

Corridors and Manufacturing Centres



Bloemfontein	Durban	Germiston	Koedoespoort	Langlaagte	Salt River	Uitenhage

A Solid History

With origins dating back more than a century to the mechanical engineering department of the former South African Railways and Harbours, this engineering organisation has actively supported railways in the expansion of the country's economy and over the decades has developed some of the most innovative bogies and wagons ever built for 1067 mm track. Through the years, Transnet Rail Engineering has become the key supplier of customised rolling stock for the coal, iron-ore, intermodal, agricultural, fuel and cement industries.



African Soul - Global Perspective

While focus is mainly on the South African market, investment in research and development to service the specific requirements of Africa and the rest of the world has led to an ever-expanding range of rolling stock products and a comprehensive list of satisfied customers, further enhancing the organisation's international reputation. The proximity of the coastal plants to major ports facilitates the movement of products to and from overseas markets.

Our People, Our Communities, Our Future

With its greatest assets being its people and their skills, Transnet Rail Engineering is committed to many initiatives such as the talent management programme, relationship building, performance management, transformation, a comprehensive lifestyle well-being programme, as well as engineering bursaries and apprenticeship training to name but a few.

The organisation takes seriously its moral and legal duty to ensure the health and safety of all employees. This obligation also extends to clients, the communities in which it operates and to the protection of the environment.

Safety has become embedded in the organisation's culture. Performance achieved through the SHEQ system is constantly monitored and managed with employees receiving regular training in operational health and safety awareness. Disabling injury frequency rates are ever decreasing and numerous accolades are received including the highest safety award, the NOSCAR.



As a responsible corporate citizen, society and the environment are high priorities in the maintenance of sustainability. Programmes extend to communities and schools, improving the lives of the under-privileged and physically challenged through donations of computers, development of sport, occupational therapy and job creation. Being an industrial consumer of electricity and fuel, savings campaigns are maintained for the reduction of losses and the efficient use of energy for heating, lighting and process power.

Competent Supplier - Total Solution

The organisation's competency is based on its sound knowledge of the technologies subsisting in its products, supported by ongoing research and development and exceptional product application experience. A demanding standard of precision, combined with integrated maintenance and life-cycle upgrading, ensure a comprehensive 'total-service' solution for railway operators to achieve optimum fleet availability and reliability. All work is conducted in accordance with railway codes of practice and standards such as those of the American Association of Railroads and all Transnet Rail Engineering depots are ISO 9001:2000 accredited. Mobile maintenance teams backed up by a network of support services take the total solution into all operational areas. Rerailing and recovery service completes the support package to regional railway operators.

Locomotive Business



The Locomotive Business is the leading supplier of maintenance, repair, upgrade and manufacturing services in Southern African for AC, DC and diesel-electric units. Dedicated staff operating from depots and factories close to the main rail freight corridors maintain a fleet of 2200 locomotives per annum, ensuring high levels of reliability and availability. During upgrades, tractive effort is increased through the addition of microprocessor wheel slip control - enhancing fleet revenue generation potential.





The Wagon Business is a major supplier of new wagons to the heavy-haul coal and iron-ore fleets with tare ratios as high as 5:1. Other wagon types supplied are cement, car carriers, intermodal and fuel tankers. The organisation has an extensive network of strategically positioned in-service depots and maintains and refurbishes wagons, including accident repairs, heavy overhauls, conversions, upgrades and essential life-cycle interventions. Capacity is sufficient for ongoing maintenance of a fleet of 75,000 freight wagons and the manufacture of 1,500 new wagons per annum. The conversion programmes add new life and improve haulage efficiency of the freight fleet through increasing of axle load capacities and modernisation.



Coach Business



The Coach Business supplies repair, refurbishing, upgrade and manufacturing services for suburban electric train sets and mainline coaches. Modernisation of South Africa's large DC suburban fleet is one of the Business' main markets and its modular upgrade designs extend the economic lifespan of the sets. During upgrades, passenger and driver ergonomics are enhanced wherever possible, while safety and operating performance are increased. Designs include dining, lounge and kitchen cars, sleeper and sitter coaches and power units.

