



قطر ستيل
QATAR STEEL



بناء المستقبل
BUILDING THE FUTURE

SINCE 1978

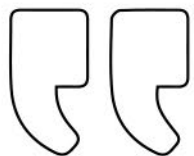
A CORPORATE BROCHURE

IN ITS EFFORTS
TO MEET THE
GROWING
DEMAND FOR
STEEL IN QATAR
AND IN THE
REGION, THE
COMPANY IS
MAKING GIANT
STRIDES IN STEEL
PRODUCTION



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We aim at providing strong, safe and sustainable steel products that are recognized both locally and internationally for its superior value and be known for our commitment to the community though our contribution to Qatar National Vision 2030.





MD & CEO's Message

As the region's first integrated steel mill, Qatar Steel has gone through many challenges and realized significant growth over the years. Towards the end of the 1990s, we initiated few bolder, innovative moves to completely reshape ourselves, and achieved remarkable growth at an unprecedented rate. As a result, QS has established itself as a world-class producer of carbon steel long products, and humbly carrying the legacy to the future.

Behind our great success is a venturesome, entrepreneurial spirit. For over four decades, QS has operated with passion. Despite being one of the oldest companies in Qatar, our vibrant mindset keeps us young and fearless to face any challenges. We keep a close watch on shifting market trends to identify new growth engines. Furthermore, we are committed to achieving innovation and technological excellence, that confers us the strong competitive edge in the market and help in taking a step forward.

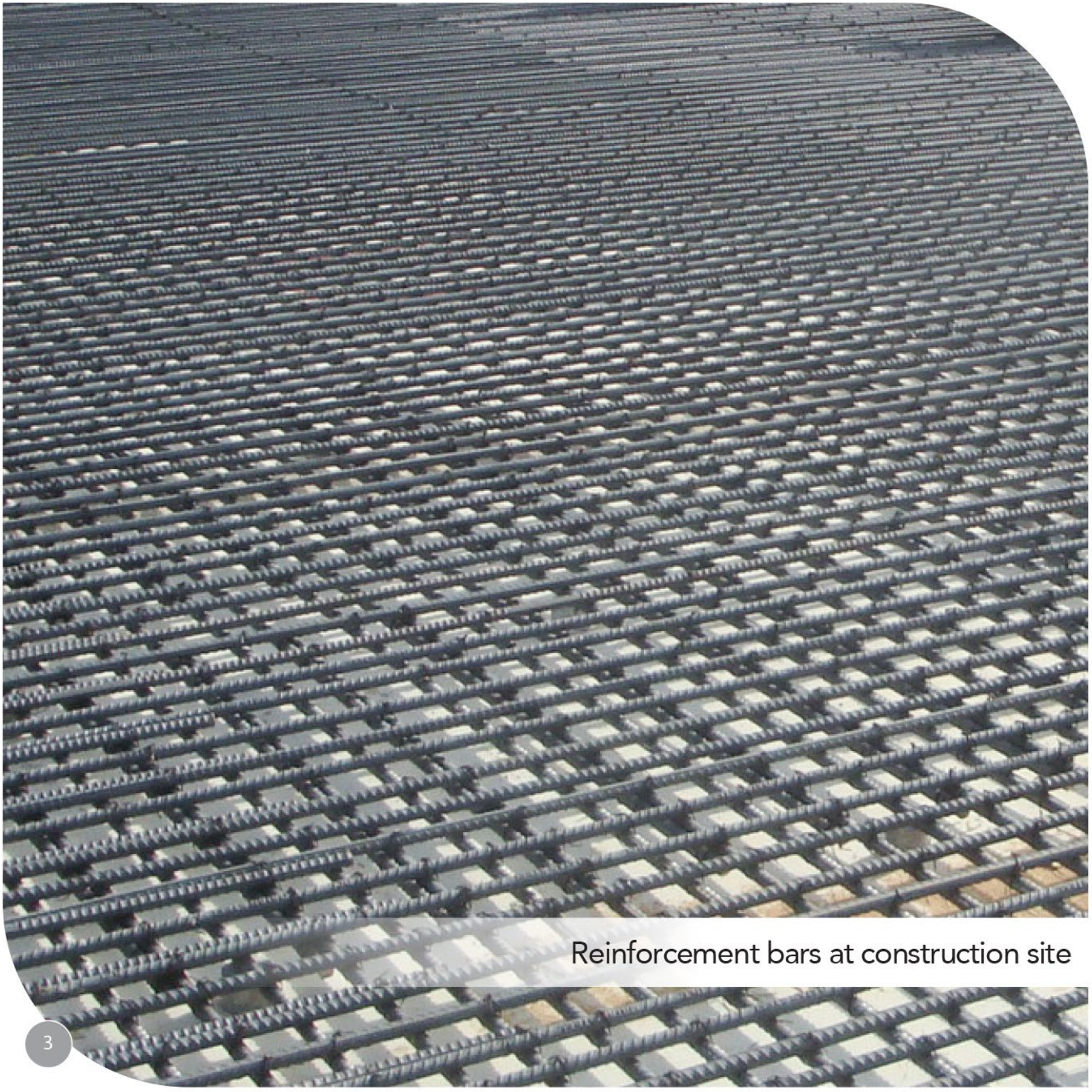
Our people impose no limits on our aspirations and possess true tenacity and drive. Thus it fosters our capability to utilize every available means to achieve the goals. Based on our people-oriented management philosophy, QS strives to become a "caring group of powerful people," who will lead the way to a brighter future.

We are aware that our commitment to contribute to the society and excel industrially can only be realized through sustained growth by responding quickly and amenable to various needs of our customers we are engaged in. This allows us to provide high quality products and services unfailingly by maintaining highest standards in HSE. We create useful value to the society by using technology and sincerely contribute to "Building the Future" - under the corporate philosophy revealed in the newly crafted Vision. We will continue taking on challenges of reforms towards fortifying technologies in the day-to-day operation and demonstrating our strength as a producer of sustainable steel. The spirit of sustainability in our new slogan "Building the Future", has its root in each individual employee and is exemplified in our value system.

We intend to devote our fullest ability towards this ambition and would be grateful to the continued warm support received from our stakeholders.

We thank our shareholders and customers for the confidence and trust they have reposed on us. We aim at providing strong, safe and sustainable steel products that are recognized both locally and internationally for its superior value and be known for our commitment to the community through our contribution to Qatar National Vision 2030.

Abdulrahman Ali A Al-Abdulla
Managing Director & Chief Executive Officer



Reinforcement bars at construction site

COMPANY PROFILE

Qatar Steel Company was established in 1978 as the first integrated steel plant in the Arabian Gulf. Commercial production commenced in 1978 with the company becoming wholly owned by Industries Qatar (IQ) in 2003. Qatar Steel was the proud recipient of '2015 Frost & Sullivan Middle East Integrated Steel Plant of the year' award in the global flagship event, GIL 2015: Middle East. Reports and other documents available in public domain were researched based on five parameters: Market Standing, Visionary Innovation Through Use of Mega Trends, Investments in Infrastructure /Greenfield Projects etc., Implementation of Best Practices (Strategy Development, Execution, Measurement etc.), Customer Purchase Experience (Customer Relationship Management) and Financial Performance/Growth. Among five steel companies, Qatar Steel was declared an undebated winner. Company celebrated its 40 years of excellence in 2018.

Today, Qatar Steel is widely recognized as a foremost leader in the steel industry, extending its pioneering commitment from an expansive mill site located in the heart of the progressive Mesaieed Industrial City - 45 kilometers south of the nation's capital, Doha. The Company also operates a UAE based subsidiary - Qatar Steel Company FZE.

Inspired to meet the growing demand for steel in Qatar as well as in the region in general, Qatar Steel has embarked upon a series of initiatives aimed at increasing its production capacity.

State-of-the-art technically advanced expansion projects are designed to produce world class products. Over the years, Qatar Steel has successfully forged a remarkable reputation by establishing unrivalled quality, flexibility and reliability in all its products and service offerings. Central to this achievement has been the drive to exceed customer's expectations.

Facilities in the State of Qatar

Plant facilities includes MIDREX process based DRI/HBI Combo Mega Module, Electric Arc Furnaces (EAF) and Ladle Refining Furnaces (LRF), Continuous caster, Rolling mills, Lime calcination plant and Cold Briquetting Plant with the latest automated technology. Other auxiliaries include well equipped Jetty facilities, Main Power Substation, Quality Control Center, Maintenance Shops, Utility and medical Clinic.

Facilities in QS FZE – UAE

Qatar Steel Company FZE was established to meet the growing demand for high- quality steel wire-rod products within the GCC as well as in international markets.

The company operates two primary facilities at its 60,000 Sq. meter Jebel Ali Free Zone site that includes:

- State-of-the-art Wire Rod Mill with design capacity of 240,000 MT per annum.
- Advanced Rebar Mill from VAI-POMINI with design capacity of 300,000 MT per annum.

Qatar Steel Products

Qatar Steel's main business is the production and supply of Reinforcement Bar (rebar) (8mm to 40mm), Wire Rods of different grades, Billets and Hot Briquetted Iron (HBI)/ Direct Reduced Iron (DRI), manufactured through modern and state of the art production technology.

