

S SCAW METALS
GROUP

 a member of the Ferrous Metals and Industries Division of Anglo American plc

An overview

The Scaw Metals Group (Scaw) is an international group manufacturing a diverse range of steel products. Its principal operations are located in South Africa, South America, Canada and Australia. Smaller operations are in Namibia, Zimbabwe and Zambia.

The main product lines manufactured by the group are rolled steel (much of which is supplied to Scaw's downstream operations), steel and alloy iron castings, cast alloy iron and forged steel grinding media, chain, steel wire rope, strand and wire products. These are supplied to the global construction, railway, power generation, mining, cement, marine, engineering and agricultural markets.

Corporate structure

Scaw's operations are housed in two companies, Scaw South Africa (Pty) Limited and Scaw International Sàrl. Scaw and its majority shareholder, Anglo American, regard transformation in South Africa as fundamental to the long-term development and stability of the South African economy and to the South African business. Consequently, Scaw South Africa's shareholders include a Black Economic Empowerment consortium that holds 21% and an employee share ownership plan trust that holds 5%. Anglo American holds the balance of shares. Scaw International is a wholly-owned subsidiary of Anglo American.

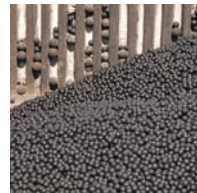
International standards

Scaw is an ISO 9000-series accredited organisation manufacturing products to meet the requirements of the appropriate international certification authorities. Scaw's safety, health and environmental management systems are aligned with the international ISO 14001 and OSHAS 18001 standards. The group drives and measures employee wellness programmes, including antiretroviral-supported HIV/AIDS programmes, and promotes skills-based educational courses and community development projects.

Sustainable development

As a producer of liquid steel from steel scrap and directly reduced iron from its rotary kilns, and a manufacturer of value-added steel products, Scaw is a member of one of the world's most sustainable industries. Steel is 100% recyclable and is indeed the most recycled material on the planet. Every new steel product contains recycled steel and in some countries the recycle rate is as high as 85%. Scaw procures and processes its own steel scrap requirements.

The group is mindful of the impact of global warming and the pressing need to conserve finite resources. Scaw maintains control of the resources it uses to manufacture its range of sophisticated steel products by applying accurate and repeatable measurements of natural resource consumption. Energy consumption emissions and water use per tonne of steel produced are being reduced throughout the group year on year. Scaw operates with due regard for environmental, social, cultural and economic concerns.



From top down:
Cast steel locomotive frame and wheels;
grinding media; a bar manufacturing mill and ground engaging tools.

Operations and products

Rolled products

Scaw's operation in Germiston has two rolling mills; one producing low- and high-carbon wire rod (supplied to Scaw's wire rod operations) and a range of merchant bar, the other producing light and medium sections.

The combination rod bar mill has a 100 tonne per hour, walking beam re-heat furnace, 21 stands in line and two outlets, a cooling bed for straight products of up to 76mm diameter and a 10 stand, high speed, wire rod mill with controlled cooling facilities for wire rod of up to 18mm diameter. The section mill has a three-high tilting table breakdown mill and one two-high sizing mill that feeds either a medium section train that produces channels and equal and unequal angles, or a ten stand continuous small section and bar train for smaller angles and flats.

Steel is produced in an 85 tonne UHP-EBT arc furnace and ladle furnace combination, which feeds a three strand, high speed, continuous billet casting machine. The caster is equipped with convex water-cooled moulds that allow for high casting speeds and electromagnetic stirring systems that achieve high quality steels. The melt shop uses a high proportion, up to 60%, of directly reduced iron (DRI) in its furnace charge. The DRI is produced from three coal-based rotary kilns located at the Germiston operation in South Africa.

AltaSteel, based in Edmonton, Canada, is a scrap based mini mill operation with melting and continuous casting facilities, a bar rolling mill and a grinding rod heat-treating facility. AltaSteel produces continuously cast bloom and billet that are rolled into rounds, squares, flats and rebar for the manufacturing, oil, construction, automotive and mining industries, including bar for Scaw's forged steel grinding media operation in Kamloops, British Columbia, Canada.

Grinding media

Scaw has a specialised foundry facility at its Germiston, South Africa operation producing a full range of heat-treated, high-carbon, high-chromium iron grinding media for use in platinum, copper, coal, gold and

regrind applications, as well as a forged steel grinding media plant. Scaw's grinding media operations in Chile, Peru, Mexico and Canada produce a complete range of forged steel heat-treated grinding media in sizes from 20mm to 150mm in diameter and have a total installed capacity of over 700 000 tonnes per year.