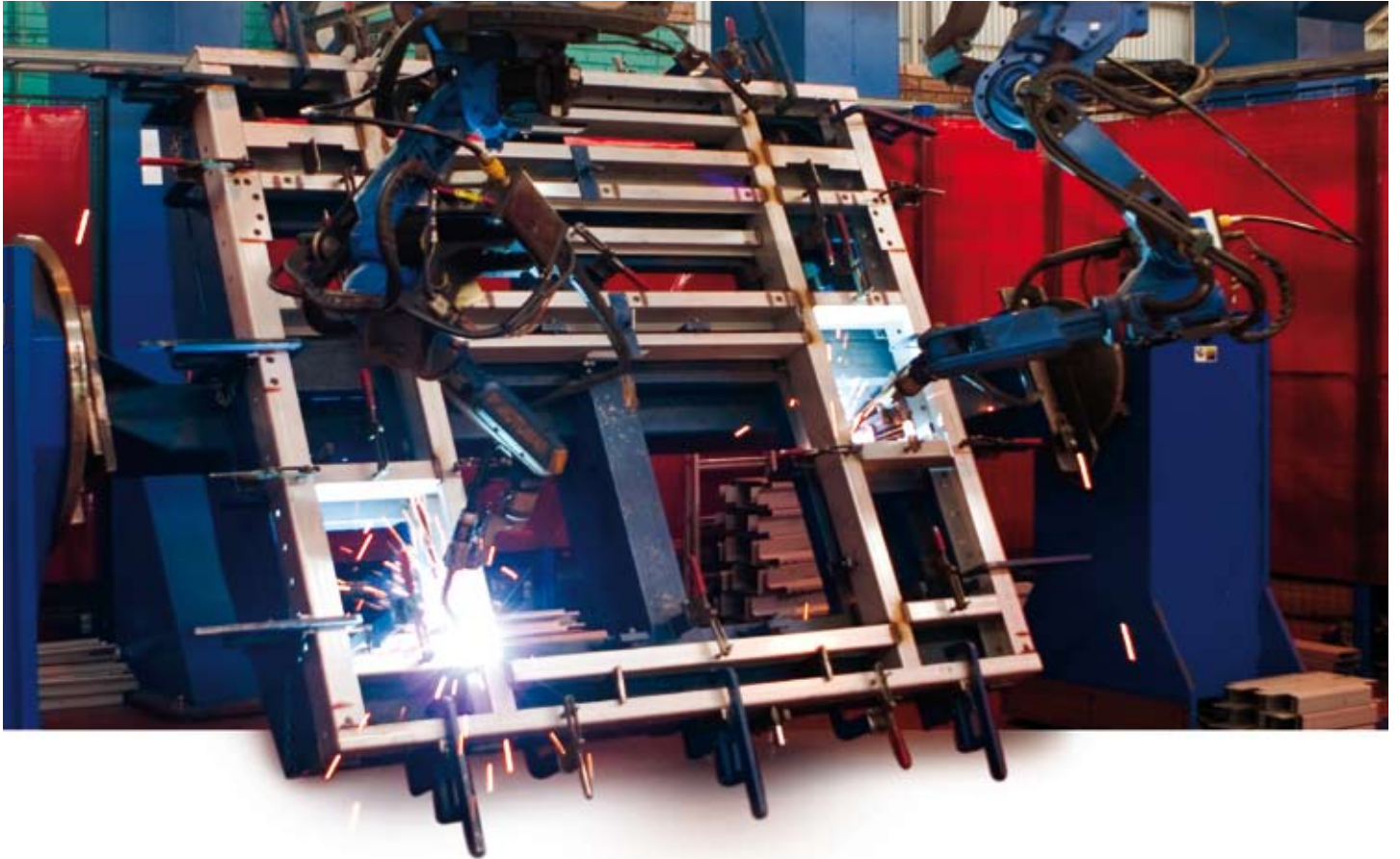




The Wheel Business specialises in the manufacturing and refurbishing of all types of railway wheelsets for the Southern African region. Equipped with the latest technology, including wheel-profiling portal lathes and laser measuring equipment, the Wheel Business has the capacity to refurbish in excess of 100,000 wheelsets annually for diesel or electric locomotives, passenger coaches and freight wagons. The main activities comprise wheel reprofiling, machining of axles, centres and tyres, fitting of wheel bearings, driving gears and motor suspension tubes as well as centre retiring, journal burnishing and crack detection through ultra-sonic testing from factories and depots on the main cargo routes.