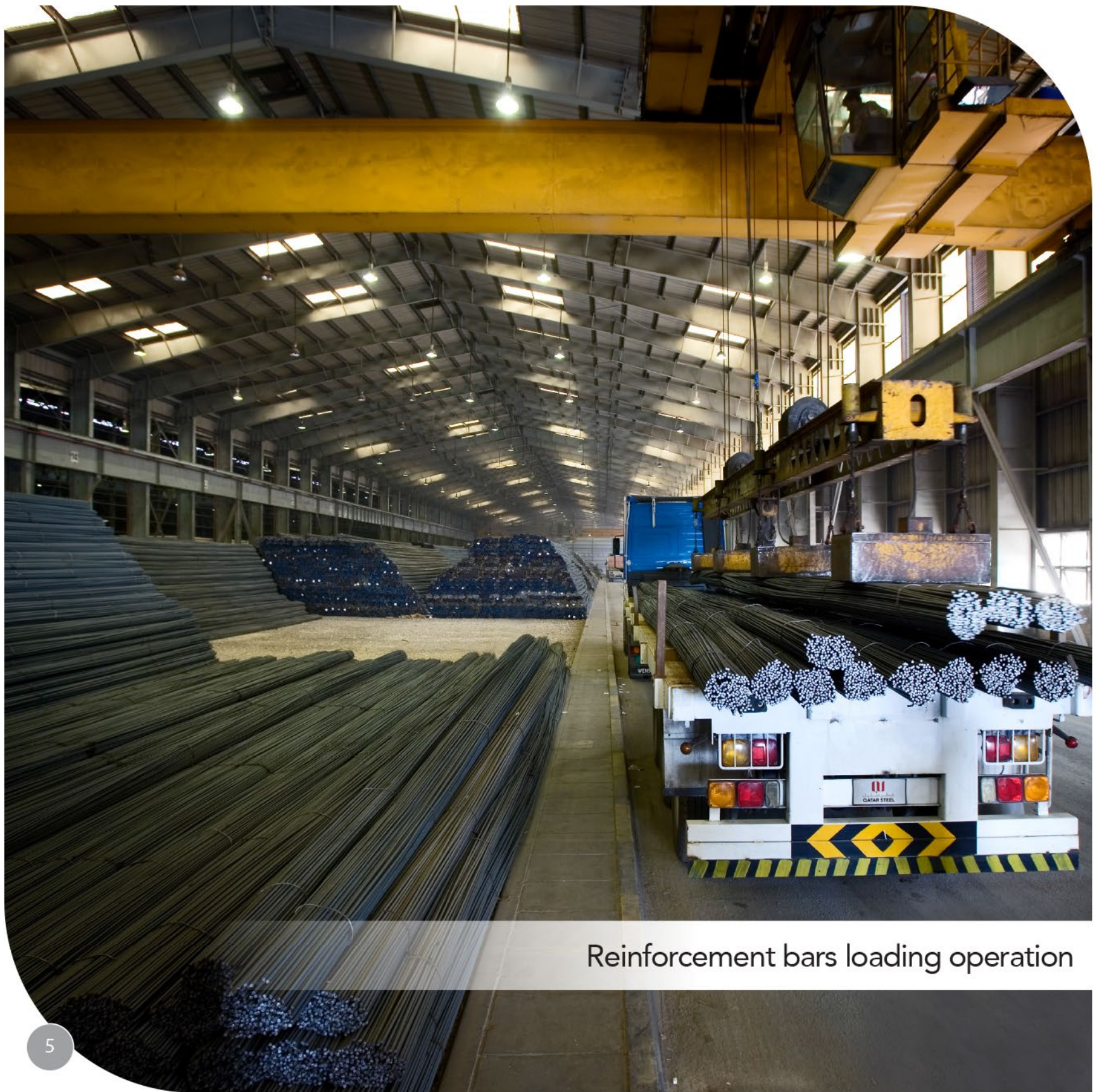
By products: Qatar Steel's main by-products are oxide fines, DR Slurry, DR Dust generated from DRI plant, EAF dust generated from Electric Arc Furnace, Slag generated from Electric Arc and Ladle Furnaces, Mill scale generated from Caster & Rolling mills.

Lime Products- Qatar Steel sells Lime products mainly Dolomite and Calcined Lime based on availability.

Qatar Metals Coating Company WLL (Q-Coat) Mesaieed, Qatar

Qatar Metals Coating Company (Q-Coat) is one of the first and most reputed epoxy coated rebar manufacturer in Middle east and the only producer in Qatar. It was founded in 1990 as a joint venture between Qatar Steel and Qatar Industrial Manufacturing Company (QIMC) with an annual production capacity of 100,000 T/Year.

FBECR (Fusion Bonded Epoxy Coated Rebar) produced at Q-Coat are sold in GCC, Middle East and Far East Asia, which proved its success in protecting steel reinforcement against corrosion in a wide variety of concrete structures. It has earned a good reputation for quality, safety, productivity and reliability.



Reinforcement bars loading operation

VISION, MISSION & VALUES



Vision

To be a leader in the Steel Industry, admired for our products and contributing to shaping the future

Mission

To be the region's Steel Industry leader, by developing our talent, fostering our high performing culture, striving for operational excellence, and safeguarding Health, Safety & Environment.
We contribute to BUILD the future of Qatar, in line with Qatar National Vision 2030

Values

Caring | Respect | Excellence | Integrity | Teamwork
Values Shape Our Behavior and Decision Making

Strategy

Commitment To Qatar Vision | Operational Excellence
Integrated Business Portfolio | Market Driver
High Performing Organization



CARING

We care for our people and all stakeholders by providing a safe, healthy and environmental friendly working environment



RESPECT

We treat our people, partners and society as a whole with dignity and safeguard their personal and professional needs



EXCELLENCE

We strive for excellence in everything that we do by constantly challenging the status quo and finding innovative and sustainable solutions, keeping customers and community in closeness



INTEGRITY

We function with honesty and fairness



TEAMWORK

Openness and Trust are key cornerstones behind our teamwork and collaboration for achieving common goals



Teamwork & Collaboration

SETTING STANDARDS FOR CUSTOMER SATISFACTION



CUSTOMER

SATISFACTION

Quality, Sustainability and Health-Safety-and-Environment (HSE) have been the essence of Qatar Steel's efforts to stay ahead of competition. Passion for brand and constant endeavor to differentiate it from competition has been our first priority at Qatar Steel.

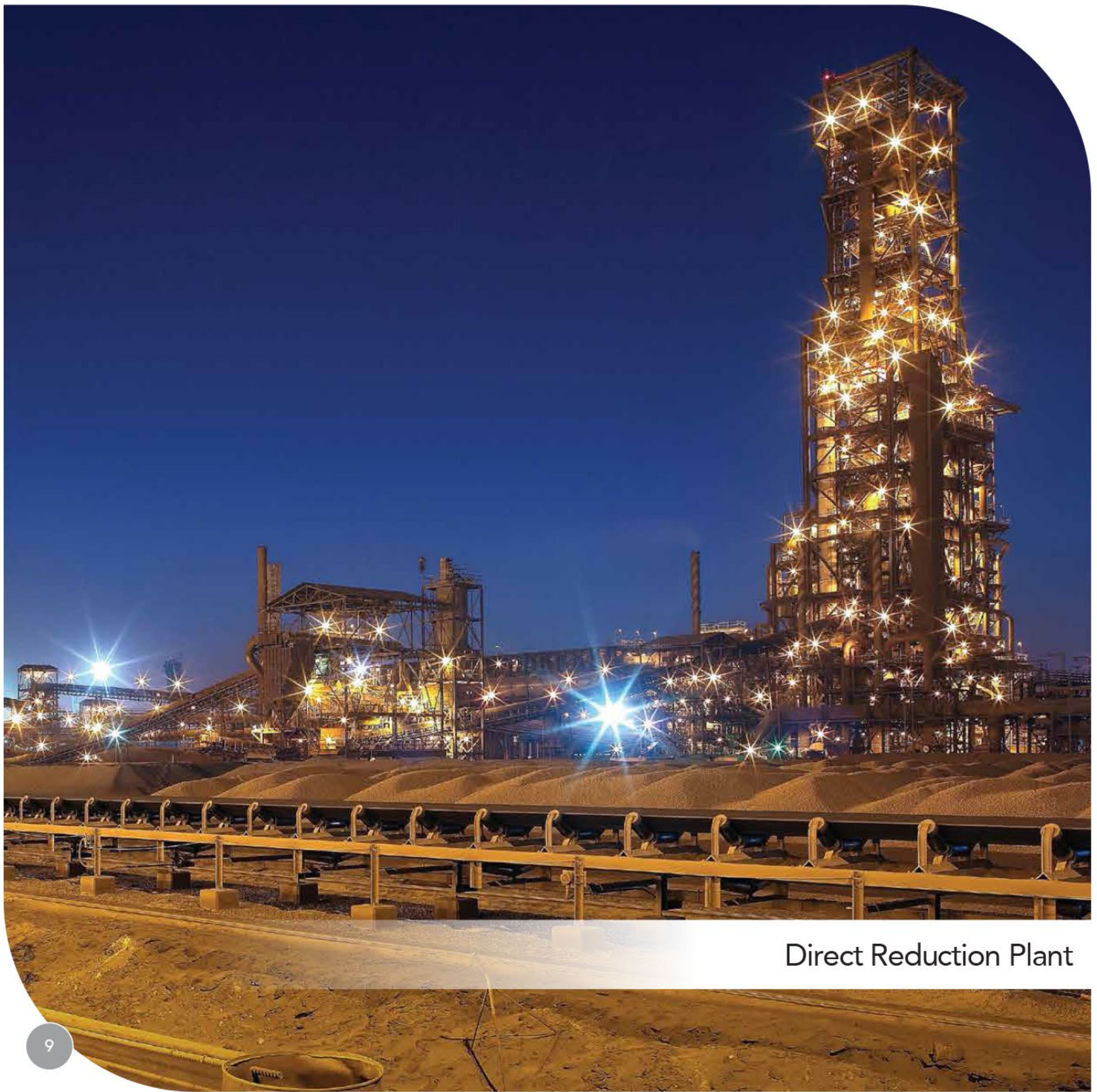
Brand building, Customer centric and data driven method of communicating with the customers to maximize the impact on consumers and other end users have been our first priority in our endeavor to differentiate it from competitors.

