

CORPORATE PROFILE

Founded in 1963, Southern Steel Group has grown from a small galvanised iron sheet plant to a major steel manufacturing group, producing a wide range of high quality steel products, including billets, steel bars, carbon steel wire rods, wire mesh, prestressed concrete wire products and steel pipes. Today, it is also a member of Hong Leong Group, a Top Ten conglomerate in Malaysia, and has diversified businesses that also include rubber product manufacturing, branded retailing, financial services and property development.

The Group strongly believes in being innovative, technology driven and environmentally friendly. Through this vision, it became the first in South East Asia to produce high quality easy drawing wire rods, and one of the first in the world to install the DC arc furnace and inline galvanising technology for producing painted and galvanised pipes.

In addition to its drive for technological advancement, the Group places great emphasis on consistency in the supply of quality products to its business partners. Consequently, it has obtained various international certified quality and environmental management certifications, such as ISO 9001, ISO 14001, etc. It also provides value-added services to customers through a network of processing plants and warehouses throughout Malaysia.

Moving forward, Southern Steel Group is committed to continue its journey towards achieving world-class standards and ensure continuous customer satisfaction.



GROUP OF COMPANIES

The Southern Steel Group Network of Subsidiaries, Associates & Joint Ventures

Southern Steel Mesh Sdn. Bhd. (65949-T)

Southern Steel Mesh Sdn. Bhd. (SSM) was established in 1980 and incorporated into the Southern Steel Group in 2000. Since the late eighties, SSM has successfully emerged as a market leader in the local steel welded mesh industry. SSM has three manufacturing plants strategically located in Klang, Prai and Tanjung Langsat, with a combined production capacity of approximately 180,000 MT per annum. SSM is also the first wire mesh manufacturer to be awarded the prestigious ISO 9002 in all its three plants. In 2000, it was certified under the Australasian Certification Authority for Reinforcing and Structural Steels (ACRS). The company adheres to stringent product quality control and has strong technical backup in meeting requirements of projects of various complexities.

Southern Pipe Industry (Malaysia) Sdn. Bhd. (7451-M)

Southern Pipe Industry (Malaysia) Sdn. Bhd. (SPIM) was incorporated into the Southern Steel Group in 1987 and has grown to become one of the biggest steel pipe mills in Malaysia. SPIM is the first Malaysian steel pipe mill to receive quality awards and the prestigious ISO 9002 certification from both SIRIM and the Bureau Veritas Quality International.

SPIM's quality has not only enabled it to capture the Malaysian market but its newly developed technology has also opened up overseas market opportunities.

Group offices and plants are located in:

Ipoh • Tanjung Langsat • Penang • Rawang • Kuantan • Sabah • Sarawak • Shah Alam • China • Singapore • Vietnam

5 1/2 Miles, Jalan Kapar, 42100 Klang,
Selangor Darul Ehsan, Malaysia.
Tel: 03-3291 2116/7/8
Fax: 03-3291 2925
E-mail: koh.liangiap@southsteel.com

4457, MK. 15, Jalan Chain Ferry,
12100 Butterworth, P.W., Malaysia.
P.O. Box 83, 12710 Butterworth,
Province Wellesley, Malaysia.
Tel: 04-331 7393
Fax: 04-331 9435
www.spim.com.my

OUR TECHNOLOGY

Southern Steel's steel making plants utilise a state-of-the-art Direct Current Electric Arc Furnace which produces billets in an energy-efficient manner that reduces waste and residue. The DC arc furnace was the first of its kind to be installed in South East Asia. The wire rod mills are equipped with walking hearth reheating furnaces and tension free rolling finishing with 80 and 120 metres per second capability respectively. At Southern Steel, we share the same aim: to steadily increase our quality and productivity by investing in technology.

Southern Steel's core products include mild steel round bars and high yield deformed bars, with wire rods ranging from very low carbon to high carbon at a total capacity of 1.2 million MT of bars and wire rods per annum.

In its production processes, Southern Steel employs advanced technology in manufacturing quality steel bars and rods, all of which conform to the prestigious international quality management system, ISO 9001.

The Wire Rod Mills utilise an EDC (Easy Drawing Conveyor) process for controlled cooling of wire rods in boiled water. This process improves the micro structure of the rods, substantially reduces scale thickness and ensures uniform structure throughout the coil.