Cast products

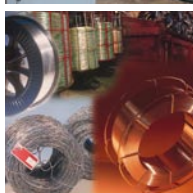
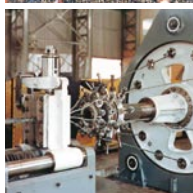
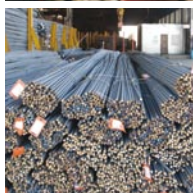
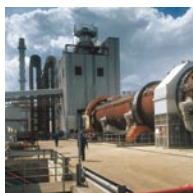
The foundry at Scaw's Germiston, South Africa operation is one of the largest foundries in the southern hemisphere and produces castings of up to 30 tonnes finished weight. It is a leading supplier of single-piece, thin-walled locomotive and passenger frames, freight car components and high integrity cast steel railway wheels. The foundry holds the American Association of Railroads' approval for the manufacture of freight car side frames, bolsters and cast steel wheels. Other products include large gear segments, high-carbon, high-chromium, abrasion resisting coal grinding elements for coal-fired power stations, high-chromium iron mill liners and impact crushing parts, stainless steel coiler drums, and a range of slag ladles for the metal processing industry.

Arc furnace melting units and a 25 tonne capacity ladle vacuum degassing unit serve the foundry where steels can be produced with lower sulphur, nitrogen, oxygen and hydrogen contents, particularly necessary for the manufacture of high strength, low-alloy steels.

Scaw's other South African foundry in Benoni manufactures a wide range of earthmoving components under licence from the ESCO Corporation, USA and general engineering products in plain and low-alloy steels of up to eight tonnes finished mass. Other products include manganese wear components for gyratory crushers.

Both foundries are serviced by a large in-house machine shop. Facilities include vertical and horizontal boring mills, CNC machining centres, lathes and planers. Castings of 25 tonnes and five metres in diameter can be machined to close tolerances. Smaller castings that require CNC batch production runs are also made.

Operations and products



From top down:
Scaw's Union Junction site in South Africa and one of its Directly Reduced Iron kilns, steel rod; the manufacture of steel wire rope; products manufactured by Consolidated Wire Industries.

Wire rod products

This business comprises manufacturing plants in South Africa, Zimbabwe, Zambia and Australia. The operation's main activity is the conversion of steel rod into a range of wire products, supplying markets worldwide as diverse as mining, construction, marine, engineering, elevator, offshore oil and electrical reticulation.

The main Steel Wire Rope operation, in Johannesburg, is a large integrated wire mill and ropery plant, manufacturing a wide range of specialised ropes. It is an acknowledged world leader in the manufacture of steel wire ropes for ultra-deep shafts. Smaller factories are in Zimbabwe and Zambia.

The Wire and Strand operation in Germiston, South Africa has three major product lines; pre-stressed concrete wire and strand, mining commodity rope and high-carbon wire. Pre-stressed concrete strand has been supplied to many prestigious projects worldwide such as the Mandela Bridge in South Africa, the Rama VIII Bridge in Thailand and the Light Horse Interchange in Australia.

Synthetic and natural fibre ropes are manufactured at the Fibre Products factory in Durban, South Africa for use as cores in steel wire rope and for mining, marine and agricultural applications.

The Chain operations in South Africa and Australia produce a comprehensive range of carbon and alloy steel chains and fittings to national and international standards. The range of products is used extensively in mining, forestry, agriculture, fishing, offshore oil exploration and other industrial applications.

Distribution

Scaw's operations are supported by a network of service centres that are staffed by trained specialists to provide on-site technical support. These centres have testing facilities and stock primarily a wide range of wire rope and chain fittings, lifting equipment and related hardware. They are located so as to be able to service Scaw's markets worldwide.

Consolidated Wire Industries (50% owned)

Consolidated Wire Industries produces a full range of mild steel wire in both black and galvanised finish. These products undergo further conversion into Diamond Mesh and Veldspan fencing, nails, staples, barbed wire and copper-coated electrode welding wire.

Scaw Metals Group (incorporating Scaw South Africa and Scaw International)

For further information please contact:

Scaw South Africa (Pty) Limited

Registered office

P O Box 61721, Marshalltown, 2107, South Africa

Black Reef Road, Germiston, Gauteng, South Africa

Tel: + 27 11 842 9000 • Fax: +27 11 942 9721 • www.scaw.co.za