The company ensures consistent sales performance along with diligent market research, efficient marketing strategies and drawing strength from the mutual relationship with its customers,. While a robust technological network facilitates efficient handling of order management, the sales and marketing operation complement each other by meeting all customer expectations ensuring efficient, reliable and prompt delivery of products to customers.

Market Research provides marketing intelligence that facilitates decision making in determining market development and penetration strategy to ensure the competitiveness of the company at all times. Our constant endeavor to differentiate our brand and

inculcate core values has culminated in delivering a unique customer portal – an electronic gateway that facilitates two way communications between the company and its' customers to conduct everyday business. It facilitates customer to place request for desired products online and also track the order status until it is shipped including any agreed changes in the quantity and delivery schedules.

Customer Relationship Management (CRM) in Qatar Steel works on a holistic approach. It delivers solutions and facilitates in establishing an individualized relationships with customers with an aim of improving customer satisfaction in the products and value added services that we provide.



Direct Reduction Plant

DIRECT REDUCTION PLANT



Direct Reduction is an iron making process for the new era. It utilizes natural gas to reduce iron ore to produce Direct Reduced Iron (DRI). It is a process whereby iron ore pellets are converted at high temperature to a highly pure form of iron. Qatar Steel has adopted the gas based Direct Reduction Process technology in its integrated complex for iron-making. Its MIDREX process DR Module (DR -1) built and commissioned in August 1978 was the first of its kind in the region with a capacity of 400,000 MTPA (now producing 800,000 MTPA). Qatar Steel has commissioned its 2nd module (DR-2) in April 2007 with a capacity of 1.5 MTPA (now producing 1.6 MTPA), thus making the total capacity of Direct Reduction plant to 2.4 MTPA.

In its over 40 years of operations, production from DR-1 has shown continuous improvement and from 2004 onwards it exceeded 800,000 MTPA. This was accomplished by leveraging the inherent capabilities of the equipment, marginal investments in balancing bottlenecks, upgrading the equipment to meet greater efficiencies, along with various other procedural and operational improvements.

GREEN FIELD DRI / HBI COMBO MODULE

A green field DRI/HBI combo dual discharge of 1.5MTPA module was built and went in to commercial production in April 2007. This plant incorporates all the features of an up-to-date MIDREX Plant. In addition, it uses "SIMPAX" – an automated level-2 quality control module, which produced 1.6 MTPA for Y 2019.

Qatar Steel's Direct Reduction Plants produces both Cold Direct Reduced Iron (CDRI) and Hot Briquetted Iron (HBI). The DR-1 (produces CDRI alone) and DR-2 is a COMBO module that produces CDRI and HBI

HOT BRIQUETTED IRON (HBI)

Hot briquetting has been practiced on an industrial scale for 3 decades and is a preferred method of preparing DRI for storage and transportation internationally. To make HBI, hot DRI discharged from the MIDREX Shaft furnace at about 700°C is compressed into pillow shaped briquettes with a typical size of 106x48x32mm. HBI is 50 per cent denser than DRI pellets and lump and reduces the tendency for re-oxidation. This enables HBI to be stored and handled without special precautions as recognized by the International Maritime Organization (IMO).



Direct Reduced Iron - DRI

DIRECT REDUCTION PLANT

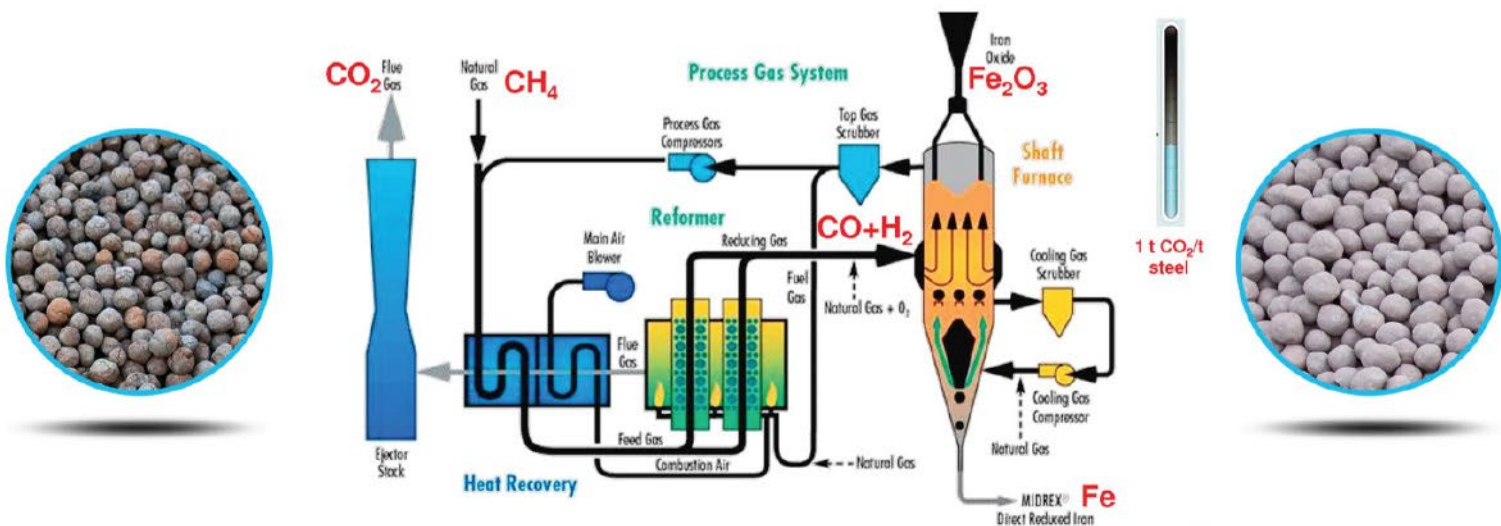
DR-1 MODULE

Designed capacity: 0.4 MTPA (Commissioned in year 1978)
 Best Achieved Production: 0.877 MTPA in 2006
 From start-up of DR1- Module, till the end of 2019, DR1- Module produced 27.02 Million tons of DRI.

DR-2 MODULE

First of its kind COMBO Plant commissioned in the world. Designed Capacity: 1.5 MTPA (Commissioned in year 2007)
 Best Achieved Production: 1.82 MTPA in 2015.
 Designed for COMBO Operation (Option: 1 = 100% CDRI, Option: 2 = 50:50% CDRI + HBI).

From start-up of DR2- Module, to the end of 2019, DR2- Module produced 19.51 Million tons of DRI.





Ladle Furnace

ELECTRIC ARC FURNACE



Qatar Steel was the first integrated steel plant in the gulf region that utilizes a high percentage Direct Reduced Iron (95%) as a high quality raw material produced from virgin iron ore for the production of steel from Electric Arc Furnaces. The original plant started in 1978 with an aim to utilize abundant natural gas resources available in Qatar for reduction of iron ore to produce DRI, which is used as a major feed stock for Electric Arc Furnaces.

Qatar Steel has three electric arc furnaces. EF 1 and EF 2 are conventional launder type while EF 3, EF 4 and EF5 are Eccentric Bottom Tapping (EBT) type. EF5 the latest one was commissioned in 2014 with 110T capacity.

EF 3, 80T EAF of EBT-type is powered by 70/84 MVA transformer comprising four strands curved mould billet casting machine that was commissioned in 1999 with an annual capacity of 550,000t of billets increasing total production to 1.14 million tons in 2004. A ladle furnace was commissioned in October 2006 to facilitate increase in production whilst reducing the operating cost.

Embarking on another expansion program in 2005, Qatar Steel incorporated EF4 with 80T EBT- type(78/90 MVA) along with a Ladle Furnace and a modern 4-strand curved mould, high speed billet casting machine equipped for special steel grades. This production line was commissioned in 2007 with a design capacity of 660,000 MTPA.

The new green field SMS facility (EF 5) comprising of a high powered 110T EAF / LF / 6-strand billet caster with a capacity of 1.1 MTPA was commissioned in Q1-2014.

FEW SALIENT FEATURES ARE:

- Introduction of Oxygen Injection Technology to make use of chemical energy for speeding up of melting and reduction of electric energy and at the same time increasing the production rate
- Making use of remotely controlled Gunning Robot for faster and more efficient refractory repair
- Using Ladle Furnace as a Secondary Metallurgy between the EAF and Continuous Caster (CC) to achieve longer sequence casting, improved steel quality, and higher casting yield
- Improved automation systems including level 2 PLC controls for better and more consistent process control



Continuous Caster

CONTINUOUS CASTER



Continuous casting is the process whereby molten steel is solidified into a 'semi-finished' billet, bloom, or slab for subsequent rolling in the finishing mills. Since its inception, a high degree of automation has enhanced operational excellence, increase in throughput by over 50% and reduction in cost.

The Continuous Casting Plant at Qatar Steel is equipped with two Casting Machines of four strands each with a total capacity of 1.4 MTPA. An additional Continuous Casting plant CC5 contributes an additional 1.05 MTPA increasing the total production to 2.45 MTPA. The Continuous Casting machines include the following specifications.

CC3 commissioned in January 2000 is also of 4 strands but of curved mould type.

THE SIZES OF BILLETS ARE:

- 150 x 150 mm square at a speed of 2.0 to 2.4 meter/minute.
- 130 x 130 mm square at a speed of 2.6 to 2.8 meter/minute.

CC4 commissioned in June 2007 is also of 4 strands with curved mould.

THE SIZES OF BILLETS ARE:

- 150 x 150 mm square at a speed of 2.6 meter/minute (max)
- 130 x 130 mm square at a speed of 3.5 meter/minute (max)

Billets from CC3 CC4 and CC5 are cut to 3.8m ~ 12m by gas cutting equipment. A charge number is punched on each billet by a marking machine and dispatched for further processing to rolling mill for the production of rebar at Qatar Steel and QS FZE, UAE. Billets are also sold to local and international customers.