Ladle furnace, steel making plant No. 2



Arc furnace, steel making plant No. 1

ROLLING MILL PRODUCTION



Wire rod rolling

Rod Rolling Mill - EDC process

Consists of:

- First dry roller conveyor
- Immersed roller conveyor
- Evacuation chain conveyor
- Water tank

The advantages:

- Uniform and homogenous structure
- Reduced scale level
- Consistent in mechanical properties

Southern Steel also employs the Tempcore heat treatment process that produces high strength reinforcing bars which are highly malleable and weldable.

Bar Rolling Mill - Tempcore process

The advantages:

- The ability to be bent and restraightened without cracking or loss of tensile strength
- High ductility and toughness at low temperature even when damaged mechanically
- The ability to be welded without cracking
- Fully weldable as required by low carbon content steel

Research and Development

Southern Steel Berhad collaborates with local universities to conduct product research and development. In our commitment to uphold top notch quality at all times, we believe that this investment in research and development is key in ensuring increased performance, productivity and profitability.

- Computer-controlled spectrometric analyser to provide chemical analyses of up to 25 elements
- A series of LECO determinators for C, S, N2, O2 and H2 analyses
- Image analyser (IBAS) together with digital camera, scanner and advanced software to produce paperless reports and shorten the feedback time



Tempcore bars

UNLOCKING THE FULL POTENTIAL OF OUR PEOPLE

Management and Human Resource Development

Southern Steel has an enthusiastic, dynamic and visionary team. The management structure of the Company places emphasis on open channels of communication. As the Company has grown, so has our corporate culture. Today, that culture is centred around the collectively agreed values of: Integrity, Competence, Teamwork, Innovation, Technology and Environment.

These corporate values are enhanced and instilled through Southern Steel Development Institute (SSDI) which was established to train and develop our entire workforce with multi-skilling capabilities and widen both the job scopes and the areas of responsibility for all towards nurturing a K-based economy and society. Through SSDI, courses like City and Guilds, Mechanical, Electrical and Steel Making Technology are being conducted. Supervisory, Executive and Management Development courses with senior executives and managers as resource persons are also carried out in-house and in collaboration with established external training institutions.



IT training facilities



Human resource development

OUR PRODUCTS

Wire Rods

Mesh/Straightening Product

- SWRM 10K, SWRM 12K, SWRM 15K, Mild Steel MS / JIS
- SSM 12 SSB

Deformed Bar in Coil (DBIC)

- Grade 460, 500, AS/NZS4671 (G500N) MS / BS
- ASNZS

Low Carbon Drawing Quality

- SWRM 6K, SWRM 8K, SWRM 10K, SWRM 12K, SWRM 15K, SWRM 18K JIS
- SAE 1006K, 1008K, 1010K, 1012K, 1015K, 1018K AIS
- SSD 5, SSD 6, SSD 8, SSD 10 SSB

Welding Quality

- SWRY 11 JIS
- ER 70S-4, ER 70S-6, EM 12K AWS
- SSW5 SSB

Polyshaft Quality

- SGD 1K, SGD 2K JIS

Cold Heading and Bolt & Nut Quality

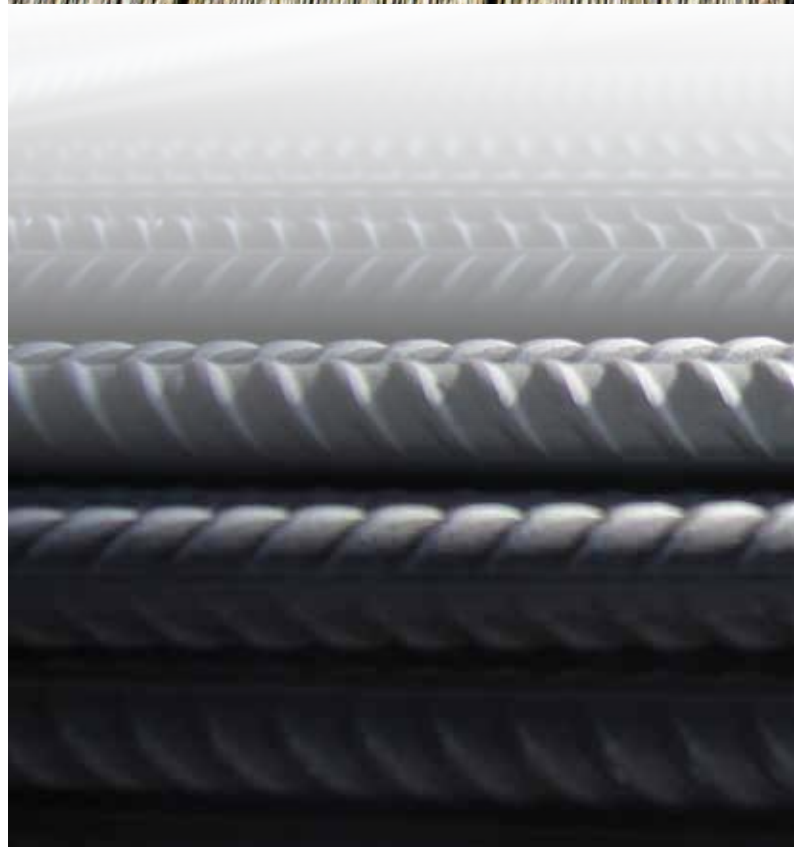
- SWRCH 18A, SWRCH 22A, SWRCH 40 JIS
- SSBN5, SSBN 8, SSCH 22, SSCH 40 SSB