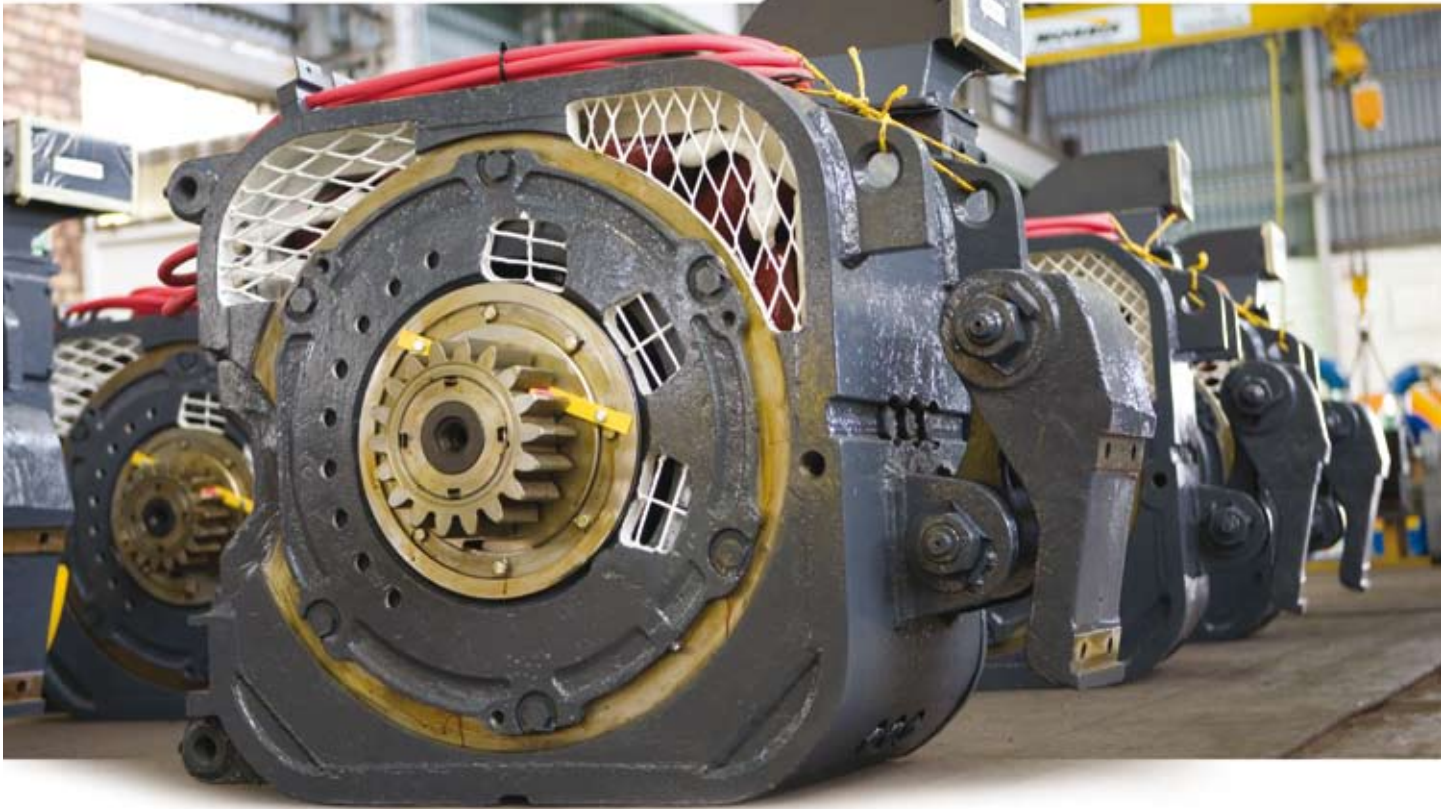
Rolling Stock Equipment Business



The Rolling Stock Equipment Business manufactures parts and sub-assemblies for locomotives, coaches and wagons. Processes involve laser cutting, bending, welding, forging and fabrication of carbon and stainless steels. The Business also repairs and upgrades components to extend the lifespan of rolling stock. This includes refurbishing of brake valves and cylinders, couplers, pantographs and the overhaul of diesel engines, turbo-chargers and compressors.



TRUMPF



The Rotating Machine Business refurbishes and upgrades traction motors and auxiliary electric motors. All traction motors are qualified and load-tested to full capacity on back-to-back motor test facilities. Electrical work includes repair and manufacture of motor field coils, complete rebuilding, rewinding and repair of armatures and the repair and calibration of instrumentation.