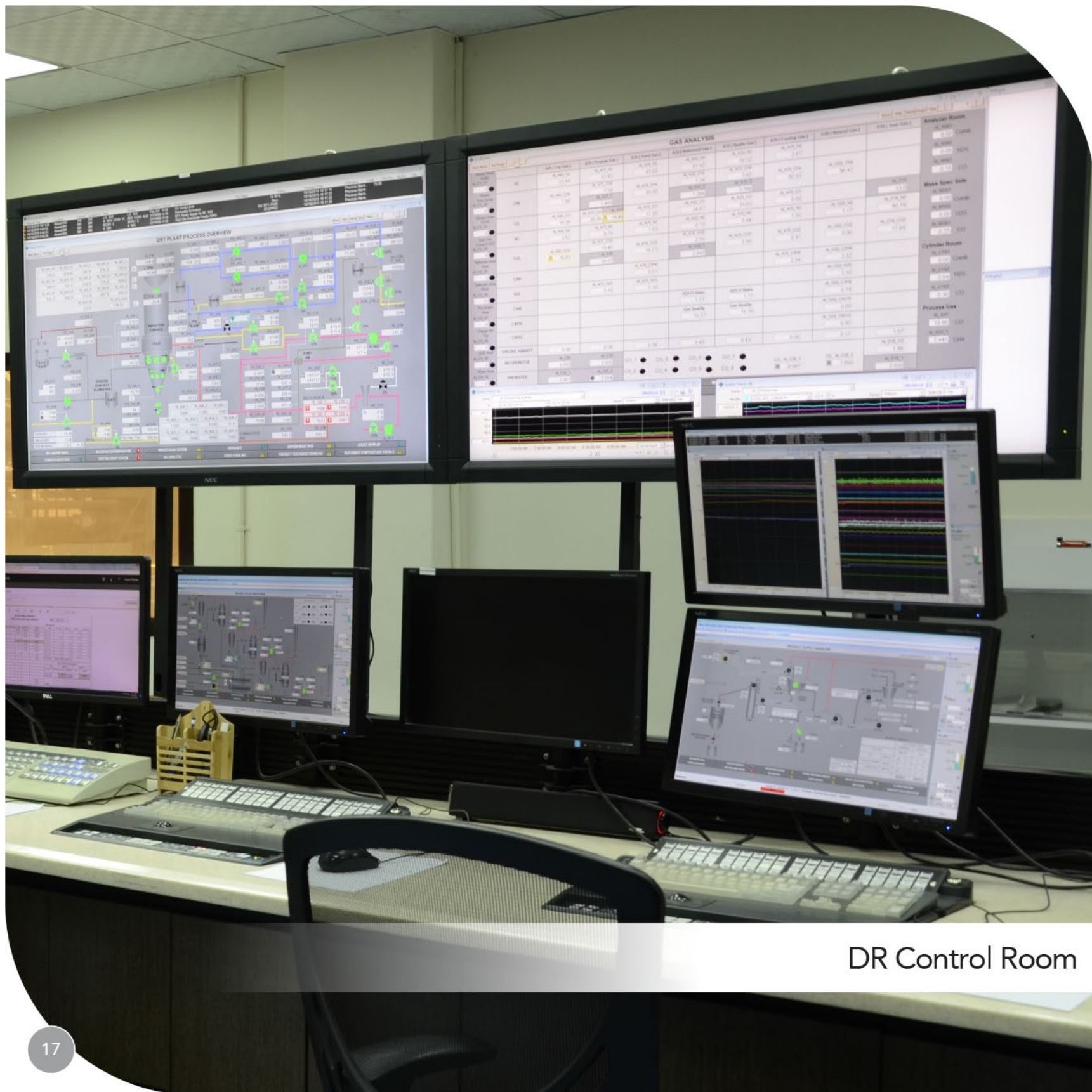
CC5 Commissioned in 2014 is of 6 Strand Billet Caster with Curved Mould and Continuous Straightening Of Strand..

THE SIZES OF BILLETS ARE:

- 150 x 150 mm square at a speed of 3.3 meter/minute.
- 130 x 130 mm square at a speed of 4.2 meter/minute.

SALIENT FEATURES OF CCP:

- Online Tundish Nozzle Changer system has been implemented in CC3, CC4 and CC5 to increase the Casting sequence length operation and casting Yield.
- Ladle Slide gate system of Vesuvius LV11 was introduced to ensure safety in operation and to reduce the running costs.
- Ladle shroud manipulator was introduced in CC3 , CC4 and CC5.
- Electro-magnetic stirrer was introduced in CC5 mould to enhance internal billet quality.



DR Control Room

CERTIFICATIONS

Qatar Steel manufactures world-class products in accordance with the highest international quality standards. All products are supported by effective and reliable delivery and after sales services. Our close proximity to neighboring countries enables us to cater to a sizeable portion of the regions' requirements, as well as Qatar's own domestic needs.





Rolling Mill



Advanced technology to meet the market requirements, faster processing speed and higher surface quality are some of the prominent features of the rolling mills at Qatar Steel.

In line with its commitment to the policy of the company related to quality, productivity and safe environment, rolling mills are designed to ensure efficient and safe operations. The total annual requirements of billets are received from the CC plants.

Billets are charged in the reheating furnaces and then rolled to produce different sizes of Rebar as per customer order.

Qatar Steel has two rolling mill plants namely Rolling Mill-1 & Rolling Mill-2 and the combined design capacity is 1,300,000 MTPA.

ROLLING MILL-1 (RM1)

RM 1 was successfully commissioned in 1978 to be the first modern mill constructed in the gulf area with a design capacity of 330,000 MTPA, with a size range from 8mm to 40mm, rebars. However after various modifications the capacity has been doubled. Furthermore, a high speed finishing block mill with complete finishing plant facilities was commissioned in 1996, to be a flexible mill enabling to increase the annual capacity to 600,000 MTPA. Recently two quenching boxes were added to the mill for original and High Speed Finishing Block Mills to achieve different steel standards to fulfill customer's requirements.

The Mill consists of a pusher type reheating furnace consisting of two production lines. The old mill and high speed finishing block mill (HSFBM). The original Mill has twenty convention stands arranged in horizontal sequence. In HSFBM, the line starts after stand#14 by Conversion Bridge each twist free

ROLLING MILL-2 (RM2)

In 2007, Qatar Steel successfully commissioned its ultra-modern rolling mill. The design capacity is 700,000 MTPA and its product ranges from 10mm to 40mm rebars in diameter.

The mill consists of 130 Tons/hour walking hearth Reheating Furnace, 18 conventional stands continuous rolling mill in horizontal vertical configuration. The mill adopts latest technologies, like MTC (minimum tension control), length optimization, slit rolling (Triple Bars & double bars). The mill also employs quenching process by Thermex Facility to achieve different steel standards to fulfill customer's requirements.

ROLLING MILL (RM3) AT QS FZE (UAE)

At Qatar Steel FZE, a rolling mill with the latest automation features has been installed with a capacity to produce 300,000MTPA rebars ranging from 8mm - 40mm in diameter and 12 meter straight lengths.



Reinforcement Bar Storage



WIRE ROD MILL – FZE (UAE) OPERATIONS:

The wire rod mill at Qatar Steel Company FZE (UAE) employs world class technology supported by renowned MORGAN, DANIELI, SIEMENS & MESTA with outstanding technical features including 40 T/hr reheating furnace with automatic temperature control.

Wire Rod Mill was established in August 2003 to meet the growing demand for high-quality steel wire-rod products in the region. The company operates two primary facilities at its 60,000 Sq. meter Jebel Ali Free Zone site: an upgraded Wire Rod Mill with installed capacity of 240,000MT per annum and a Rebar Mill with an annual capacity of 300,000MT.

Wire Rod Mill (WRM) with latest automation features, is capable of rolling low carbon, low alloy steel, high carbon, and cold head quality wire rods of sizes 5.0 mm to 16 mm along with re-bars in coils of sizes 8mm to 16 mm.

Qatar Steel Company FZE, has been successful in obtaining Certificate of Approval from UK CARES (UK CERTIFICATION AUTHORITY FOR REINFORCING STEELS) for complying with requirements of BS EN ISO 9001-2015 and the relevant CARES quality requirements for Rebars in coils in diameters 08 mm to 16 mm in grade BS 4449 Grade B500B. Dubai Central Laboratory (DCL) of Dubai Municipality has granted QATAR STEEL COMPANY FZE a license to use 'DLC Conformity Mark' on its product and is the first Company in the region eligible to use the DCL quality marking.

Company has also secured management system certifications - ISO 14001-2015; ISO 45001-2018, BES 6001- Certificate of approval for Responsible sourcing of construction products; UK CARES certificate of approval for Sustainable Construction Steel.

WIRE ROD MILL LAYOUT

Roughing Mill :	9 Stands + Shear
Intermediate Mill :	Repeater + 6 Stands + 3 Loopers
Pre-Finishing Mill :	2 Stands H-V(Morgan) + 2 Loopers + Shear
Finish Mill :	10 Stand - No Twist Mill (NTM) - Morgan - U.S.A
Water Boxes:	With Equalization Zones Morgan Water quenching system for rebar in coil
Special Feature:	Stelmor Conveyor - 6 Independent Zones, Reform Tub with ring distributor - Morgan U.S.A.
Coil Compactors :	Auto & Manual



Lime Calcination Plant

LIME CALCINATION PLANT



With the support of a diligent team, Lime Calcination Plant was commissioned in Qatar Steel on December 2011 for producing calcined lime and dololime for captive consumption. Both high calcium and dolomitic lime enjoys its most extensive use as a flux in refining of the steel in EAF. Lime is particularly effective in removing phosphorous, sulphur, silica and other impurities in the molten steel in the form of slag.