High Carbon Quality

- SWRH 42A, 47A, 52A, 57A, 62A, 67A, 72A, 77A, 82A JIS
- SWRH 42B, 47B, 52B, 57B, 62B, 67B, 72B, 77B, 82B JIS
- SSHB 30 / SSHB 35 SSB

Steel Wool Quality

- SSU 8 SSB



OUR PRODUCTS

Reinforcing Steel Bar - Grade 500

Grade 500 is an improved reinforcement bar grade with characteristic strength of 500 MPa. It is SIRIM certified and in full compliance with Malaysian Standard (MS 146: 2014).

It covers the full range of steel bars from 9 to 40 mm, with the following enhanced properties:

High Strength

- It provides 8.7% increase in yield strength from Grade 460 rebar
- It enhances the performance of reinforced concrete structures by increasing load bearing capacity more efficiently
- It reduces rebar congestion at critical design sections, thus easing fixing difficulties and improving quality of rebar detailing
- It reduces the quantity of rebars required, and consequently increases project cost savings

Ductility

- It maintains similar elongation at fracture
- It has minimum tensile to yield strength ratio of 1.05
- It is ductile and formable
- It can better withstand bending tests with no visible cracks or fractures

Safe

- It is tested to be radiation free

Weldability

- It is of weldable quality
- It is capable of being welded on site in accordance with the requirements of BS 5135 and manufacturers' recommendations



Reinforcement steel bars

VALUE-ADDED SERVICE - CUT & BEND

To contribute further towards quality steel reinforcement services, Southern Steel introduces a comprehensive range of off-site fabrication services for reinforcement bars and stirrups for the Malaysian construction industry.

The plants are strategically located in Rawang Integrated Industrial Park, Prai Industrial Estate and Tanjung Langsat to serve the fast growing construction zones in Klang Valley and Penang. Through the use of a total integrated computerised optimisation and production scheduling system, together with state-of-the-art CNC cutting, bending and stirrup making machines, customers are ensured of consistent quality products.

Advantages of Off-Site Prefabrication Reinforcement

The precision fabrication service provides accurate cut and bent reinforcement for quick on-site installation. This results in the following advantages:-

- controls material wastage, loss and deterioration
- reduces inventory-carrying costs at construction site
- reduces difficulty in getting on-site skilled labour
- relieves site congestion, especially for projects in city centres
- improves quality control particularly when bending to prescribed bending standards
- improves scheduling



Bending activities



Cutting to required sizes

CUSTOMER SATISFACTION & QUALITY ASSURANCE

Welcome to a company that is truly committed to our customers' goal of higher quality, productivity and profitability. We find that the best way of working for you is working with you. We do so through commitment and partnership.

Our Quality Policy Statement

Southern Steel Berhad aims to be the best steel producer in ASEAN by:

- Setting customer satisfaction as our highest priority
- Seeking continuous improvement through staff development, innovation and new technology
- Building the highest standards of quality, integrity and efficiency into all our operations

SAMM (Lab Accreditation Scheme of Malaysia), MS ISO/IEC 17025:2005

Company	Field of Testing	Materials/Products	Type of Test/Properties Measured/Range of Measurement
SSB Testing Laboratory, Southern Steel Berhad No.: SAMM 436	Mechanical	Steel bars for reinforcement of concrete Metallic materials/Steel products	Tolerance on cut length, mass and cross sectional dimensions Tensile test (up to 200 tonnes) Bend test Rebend test Rockwell Hardness • HRB 100 kgf • HRC 150 kgf
		Metal products • Stainless steel • Carbon and low alloy steel • Cast iron	Elementary analysis arc spark spectrometry
		Carbon and low alloy steel	Metallography -Surface preparation Microstructure identification Non-metallic inclusion identification
Southern PC Steel Sdn Bhd No.: SAMM 289	Mechanical	Strand for prestressed concrete	Tensile test (range: 300 kN max.) Relaxation test (range: 300 kN max.)