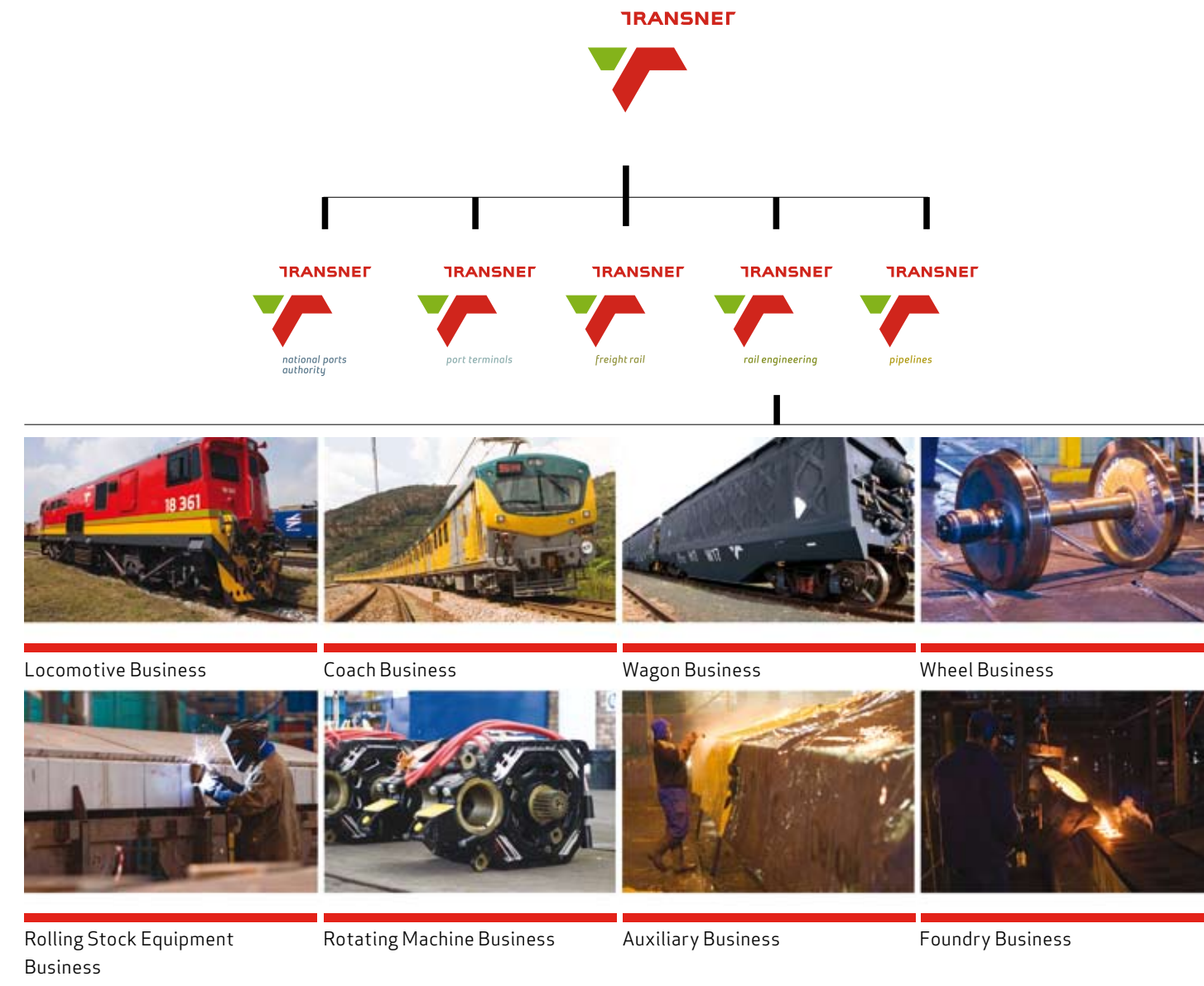


Auxiliary Business



The Auxiliary Business offers both products and services for rail cargo as well as ISO container refurbishing and wagon cleaning. Supplying newly manufactured, repaired and washed tarpaulins and accessories, product diversity extends to cargo canopies, scotches, lashing chains, road trailer tarpaulins, boat covers, tents and other PVC material products, trimming and cargo protection equipment.





Transnet Rail Engineering, an operating division of Transnet Limited, is the backbone of South Africa's railway industry with eight product-focused businesses, 150 depots, seven factories and 15,000 employees countrywide. The organisation is dedicated to in-service maintenance, repair, upgrade, conversion and manufacture of freight wagons, mainline and suburban coaches, diesel and electric locomotives as well as wheels, rotating machines, rolling stock equipment, castings, auxiliary equipment and services.



Transnet Rail Engineering operates an iron foundry producing approximately 240 tons of spheroidal graphite iron, 600 tons of cast iron, and 60 tons of steel castings every month for railways and related industries. A second operation produces brass and copper castings primarily for suspension bearings.



World Class Systems

The core of the organisation's business systems is SAP. A Competency Centre based at the corporate office supports the application modules, being Finance, Controlling (management reporting), Production Planning, Sales and Distribution, Human Capital, Material Management, Document Management and Project Systems with Investment Management. The Centre is a member of the Gartner Best Practices Group and is a well respected member of the SAP community. Architecture includes a portal with a completely duplicated infrastructure for disaster recovery.



Programmes such as Lean Six Sigma, complemented by agreements with original equipment manufacturers for skills and know-how transfer have placed Transnet Rail Engineering firmly on the map as a world class manufacturing organisation.