Lime Calcined Plant with total design capacity of 550 tons/day was established on Dec 26, 2011. In Q4 of 2015, it was upgraded to 700 tons/day. Overall set up comprises of 2 numbers of State of the art vertical twin D shaft, natural gas fired lime kilns and related material handling systems supplied by M/s Cimprogetti Srl, Italy, to fulfill the flux requirements of EAFs and LRFs. It is a process in which specially sourced raw Limestone & Dolostone are calcined at temperatures about 1050 Deg C to produce highly reactive and quality products, Calcined Lime & Dololime with optimum energy. Material Handling System includes facility of crushing, screening & bagging to prepare the final product sizes as per requirement.

Salient Features

- ▶ Utilizes principle of Regenerative Heat Transfer for heat recovery from the waste gas.
- ▶ Consistent internal process improvements which helped to produce Calcined Lime & Dololime in switchover mode operation.
- ▶ Introduced Pulverizing facility for recycling of waste undersize limestone which enabled its utilization for oxide pallets coating in existing Direct Reducing Plants.



Universal Testing Machine



Aligned with QNV 2030 and corporate strategic objectives, Qatar Steel has established facilities to facilitate new product development, process improvement, cost reduction and sustainability & recycling.

Production of 'sustainable steel' is expected to reduce CO₂ emissions and recycle wastes thereby protecting the environment and enhancing the core brand value of the company.

Qatar Steel's quality assurance system has been established to impact its operations across the board, from order placements to shipment of products.

All products including rebar and wire-rods are manufactured from selected raw materials with definite chemical compositions and ensured quality. Inspections are conducted throughout the manufacturing process to ensure compliance to customers' requirements.

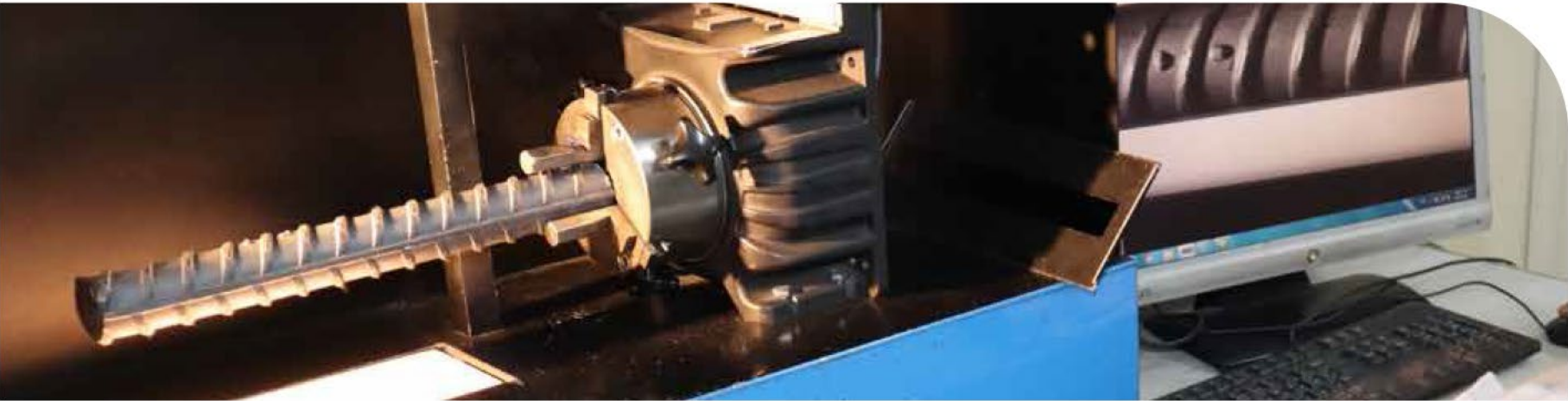
Qatar Steel has also obtained ISO/IEC 17025:2005 certificate issued by the Turkish Accreditation Agency (TURKAK) to accredit its Quality Control Laboratories that are equipped with modern computerized testing and analysis equipment, such as, Optical Emission Spectrometers, X-Ray Fluorescence Spectrometers, Universal Testing Machines and LECO Analyzers.

We assure uniform quality which satisfies all local and international requirements. Qatar Steel's Quality Management System meets ISO 9001 standards.



Quality Assurance Lab

QUALITY ASSURANCE



THIRD PARTY CERTIFICATION

Consistent with Qatar Steel's commitment of ensuring the quality of its products, reinforcement bars manufactured at facilities in Mesaieed and Dubai have received many prestigious certifications, including ISO 9001, Product and Sustainability certified by UKCARES, KUCAS Kuwait, CEDD Hong Kong, SIRIM QST Malaysia and ACRS Australia/New Zealand", and DCL Certification for Qatar Steel FZE.

The company satisfactorily operates a Quality System which complies with the requirements of BS EN ISO 9001: 2015 and relevant CARES Quality and Operations Assessment Schedules. Qatar Steel is certified by UK CARES for product certifications of rebar conforming to different international standards such as BS 4449 2005 Grade B500B, Nuclear Grade Applications certified, ISO 6935-2:2015 Grade B500B-R, ASTM A615 Grade 60, SS 560:2016 Grade B500B, B600B and CS2: 2012 Grade 500B

DCL MARKING:

Qatar Steel Company FZE's deformed steel bars have been accredited by Dubai Central Laboratory Department (DCLD) of Dubai Municipality for conforming to standard specifications of BS 4449:2005 Grade B500B and Grade ISO 6935-2-B500B-R.

NEW PRODUCT DEVELOPMENT

Under the new product development drive, Qatar Steel strives to continuously develop new grades of rebar, billet and wire rod as per the requirement of local and international customers to cater the demand of the market.

Quality Assurance is on board with Qatar Foundation to work for the sustainable development of the state of Qatar in line with Qatar National Research strategy. The department is working on research projects with Qatar University to develop a relations between industry and local institutions.

Under its Recycling and Sustainability initiative, Qatar Steel aims to reduce waste through reuse and recycling. In line with this vision, in 2015, Qatar Steel successfully commissioned a by-Products Cold Briquetting Plant, which was a pioneering step for the company. Till date more than 300,000 Tons of by-products briquettes were produced and recycled successfully in its steel making facility and overall there has been a positive development of recycling material internally over the past years.

As a part of synergy initiative between neighbouring companies waste carbon material from a nearby aluminium smelter is also recycled as a raw material in steel making. In addition, Qatar Steel is continuously dispatching its by product EAF dust to a local cement company for reuse in their operations to produce cement clinker.



Qatar Steel aspires to be the leader in the region's steel industry and aimed at reaching the target of zero harm to people and environment

HEALTH, SAFETY AND ENVIRONMENT



Qatar Steel aspires to be the leader in the region's steel industry. Strategic HSE initiatives undertaken by Qatar Steel are aimed at reaching our target of zero harm to people and environment, which illustrates the company's proactive role towards safe guarding their employees, protecting environment and making the steel manufacturing process more eco-friendly.

Unlike scrap based steel plants with high emissions level of heavy metal & toxic chemicals, Qatar Steel has an exclusive advantage compared to other plants in the region environmentally. Qatar Steel's production is based on DRI which uses the cleanest raw material possible.

COMPLIANCE:

External & internal audits are conducted yearly to ensure that our operations are in accordance with the standards regulated by the Ministry of Environment (MOE) and to meet the internally set requirements.

ISO 14001:2015 & ISO 45001:2018:

Qatar Steel's reputation in the field of Health, Safety and Environment is integral to its image and corporate culture. Qatar Steel has adopted the globally accepted environmental Standard ISO 14001:2015. The alignment of environmental objectives, targets and programs with the corporate HSE objective were considered significant achievements during this transition. We succeeded in defining our communication with interested parties, establishing an effective internal & external audit system and reviewing its performance with the top management. Our success has inspired us to proceed with the development of an integrated management system. Qatar Steel has been also awarded with Sustainable Reinforcing Steel certification by CARES UK during the year 2011.

Qatar Steel had gone ahead to implement ISO 45001:2018 to support and promote good health and safety practices in balance with socio economic needs. A detailed gap analysis was conducted to know the requirements of the new system followed by Audits and closing of Non – conformities Accordingly ISO 45001 : 2018 certificate was awarded to Qatar Steel at the end of the year 2018. Qatar is the first company (industry) in Qatar to have been certified against the new ISO standard for Health and Safety.

ENVIRONMENT MANAGEMENT PROGRAM:

In addition to spearheading environment friendly expansion plans, HSE Department coordinates various projects with internal departments according to an Environment Management Program.

Qatar Steel continues to study various options to re-using / re-cycling its production waste. Pelletizing DR product dust and EF dust, recycling of Refractory bricks and extracting iron from slag are some of the programs under progress. Various dust vacuum systems are explored to reduce dust levels further at Qatar Steel plant. The scope of waste management covers all departments, activities, processes and types of waste. The plan applies to all hazardous wastes, non-hazardous wastes, recyclable materials as well as water & energy conservation.



Landscape with Office and Plants

HEALTH, SAFETY AND ENVIRONMENT



HSE TRAINING:

Safety education & training is a continuous process. Basic HSE training is imparted to all the new employees who join Qatar Steel as well as to all contractor employees in various languages that enables them to enter QS premises. Qatar Steel has recently appointed a HSE trainer to further enhance competence levels of all staff.

HEAT STRESS MANAGEMENT:

Campaigns on the hazards of heat stress, hourly monitoring of the heat index, strategic placements of colour flags, and work stoppages during mid-day are all new initiatives to ensure we manage heat related risks at Qatar Steel, especially during summer.