QUALITY/ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATIONS

Quality/ Environmental Management System	Certified By	Scope
Southern Steel Berhad		
ISO 9001 :2008	BVC and SIRIM QAS International Sdn. Bhd. and IQNet.	Development and manufacture of : <ul style="list-style-type: none"> • steel billets • steel bars • steel wire rods
ISO 14001 : 2004 OHSAS 18001 :2007 MS 1722 : 2011	SIRIM QAS International Sdn. Bhd. and IQNet.	Development and manufacture of : <ul style="list-style-type: none"> • steel billets • steel bars • steel wire rods
Southern Steel Mesh Sdn. Bhd.		
ISO 9001 :2008	SIRIM QAS International Sdn. Bhd. and IQNet.	Manufacture of hard drawn and cold reduced wires and steel welded mesh for the reinforcement of concrete
Southern PC Steel Sdn. Bhd.		
ISO 9001 :2008	SIRIM QAS International Sdn. Bhd. and IQNet.	Manufacture of prestressed concrete strands and wires, drawn wire products and S-bond prestressed concrete bars
Southern Pipe Industry (Malaysia) Sdn. Bhd.		
ISO 9001 :2008	SIRIM QAS International Sdn. Bhd. and IQNet.	<ul style="list-style-type: none"> • Manufacture of steel pipes and related products such as galvanized pipes, electrical conduit pipes, square and rectangular hollow sections • Provision of hot-dip galvanizing, tubing and slitting services
Southern Steel Pipe Sdn. Bhd.		
ISO 9001 :2008	BVC and SIRIM QAS International Sdn. Bhd. and IQNet.	<ul style="list-style-type: none"> • Manufacture of steel pipes and related products such as galvanized pipes, electrical conduit pipes, square and rectangular hollow sections. • Provision of hot-dip galvanizing, tubing and slitting services
Southern Pipe Industry (M) Sdn. Bhd. & Benxi Iron & Steel (Group) Co. Ltd		
MS EN 10025-2: 2011	SIRIM QAS	Hot rolled plates and strips of non-alloy structural steels
MS 1768:2004	SIRIM QAS	Hot rolled carbon steel strips for pipe and tube

QUALITY/ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATIONS

Quality/ Environmental Management System	Certified By	Scope
Southern Pipe Industry (M) Sdn. Bhd.		
BS 1387 : 1985	SIRIM QAS	Welded steel tubes
BS 1387 : 1985	SIRIM QAS	Welded steel tubes
BS 31 : 1940	SIRIM QAS	Steel conduits for electrical wiring
AS 1163 : 1991	SIRIM QAS	Cold formed structural steel hollow sections
BS 1139-1.1 : 1990	SIRIM QAS	Steel tubes for metal scaffolding
BS 4568:PART 1: 1970	SIRIM QAS	Steel conduits for electrical installations
MS IEC 61386-1 :2008 MS 61386-21 :2010	Jabatan Kerja Raya	Galvanised steel conduits
Southern Steel Pipe Sdn. Bhd.		
AS 1163 : 1991	SIRIM QAS	Cold formed structural steel hollow sections
BS 1387 : 1985	SIRIM QAS	Welded steel tubes
BS 1139-1.1 : 1990	SIRIM QAS	Steel tubes for metal scaffolding
BS 31 : 1940	SIRIM QAS	Steel conduits for electrical wiring
BC 1: 2012 : EN10219-1:2006 EN10219-2:2006	TUV Rheinland Singapore Pte. Ltd.	-
PNS 26: 1992	Bureau of Product Standards Department of Trade & Industry Philippine	-
ANSI/UL 1242	Underwriters Laboratories Inc.	Electrical intermediate metal conduits – steel
ANSI/UL 797	Underwriters Laboratories Inc.	Electrical metallic tubings – steel

OUR FUTURE

The best way forward in times of change

Southern Steel's future is closely linked with that of our country, society and employees. In line with Vision 2020, we are committed to help make Malaysia a developed country as we forge ahead in our endeavours to accomplish our Mission and live by our Philosophy.

We are continuously striving to:

- optimise our production to suit our customers' needs
- modernise and expand our facilities
- train and develop our workforce
- provide employees with excellent facilities and benefits
- turn our mill into a green field and environmentally friendly premise/workplace
- share our success with society in providing scholarship, charity and training programmes

