Tarry & Co. Thomas Begbie had decided upon a fresh course; to open a new business in the town of Middelburg, in the Eastern Transvaal. The business was incorporated, in 1907, as a company in terms of the (then) New Companies Act as Thos Begbie & Co (Pty) Limited.

1907

Folklore has it that Paul Kruger banished Thomas Begbie from Johannesburg to an area 100 miles East of Johannesburg, which points to Middelburg. Some say the reason was more economic, others have the theory that there was a restraint agreement with EW Tarry. More probable was that Thomas Begbie held the view that Middelburg was well positioned to service the goldfields of Lydenburg and those on the Reef.

Whatever the reason, little could he have guessed of the coal mining and power generation developments that would take place in the region?

His early enterprise in Middelburg comprised a small general repair shop and contracting plant situated near the railway station. Considerable business was done in repairs to agricultural machinery. Shortly after the company had relocated to larger premises sporting a wagon building department, a well fitted and spacious machine shop, an iron and brass foundry and a well equipped pattern shop, Thomas Begbie, aged 67, died of pneumonia in August 1912.

He was succeeded by his son William, who took in a partner, Mr. RD Mackintosh, who continued as general manager of Thos Begbie for many years thereafter. The fortunes of the company continued to grow until disaster struck in the form of a fire on 20th September 1920, which, in the absence of a fire brigade in Middelburg, destroyed the entire works. At the time, William Begbie and his family were on holiday in England.

After the fire, only three of the 37 employees were re-employed.

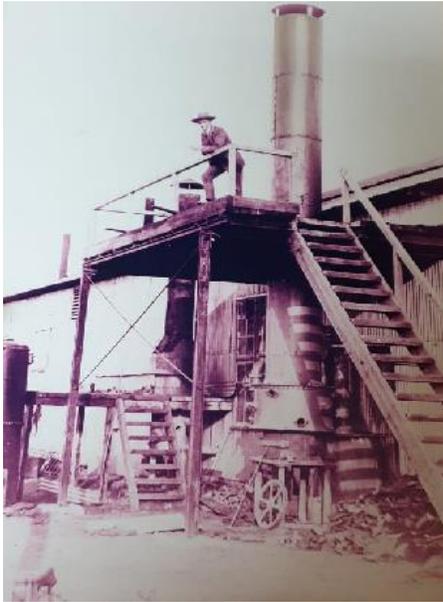


Photo of Cupola furnace with Mr. Mackintosh on the platform (circa 1926)

1929

Shortly after William's death in 1929, his widow and family returned to England and ownership was acquired by the young Anglo American Corporation, founded by Sir Ernest Oppenheimer and his associates in 1917.

The business continued to grow under the ownership of Anglo, with the capital employed growing from British Sterling 6,863 at the end of 1936 to British Sterling 36,512 in 1946, with dividends of British Sterling 4,306 being paid out in that period.

1946

One of Anglo's earliest employees was a Welsh born mechanical engineer, Idris Rosser, who, in 1946, after Sir Ernest had mentioned that he thought that Thos Begbie was too small for Anglo and should be disposed of, volunteered to take it over. He and his family spent many more years in Middelburg.

Idris Rosser was one of the founding signatories for the establishment of the Rotary Club of Middelburg.

Dana Kruger, who joined Thos Begbie as a fitter and turner in 1949, was to remain with the company for 40 years, remembers that when he began there:

“It was quite primitive, there were earthen floors and the machines were driven by overhead belts driven from a steam engine. All we had was a small foundry and a forge shop with a steam hammer. At times when Thos Begbie was short of work, Mr. Rosser would send me out in a little Ford Zephyr we had to visit the coal mines telling me to pick up whatever orders I could find.”

Gradually, as it had so many times before, Thos Begbie expanded: a machine shop was added, then a bronze foundry, pattern shop, drawing office and a boiler shop. As its reputation grew, (the TB stamped on its products was said to stand for 'The Best'), orders came from all over South Africa and from as far away as the former Northern Rhodesia and even Madagascar. In 1961, Rosser's son, Neville, came into the business after graduating in mechanical engineering at the University of Cape Town. He took over as managing director, while his father remained as chairman.

Under the ownership of Idris Rosser the nature of the business was unchanged, providing engineering and foundry services to the mining industry. Capital employed grew to British Sterling 62,132 in 1954.

1963

In 1963, Idris Rosser agreed to sell a minority interest in Thos Begbie to Rand Mines. At first, the mining house took only a token share of the foundry – a matter of 13%, just enough to establish a special relationship between Thos Begbie and Rand Mines' new ferroalloy plant, Rand Mines Blleloch (RMB), situated on the perimeter of the Middelburg town.

RMB's incumbent MD, Frank Bath, envisaged a close working relationship between the two companies as the Middelburg foundry was already making quantities of equipment for RMB, not least furnace shells.

Thos Begbie was active in producing furnaces and furnace spares for RMB and the Southern Cross Stainless Plant which had been established in Middelburg the following year, 1964.