SAFETY PERFORMANCE:

The Safety Performance of Qatar Steel has shown continuous improvements and is known to be one of the best in the Steel Industry. Being a Sustainable Producer, Qatar Steel has a Strategic objective for the near future with a focus on "Zero Harm". A number of Safety initiatives involving employees & contractors are being implemented to reach our HSE objectives.

FIRE PREVENTION

An emergency response contingency plan in Qatar Steel ensures that the health and safety of the employees and environment are safeguarded. Various emergency preparedness drills like, chemical drills, oil spill, fire drill, gas leakage, molten steel leakage drill, building evacuation drills etc. are undertaken from time to time.

HEALTH SERVICES

Awareness campaigns are launched regularly to remind staff of the importance to stay healthy, and medical practitioners and nurses oversee all operations relating to medical examinations, health care and treatment of injury and illness. Our ambulance service is also available 24/7.

Contribution to Qatar's Environment

Our continuous endeavor to protect the natural environment by reducing its carbon footprint and fight against climate change is at the core of our strategy. Maintaining sustainable operations and continually making improvements in our products and processes help us to minimize our environmental footprint.

Minimizing Dust and Gaseous Emission

Matching with the objective to minimize dust and gaseous emission, AAQMS (Ambient Air Quality Monitoring Station) and CEMS (Continuous Emission Monitoring System) has been installed inside the plant to monitor the air quality and the emissions from operations.

Additionally, regular replacement of bag filters which are installed at the dust collection system, ensures emission from the stacks is filtered before it is emitted to the air. Qatar Steel uses low NOx Combustion technology in the plant resulting in significant reduction in the emitted amount of NOx.

As a responsible corporate citizen of Qatar and the global community, Qatar Steel is always committed to reducing its carbon footprint and implemented industry best practices in order to fight climate change.

Water Conservation:

Decrease in freshwater consumption and wastewater discharge, and increase in the recycling rate of processed water are few salient features of water conservation strategies we follow.

Our strategy aims to reduce water consumption to the best of its



Sustainable Progress

HEALTH, SAFETY AND ENVIRONMENT



ability in the form of usage of freshwater, seawater, and recycled water in its operations. With the implementation of Near Zero Liquid Discharge (NZLD) project, the aim is to reduce freshwater consumption by as much as 40%. The goal of the NZLD project is to reuse wastewater in the production process in order to reduce freshwater consumption.

Qatar Steel continues to increase the wastewater use for gardening. The company is also making progress on its objective to reduce wastewater discharge to the sea.

Recycling of Co-Products to foster Circular Economy:

A comprehensive procedure has been developed for identification, segregation, collection and disposal of waste generated across all operations. A summary of all waste shipments for non-hazardous wastes is reported to MME each quarter. Hazardous waste is stored at an approved hazardous waste storage facility and disposed locally by the third parties within the coverage of disposal contract.

Qatar Steel is consistently exploring options to reuse / recycle the by-products/ co-products within its operation. Cold briquetting of DR fines & dust, pelletizing of EF dust, recycling of refractory bricks, extracting iron from slag, utilization of carbon material from neighboring company in steel melting process, to name a few, are our salient achievements. Recycling of locally procured steel scrap in steel making process is one of the major contribution in circular economy. All these initiatives contributed towards reducing a major solid waste management problem within the State of Qatar.

We have also taken initiatives in supplying company wastes such as used oil, oily sludge, and paper to the recyclers to avoid unwanted landfill and fostering a circular economy.

Biodiversity Protection

As recommended in the National Biodiversity Strategy and Action Plan 2015-2025, Qatar Steel is committed to preserving Qatar's natural environment. Consultants and studies have ensured that

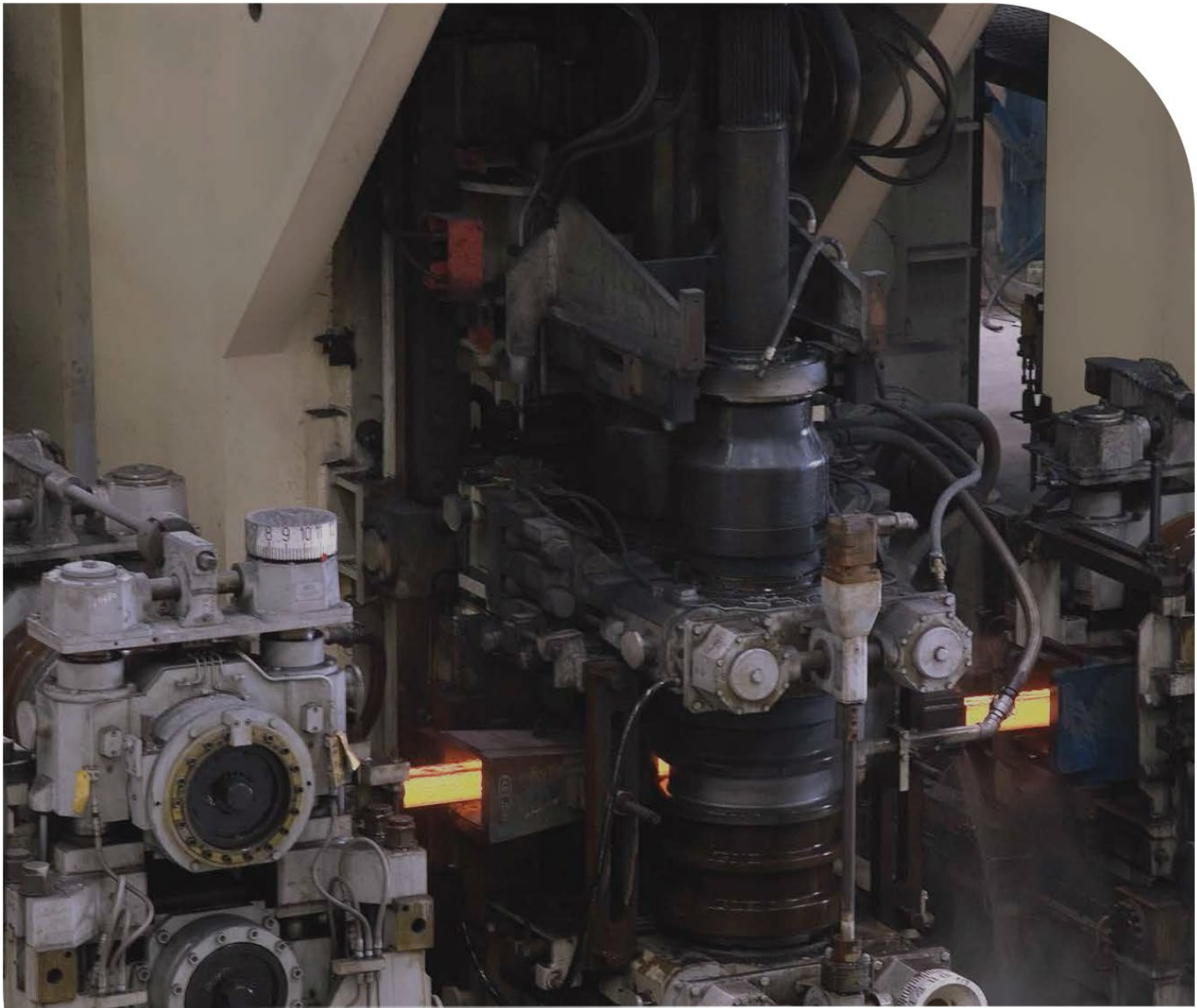
Qatar Steel's operations do not have a harmful impact on the biodiversity in its region. To enhance site biodiversity, trees are planted inside the plant premises for which recycled water is being used for irrigation.

Efficient Energy Usage

Steel production is an energy intensive process. To minimize the environmental impacts as well as increase the company's operational efficiency, Qatar Steel uses natural gas as an energy source for producing steel, which is cleaner and more environmentally friendly.

Some of the salient features are:

- The state-of-the-art production technology of Qatar Steel produces premium quality products which are recyclable nevertheless minimizing carbon emissions.
- Qatar Steel is the biggest recycler of waste steel scrap in the country.
- GHG emissions intensity has stayed relatively flat at 1.3 CO₂equivalent/metric ton of molten steel.
- Leader in recycling and reusing among companies in the Qatar's energy and industry sector.
- Recycling of by-products to produce briquettes by cold briquetting technology and also consuming carbon material from neighboring companies in steel making as a raw material in line with QNV 2030 Environmental Development Pillar and to reduce the carbon footprint.
- Supplying locally developed steel to the country and to the region which reduces the carbon footprint.
- The iron ore used for production is sourced from globally reputable companies, all of which are certified by ISO 14001 Environmental Management System and ISO 9001 Quality Management System.



Rebar Rolling Mill

PRODUCT SPECIFICATIONS

DRI SPECIFICATION:



CHEMICAL COMPOSITION

Parameter	Guaranteed	Expected
Total Iron (T.Fe)	91.0% Min	92.0%
Metallic Iron (M.Fe)	85.0% Min	86.0%
Metallization	93.0% Min	94.0%
Carbon (C)	2.20% Min	2.40%
Phosphorous (P)	0.06% Max	0.04%
Sulphur (S)	0.01% Max	0.002%
Total Gangue(CaO+Al ₂ O ₃ +MgO+SiO ₂)	4.8% Max	4.20%

Physical Analysis

Bulk Density (tons/m ³)	1.9 ~ 1.6
Size Under 5 mm at Loading Port	5.0 % Max



Hot Briquetted Iron - HBI

PRODUCT SPECIFICATIONS

HBI SPECIFICATION

CHEMICAL COMPOSITION

Parameter	Guaranteed	Expected
Total Iron (T.Fe)	91.00% Min	91.5%
Metallic Iron (M.Fe)	85.00% Min	85.5%
Metallization	93.40% Min	93.90%
Carbon (C)	1.30 % Max	1.10%
Phosphorous (P)	0.050% Max	0.040%
Sulphur (S)	0.0050% Max	0.001%
Total Gangue (CaO+Al ₂ O ₃ +MgO+SiO ₂)	4.80% Max	4.20%

Physical Analysis

Bulk Density (tons/m ³)	2.4 ~ 2.7
Apparent Density (tons/m ³)	4.9 Min
Average Size (mm)	106 X 48 X 32
Size Under ¼ Inch at Loading Port (mm)	5.0 % Max

Note: The DRI/HBI is produced with respect to the above specifications for Qatar Steel melt shop, whereas for Export it is produced as per the contractual specifications i.e., as required by the customer.