Design and Product Development

The organisation's design office makes use of state-of-the-art programs for computer-aided design, finite element analysis and three-dimensional modelling as well as mechanical and electrical integration software. New products and upgrades of existing products are created by highly qualified and experienced engineers, all specialists in the varied technical disciplines of railway engineering.

The design, prototyping, testing, commissioning, industrialisation and production processes are supported by configuration management, project management, quality control, SAP and non-conformance reporting. As the process of manufacture is as important as the products it produces, capital expenditure and maintenance management are equal priorities to ensure modern well serviced equipment, machinery and facilities.



Project Management

Whether product development or capital expenditure, every project tackled is meticulously analysed using leading project management methodology. This involves a structured approach in the use of the skills, tools, software and techniques throughout the process, from conceptualisation through initiation, planning, execution and control to close-out. Assisting this process is the Project Support Office, which acts as a resource centre to sustain the project management culture.

Corporate Governance

Transnet Rail Engineering is firmly committed to sound corporate governance and accountability, having adopted a proactive approach to risk management in line with the King II Code of Corporate Governance, the Companies Act and the Public Finance Management Act. Committees, offices and departments within the organisation manage corporate governance and risk, integrating the three components, Compliance, Financial Risk Management and Enterprise Risk Management.

Supporting Railways

Through its comprehensive set of rolling stock products and services, Transnet Rail Engineering is the supplier of choice for successful railway operations.