Besides manufacturing furnace shells, Thos Begbie's boiler shop had built one of the melt shop's three overhead cranes to a Japanese design, and the foundry was busy making cast iron moulds for ingots for the steel plant in addition to the regular engineering work for RMB.

One result of being so busy was that Thos Begbie was outgrowing its premises.

Accordingly, Neville Rosser bought 22 ha of municipal property (the present site) adjoining the RMB/Southern Cross site and a new machine shop and boiler shop was erected.

By 1966, Rand Mines had increased its stake and was the controlling shareholder of the company. Thos Begbie had 200 men working at its foundry and machining facility.

It was the time of industrialisation of the region, and coal mines, power stations, gold mines and a new steel mill, the Highveld Steel and Vanadium Corporation, were emerging rapidly.

1967

Idris Rosser retired from Thos Begbie in 1967 and two years later, in 1969, Neville Rosser decided to accept Rand Mines' offer to buy the remaining 40% shares and Thos Begbie became a wholly owned subsidiary of Rand Mines and part of Southern Cross Steel and RMB Alloys.

Thos Begbie had long been part of Frank Bath's plans for the Middelburg complex.

Thos Begbie was to operate as the engineering division of Southern Cross.

At the time of the acquisition from Neville Rosser, Thos Begbie's shares were acquired by the newly formed Middelburg Steel & Alloys (MS&A) (the amalgamation of Southern Cross and RMB Alloys).

In June 1971, the Rand Mines Corporation was taken over by Thos Barlow and Son and the group known as Barlow Rand came into being, with Thos Begbie as one of its subsidiaries.

These were pioneering days for Thos Begbie and new technology and innovation were the order of the day.

The market for stainless steel castings was growing and, in July 1971, Thos Begbie set up a Stainless steel foundry alongside the MS&A melt shop producing stainless steel casting of exceptionally high integrity.

March 1971 saw the commissioning of a 25 ton electric arc furnace at MS&A, with Thos Begbie's skills being employed in the construction of the furnace.

Developments in stainless steel manufacturing had brought about a new technology, the Union Carbide's Oxygen Decarburisation (AOD) process, which called for metal to be melted in a conventional arc furnace then transferred to a tulip shaped vessel where oxygen, diluted with Argon, an inert gas, was blown from below.

MS&A decided to use their own resources, the arc furnace was in place and they wanted to switch to AOD as soon as possible. A 25 t AOD was designed and Thos Begbie was commissioned to manufacture the shell and other components.

1974 saw RMB's Krugersdorp Plant furnace replaced with a new sub-arc furnace shell, manufactured by Thos Begbie. A pilot briquette plant was built, which resulted in Thos Begbie obtaining technology in briquetting plants and segments, which they continue to produce and even export today.

1975

In 1975, the winds of change swept through the corridors of Corner House, home to the Barlow Rand head office, and Thos Begbie was one of the companies which came up for scrutiny.

All this time, Thos Begbie had remained a separate company, treated as an MS&A division, but had never come as close to the ferrochrome and stainless steel plants as Frank Bath had hoped. Indeed, Thos Begbie was itself split three ways, part of it is still located near Middelburg Station, further parts on a tract of land neighbouring the rolling mill and a small stainless foundry attached to the melt shop.

Thos Begbie was doing more business with the districts' coal and other industries than with MS&A. So, through a group transfer, Thos Begbie acquired a new master; Barlows Heavy Engineering. The change was made in November 1975 and Thos Begbie adjusted without skipping a beat.

1981

In 1981, the Barlows group rationalised its foundry interests with the Germiston-based foundry, Unifront, and its contracts backed into Thos Begbie.

In 1982, the company decided to merge its various works, and, by the following year, the three sites had been consolidated at the site adjacent to the MS&A complex.

The property in town adjacent to the Middelburg Station was sold to the developer of Twin City.

This impacted negatively on Thos Begbie's financial results. Poor financial results in this period by Barlows Heavy Engineering led to the disposal of Barlows' engineering activities to the Dorbyl group. This placed a question mark over Thos Begbie, still a Barlows Heavy Engineering subsidiary.

“There was strong pressure to close it down. The whole foundry industry was going through a rough time and Thos Begbie had been hit very badly. It was losing money, orders were drying up and the workforce had been cut by a third. There was no sign that things were going to get better,” relates Louis Kok, a former director of MS & A and erstwhile MD of Thos Begbie.

Some of the old hands who had been with the company close to 40 years still had faith in its future and asked for an option to buy Thos Begbie. But no such action was needed. Louis Kok and others put forward a strong case, based on the strategic value of Thos Begbie to MS&A. “Where will we source our furnace parts?” he asked MS&A chairman John Hall. By 1985, Thos Begbie's fortunes were secured and the ailing company was back within the MS&A fold.

A ‘year of grace’ was granted to Thos Begbie and by the end of that period of grace, Louis Kok and his team had Thos Begbie back in the black, in spite of a continuing recession in the foundry industry, ascribed by Kok to be the result of a move into alternative materials and other ways of fabricating.

Under his leadership, the veteran company was looking for special market niches. Kok and his colleagues aimed to re-establish the old company to the point where Thos Begbie again stood for ‘The Best’. Given its connections, it was no surprise that the company was doing especially well with spares for electric furnaces.