Billet Storage

PRODUCT SPECIFICATIONS

Although some of the billets produced at Qatar Steel are directly sold to customers, most are processed into bars at one of our rolling mills. We supply high quality steel billets of various cross- sections and sizes, which enables us to meet the customer requirements and industry specifications.

BILLET SPECIFICATION

CHEMICAL COMPOSITION: (As below or as per customer requirement)

Chemistry	%C	%Si	%Mn	%P	%S	N (ppm)
	0.15~0.25	0.12~0.20	0.60~0.80	0.035 max	0.035 max	120 max

PHYSICAL PARAMETERS:

Sr. No.	Item	Acceptance Criteria
1.	LENGTH	3.8 ~ 12 meter (± 100 mm) for 150 section 6.0 ~ 12 meter (± 100 mm) for 130 section
2.	SECTION	150 X 150 mm ² or 130 X 130 mm ²
3.	FACE LENGTH	± 3 mm
4. *	<u>RHOMBODITY</u>	5 % Max
5.	CORNER RADIUS	8 mm
6.	STRAIGHTNESS	Camber 5mm/meter
7.	BENDING	Not more than 5mm in 1 meter Not more than 30mm in 6 meter Not more than 60 mm in 12 meter
8.	ANGULAR TWIST	Not more than 1 degree per meter and not more than 6 degree over 12 meter length.
9.	CUTTING	Both ends will be Gas Cut
10.	IDENTIFICATION	At the end of each billet cast number will be stamped or written by Paint.
11.	SURFACE	The billets will be free from surface imperfection which impair the product quality such as longitudinal cracks, transverse cracks, deep ripple mark, scab & thick scale, slag patches, surface blow holes & internal quality should be free from harmful defects, like surface pinholes, blow hole, pipes, voids and internal crack.

As Qatar Steel have open casting process, chances of minor surface pinholes are there and it will not impair the product quality.

* $\% \text{ Rhombodity} = (D_{\text{max}} - D_{\text{min}}) / D_{\text{max}} \times 100$



REINFORCEMENT STEEL BARS (REBAR)

Advanced technology to meet the market requirements and superior surface quality are some of the prominent features of Qatar Steel's rebar.

Rebar Specification

Characteristics	BS 4449:2005 Gr B500B	BS 4449:2005 Gr B500C	SS 560 Gr B500B	SS 560 Gr B600B	CS2: 2012 Gr 500B	ASTM A615 Gr 60	ASTM A615 Gr 75	ASTM A615 Gr 80	ASTM A706 Gr 60	AS/NZS 4671:2001 Gr 500N	QS600 (YS> 600MPa)	ISO 6935-2 B500B-R
Origin	British		Singapore	Hong kong		USA			Australia / Newzealand		Internal	ISO

Chemical Composition

Carbon (C) %	0.22 Max	0.22 Max	0.22 Max	0.22 Max	0.22 Max	—	—	—	0.30 Max	0.22 Max	0.32 Max	0.32 Max
Phosphorous(P) %	0.05 Max	0.05 Max	0.05 Max	0.05 Max	0.05 Max	0.05 Max	0.05 Max	0.05 Max	0.035 Max	0.05 Max	0.05 Max	0.060 Max
Sulphur (S) %	0.05 Max	0.05 Max	0.05 Max	0.05 Max	0.05 Max	0.05 Max	0.05 Max	0.05 Max	0.045 Max	0.05 Max	0.05 Max	0.060 Max
Nitrogen (N) ppm	120 Max	120 Max	120 Max	120 Max	120 Max	120 Max	120 Max	120 Max	—	—	120 Max	120 Max
CE (%)	0.48 Max	0.48 Max	0.48 Max	0.48 Max	0.48 Max	—	—	—	—	—	—	—

Mechanical & Physical Properties

Yield Strength MPa (min)	500	500	500	600	500	420	520	550	420	500	600	500
Tensile Strength MPa (min)	650	650	650	780	650	620	690	725	540 420 540	650	740	—
TS/YS (min)	1.08	>=1.15, < 1.35	1.08	1.08	1.08	—	—	—	1.25	1.08	—	1.08

PRODUCT SPECIFICATIONS

Mechanical & Physical Properties												
Elongation (%) (min)	—	—	—	—	—	9	7	7	14	—	7	14
Agt (%) (min)	5	7.5	5	5	5	—	—	—	—	5	—	5
Bend Angle	90°	90°	160°	160°	90°	180°	180°	180°	180°	d ≤ 16 : 90° d ≥ 20 : 180°	180°	— 180°
Re-bend	From 90°	From 90°	From 90°	From 90°	From 90°	—	—	—	—	d ≤ 16 : From 90° Back by at least 20° d ≥ 20 : not applicable	—	From 90°
Angle	Back by at least 20°	Back by at least 20°	Back by at least 20°	Back by at least 20°	Back by at least 20°	—	—	—	—	—	—	Back by at least 20°
Weldability												
	Weldable	Weldable	Weldable	Weldable	Weldable	Non-Weldable	Non-Weldable	Non-Weldable	Non-Weldable	Weldable	Non-Weldable	Non-Weldable
Application												
	RCC	RCC in seismic zone	RCC	High Raise Towers / Highly loaded RCC structure	RCC	RCC	RCC	High Raise Towers	RCC in seismic zone	RCC	High Raise Towers / Highly loaded RCC structure	RCC

Note: Bend and Rebend tests are performed as specified in respective standards using proper mandrel diameters

TECHNICAL FEATURES

- SS560 GrB500B / CS2:2012 Gr 500B/ BS4449:2005 GrB500B rebar are produced with low carbon equivalent & Weldable, whereas ASTM A615 Gr60, Gr75, Gr80, ASTM A706 Gr 60, QS600, and ISO 6935-2 B500B-R are Non-Weldable.
 - BS4449:2005 GrB500B rebar have High Strength Compared to ASTM A615 Gr60 which reduce steel consumption & congestion in structure, in turn reduces overall cost of project.
 - BS4449:2005 GrB500B rebar have High Yield Strength i.e., minimum 500 MPa compared to ASTM A615 Gr60, without compromising on ductility.
 - BS4449:2005 GrB500B rebar have better bend performance, due to severe bend & re-bend angle. Rebar conforming to BS 4449:2005 specification are subjected to fatigue testing and survive minimum 5 million stress cycles.
- QS 600 with yield strength > 600 MPa. Over the years, rebar with yield strength 420 MPa, 500 MPa etc., conforming to BS 4449 / ASTM A615 specification are available in Qatar/GCC region. Rebar with higher strength i.e., YS > 600 MPa will reduce the steel consumption by around 20% in construction, which in term lowers the overall cost of structure. Application of QS 600 grade can also lead to reduction in column size of heavily loaded structure and there is relief from rebar congestion.



Ladle Furnace

PRODUCT SPECIFICATIONS

Designation	Nominal Dia. (d) (mm)	Nominal Cross Section Area (mm ²)	Unit Mass (kg/m)	Maximum of Average Knot Space (mm)	Height of Knot		Ltgd/Ri Width (mm)	Nominal Mass kg/piece		
					Min (mm)	Max (mm)		6m	9m	12m
D8	08	50.27	0.395	5.6	0.3	0.6	3.14	2.37	3.56	4.74
D10	10	78.54	0.617	7.0	0.4	0.8	3.9	3.7	5.55	7.40
D12	12	113.1	0.888	8.4	0.5	1.0	4.7	5.33	7.99	10.66
D14	14	153.9	1.21	9.8	0.6	1.2	5.5	7.26	10.89	14.52
D16	16	201.1	1.58	11.2	0.7	1.4	6.3	9.48	14.22	18.96
D18	18	254.5	2.00	12.6	0.8	1.6	7.1	12.00	18.00	24.00
D20	20	314.2	2.47	14.0	1.0	2.0	7.9	14.82	22.23	29.64
D22	22	380.1	2.98	15.4	1.1	2.2	8.6	17.88	26.82	35.76
D25	25	490.9	3.85	17.5	1.3	2.6	9.8	23.10	34.65	46.20
D28	28	615.8	4.83	19.6	1.4	2.8	11.0	28.98	43.47	57.96
D30	30	706.9	5.55	21.0	1.5	3.0	11.8	33.30	49.95	66.60
D32	32	804.2	6.31	22.4	1.6	3.2	12.6	37.86	56.79	75.72
D36	36	1017.9	7.990	25.2	1.8	3.6	14.1	47.94	71.99	95.88
D40	40	1256.6	9.864	28.0	2.0	4.0	15.7	59.18	88.78	118.37

Note: Other specifications / sizes as per any international standard or meeting any other special requirement can be supplied as per customer's requirement.

Requirement for rib geometry
 Height of transverse ribs 0.03d to 0.15d
 Rib spacing, c 0.4d to 1.2d
 Rib inclination, β 35° to 75°.

The projection of transverse ribs shall extend over at least 75% of circumference of the product which shall be calculated from the nominal diameters.