“In 1984, Begbie's market share in spares had been only 15%. By 1988, we had 90% – not just in South Africa but in Zimbabwe and Botswana too, said Kok. Such spares were chiefly made of copper and accounted for 75% of our turnover.”

Other lines included blast furnace parts, pumps and valves.

1991

On September 16, 1991, Barlow Rand announced that MS&A and the Rand Mines chrome interests had been sold to an Anglo/Gencor consortium.

At this time, Thos Begbie was in the process of negotiating a technical agreement with British Steel, which would enhance the company's credibility in European markets. A hold was called on all agreements and negotiations, while the MS&A group was being divided up.

Samancor acquired the chrome operations and the Columbus Joint Venture, the stainless steel operation which was to become the foundation for the Columbus Expansion Project.

Thos Begbie – neither chrome nor steel – remains a group company, jointly owned by Columbus and Samancor.

From 1991 to 1993, Thos Begbie again faced doom and gloom, with massive retrenchments precipitated as a result of the decline in the ferroalloy industry which accounted for such a large slice of its custom in furnace spares.

1993

Mid 1993 saw the appointment of Eugene Rossouw, a chartered accountant who headed up procurement at Columbus Stainless, as Managing director. He was joined by an operations director, Gavin Henderson, a Metallurgist, who formerly had been responsible for the production of low-carbon ferrochrome at the Samancor-owned Middelburg Ferrochrome.

Together, under the chairmanship of Tony Bagnall (Technical Executive at Columbus), they nurtured Thos Begbie back into the black and the company showed a healthy profit in the 1994 year.

1998

A management buy-out in 1998 led by Eugene Rossouw, resulted in Thos Begbie being owned by its seven senior members of staff, later reduced to five with a staff trust owning 10% of the shares.

An investment into a new Special Metals division during 2003 opened up exciting opportunities in the ferrochrome alloy industry and major expansion was planned with a promise of electricity from Eskom.

The electricity never arrived, and the final blow came when international prices for chrome and chrome products dropped too low to sustain the Special Metals business model. Again, Thos Begbie had to pay off staff in this division, while the foundry and machine shop carried the business.

During the next few years and, despite this setback, the company enjoyed growth in its copper foundry and machining division making the best and biggest copper castings in the world. Thos Begbie boasts that most of the furnaces worldwide in 62 countries used their unique copper cooler technology to protect their smelter shells.

Its stalwart people, seemingly cast in the mould of its innovative and entrepreneurial founding father, Thomas Begbie of Glasgow, look to the success of the company with optimism, now and into the next century.

2007

Thos Begbie's copper business prospered and early in 2007 a new entrant, Edwin Dreyer, merged his company, RST Base Metal Recovery into the Thos Begbie group and introduced a unique reduction smelting technology using AC electric arc furnaces to produce manganese and chrome alloys for the iron and steel industry from discard fines and slag dumps.

“In 2006/7, Edwin Dreyer initiated and led a successful buy-out of the South African shareholders holding 70% of the equity in Thos Begbie Holdings (Pty) Ltd. The independent offshore consortium of financiers still holds that 70% stake in the group.”

Edwin Dreyer was then appointed executive chairman and CEO of the Thos Begbie group. Eugene Rossouw continued as a Managing Director.

Edwin Dreyer also brought with him the concept of private ownership of 'own generation of electricity' and facilitated the building of a 10 MW power generator using the Sasol gas already on the site, to drive 4 × 20-cylinder Jenbacher internal combustion engines.

The site has plans to fully use the available electricity, as a strategic supply to operate AC and plasma-arc furnaces without fear of disruption from Eskom's electricity 'load shedding'.

2010

During 2010, the smelting and processing business together with the power station was sold to Jubilee Platinum PLC – a London listed Platinum based group.

Thos Begbie continued to concentrate its efforts on its foundry engineering business, growing its technologies and presence as a world class specialist supplier of integrated water-cooled components and equipment for smelters around the world.

2016

During 2016 Eugene Rossouw and Edwin Dreyer as the South African shareholders with the backing of the Overseas shareholders decided to play a lesser role in the day to day running of the business, this resulted in a Management restructure and the appointment of a new board of directors to run the operating business, the team lead by Joubert Groenewald includes Gabriel Sekgwele, Isaac Mogoba, David Fundzane and Piet du Preez.

In 2018 a new business, Graphite Freezeline Solutions was set up, this offering new technology incorporating the water cooled copper equipment with engineered graphite providing a furnace wall cooling solution to overcome specific challenges faced by smelter operators.

The business continues to operate with the most modern technologies available and includes, electronic melting furnaces, 3D printing, Solidification modelling, CNC machining and turning, Robotic welding and integrated 4th Industrial Revolution platforms within the business.

Acknowledgements

Begbie to Barlow – by Jack Frewin (published by OH Frewin, Middelburg)

The Chrome Connection – Anthony Hocking

Eugene Rossouw – former Managing Director – Thos Begbie & Co since 1993

Edwin Dreyer: former Chairman and CEO since 2007