Longitudinal rib: Where longitudinal rib are present, there height shall not exceed 0.10d, where d is the nominal diameter of the product.

PRODUCT SPECIFICATIONS



WIRE-ROD AND RE-BAR IN COILS

PRODUCT SIZE

Products	Size – MM													
Wire Rod	5.0	5.5	6.0	6.5	7.0	8.0	9.0	10	11	12	13		16	--
Rebar In Coil	--	--	--	--	--	8.0	--	10	--	12	--	14	16	--

Wire Rod Grades: SAE1006/ SAE1008/ SAE1012/ SAE1018/ SAE1042/ SAE 1045/ SAE1060/ SAE1065/SAE1070/ SAE1080

Rebar In Coil: ASTM A615 GR60 / BS4449:2005 GRB500B / ISO 6935-2 B500B-R

Coil Weight & Dimension		Metallurgical Standard
Inner Diameter (MM)	: 850 – 950	Decarburization : 1% max of wire rod diameter
Outer Diameter (MM)	: 1100-1200	Surface Defect : 1% max of wire rod diameter
Coil Weight (Kg)	: 1050 -1200	Cold Up-settability: 67% (Billet route)

PRODUCT SPECIFICATIONS

CHEMICAL & MECHANICAL PROPERTIES

Grade	%C	%Mn	%Si	%P	%S	Ys - N/mm ²	Ts-N/mm ²	%El	%Ag
SAE 1006	0.08 Max.	0.25 - 0.40	0.15 Max	0.035 Max	0.025 Max	240 - 290	350 - 415	35 Min	-
CAQ Cable Armor Quality	0.04 - 0.06	0.30 - 0.40	0.030 Max	0.035 Max	0.025 Max	240 - 280	340 - 380	35 Min	Cable Armoring Wires
SAE 1008	0.06 - 0.10	0.30 - 0.50	0.15 Max	0.035 Max	0.025 Max	250 - 300	360 - 425	30 Min	-
SAE 1012	0.10 - 0.15	0.30 - 0.60	0.15 Max.	0.035 Max	0.025 Max	265 - 325	380 - 475	30 Min	-
SAE 1018	0.15 - 0.20	0.60 - 0.90	0.10-0.35	0.035 Max	0.025 Max	300 - 350	450 - 525	22 Min	-
BS4449 :2005 GRB500B	0.22Max.	0.60 - 1.00	0.35 Max	0.035 Max	0.025 Max	500 - 650.	Ys x 1.08 Min.	-	5% Min

DIMENSIONAL TOLERANCES OF WIRE RODS:

Standard	Wire Rod Size (mm)	Tolerance +/- (mm)	Out of Round (mm)	Remarks
QS FZE	5.0 - 16.0	0.20	0.30MM	QS FZE Tolerance is Half of - ASTM Tolerance
ASTM A510	5.0 - 16.0	0.40	0.60MM	General Requirements

COIL IDENTIFICATION

Each coil has tag with unique coil number and Heat number.

PRODUCT QUALITY

Steel production is the heart of Qatar Steel's operations, and product quality is therefore of the highest importance. 'Quality' at Qatar Steel includes several important elements: full understanding of and conforming to the requirements of our customers; delivery of defect-free products; and timely service. We achieve quality via two broad strategies:

- Use of only high-quality raw materials as input for our operations.
- Implementation of rigorous quality-control systems.

All products, including reinforcing bars, are manufactured from selected raw materials with defined chemical compositions pre-tested for quality at different stages of the production cycle. We have long-term contracts with our suppliers for key raw materials that allow uninterrupted operations in our manufacturing facilities. Inspections of sample are conducted throughout the manufacturing process, with 'sample testing' of output performed to ensure compliance with quality standards and customer requirements. Qatar Steel also uses sophisticated quality-control laboratories to ensure delivery of high-quality products. Our labs are ISO17025 accredited, and are equipped with modern computerised testing and analytical instruments, including chemical testing analysers and mechanical testing machines.

MAINTAINING PRODUCT QUALITY THROUGH CERTIFICATIONS



Use of stringent quality-control systems qualifies Qatar Steel for several international management systems and certifications, listed below.

Management System / Certification	Description
BS EN ISO 9001:2015 Quality Management System	One of the world's most respected quality frameworks, implemented at Qatar Steel in order to effectively manage and meet customers' requirements and achieve improved customer satisfaction, staff motivation, and continual improvements. Qatar Steel has maintained its quality certification since 1995.
UK CARES Quality and Operations Assessment Schedule	<p>The CARES Quality and Operations Assessment Schedule is centered around the essential elements of the quality management system, and additionally incorporates requirements for process control and product testing agreed upon by all relevant sectors of industry. The Schedule consists of the application of three main elements of CARES Product Certification:</p> <ul style="list-style-type: none">• The manufacturers' management system as defined by BS EN ISO 9001.• Full requirements of the relevant product standards.• Control of the manufacturing process to produce a consistent level of compliance. <p>Qatar Steel has maintained compliance with the CARES Quality and Operations Assessment Schedule since 2006.</p>

PRODUCT SPECIFICATIONS

ISO/IEC 17025:2017 Laboratory Accreditation	This certification was attained in 2014. It specifies the general requirements for competence in carrying out tests and/or calibrations, including sampling. The accreditation covers testing and calibration performed using standard methods, non-standard methods, and laboratory-developed methods, and is designed for development of laboratory management systems for quality, administrative, and technical operations.
UK CARES Product Certification	CARES Product Certification was developed to meet the needs of customers using steel products for the reinforcement of concrete. CARES has acquired extensive experience in designing and operating certification schemes which cater to the reinforced concrete industry.
Dubai Central Laboratory	The Dubai Central Laboratory was established in 1997, guided by a simple objective: 'Enhancement of Quality of Life in Dubai'. Qatar Steel ensures that its products are aligned with the standards (BS 4449:2005B500B & ISO 6935-2 B500B-R) and can be exported to the Dubai market.
KUCAS certificate	Qatar Steel holds product certification from Kuwaiti Public Authority for Industry which enables the product to be exported in Kuwait market and ensures the quality of product meets the standard requirements.
UK CARES BES 6001 Responsible Sourcing Certification	Qatar Steel holds BRE BES 6001 Issue 3.1 responsible sourcing certification from UK CARES. The first approval of this certificate was received in July 2016. The BRE standard BES 6001 has been published for construction product manufacturers to ensure and then prove that their products have been made with materials that have been responsibly sourced. The standard includes a framework for various aspects such as the organizational governance, supply chain management and environmental and social aspects that must be addressed in order to ensure the responsible sourcing of construction products. Qatar Steel has achieved a performance rating of "VERY GOOD" under this certification scheme from UK CARES.
UK CARES SCS Scheme Certification:	Qatar Steel holds UK CARES Sustainable Constructional Steel (SCS) Scheme Certification from 2011. The SCS scheme is based on foundations of technical specifications, traceability, product quality and sustainability principle of inclusivity, integrity, stewardship and transparency.

SPECIFICATION OF CALCINED LIME

Chemical Composition		Physical Properties	
Calcium Oxide (CaO)	92.0% Min	Size Range 1	80 ~ 25 mm
Magnesium Oxide (MgO)	2.0% Max	Size above 80 mm at Loading Port	3.0% Max
Silica (SiO ₂)	1.0% Max	Size below 25 mm at Loading Port	10.0% Max
Alumina (Al ₂ O ₃)	0.20% Max	Size Range 2	30 ~ 3 mm
Sulfur (S)	0.06% Max	Size above 30 mm at Loading Port	3.0% Max
LOI	4.5% Max	Size below 3 mm at Loading Port	10.0% Max

Remarks: Qatar Steel ensures that product will be free from clay, dirt & other foreign materials.

TYPE OF PACKING

The material will be packed in jumbo bags of 1.5 Ton capacity.

PRODUCT SPECIFICATIONS

SPECIFICATION OF DOLOLIME:

Chemical Composition

Elements	Guaranteed
CaO	54.0% Min
MgO	32.0% Min
SiO ₂	2.0% Max
Al ₂ O ₃	0.5% Max
Phosphorous (P)	0.025% Max
Sulphur (S)	0.025% Max
Fe ₂ O ₃	0.5% Max
LOI	5.0% Max

Physical specification

Size Range 1	5 ~ 80 mm	Size Range 2	5 ~ 60 mm
Size Under 5 mm at Loading Port	10.0% Max	Size Under 5mm at Loading Port	10.0% Max
Size Above 80mm at Loading Port	3.0% Max	Size Above 60mm at Loading Port	3.0% Max

SPECIFICATION OF PULVERIZED LIMESTONE

Chemical Composition

Calcium Oxide (CaO)	50.0% Min
Magnesium Oxide (MgO)	2.5.0% Min
Silica (SiO ₂)	1.0% Max
Alumina (Al ₂ O ₃)	0.5% Max
Phosphorus (P)	0.025% Max
Sulfur (S)	0.05% Max
Ferric Oxide (Fe ₂ O ₃)	2.0% Max
Moisture	0.5% Max

Physical Properties

Size above 200 µm at Loading Port 4.0% Max

Remarks: Qatar Steel ensures that product will be free from clay, dirt & other foreign materials.

TYPE OF PACKING

The material will be packed in jumbo bags of 1.5 Ton capacity.

CORPORATE SOCIAL RESPONSIBILITY



Caring for our communities, our customers, patients and colleagues is at the heart of who we are and what we do. For 40 years, we have demonstrated an ongoing commitment to operating as a socially responsible business and we recognize the active role we can play in helping to build happier and healthier communities.

We work together with our stakeholders to make progress and tackle critical issues such as:

- improving the health of our employees and communities
- protecting the environment
- leading the development of sustainable society
- placing our customers and colleagues at the heart of our business



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