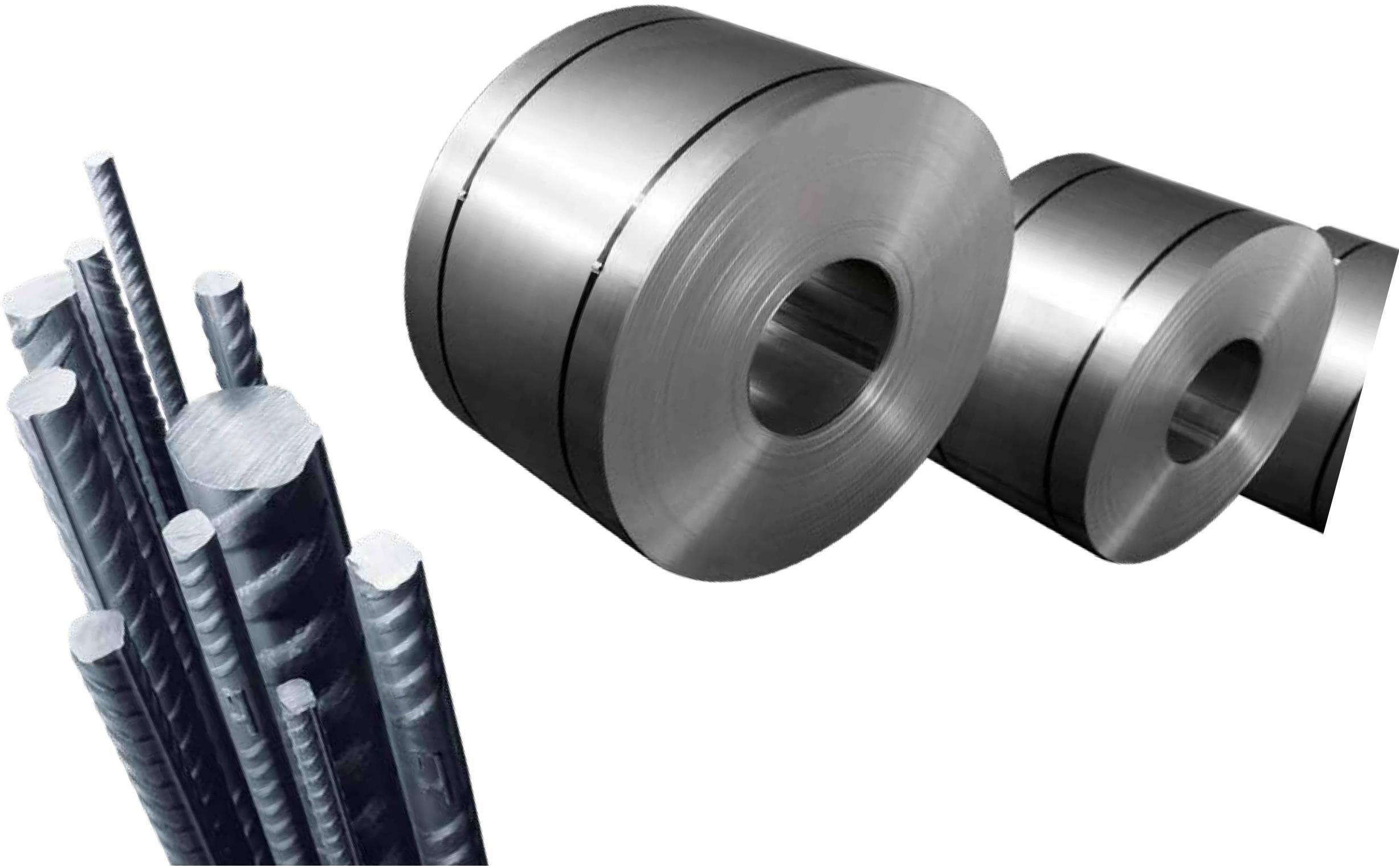


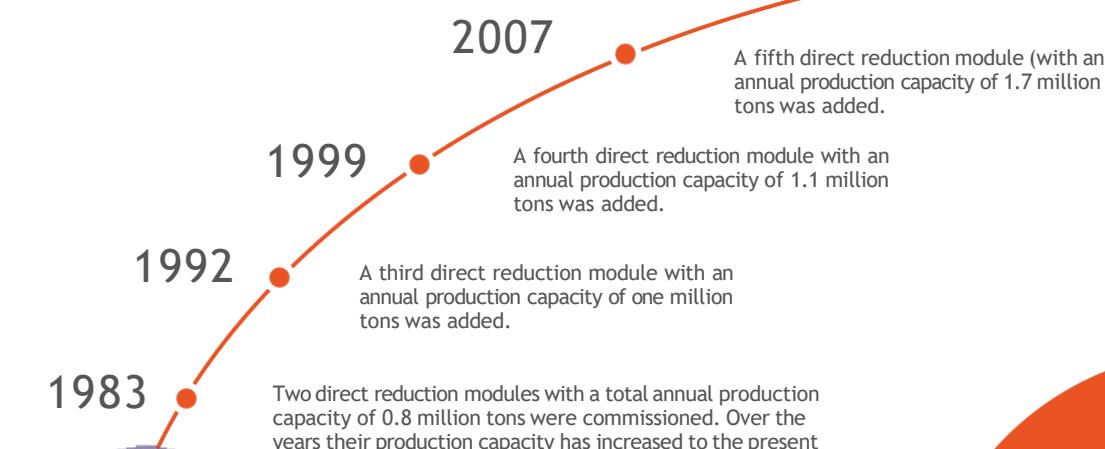
حديد
hadeed



—

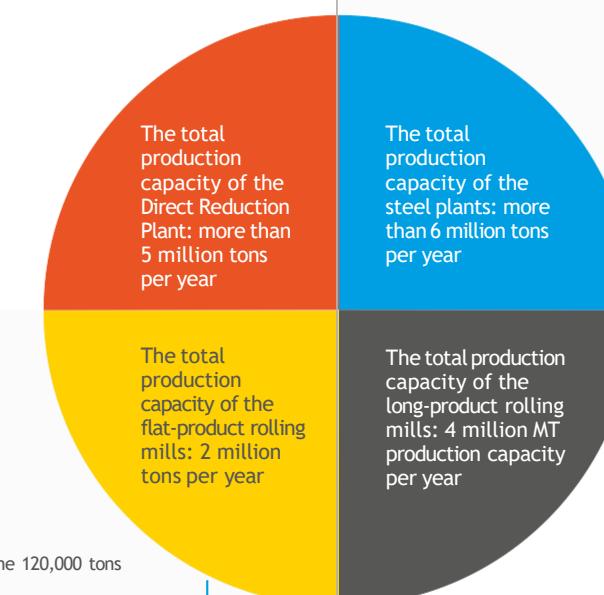
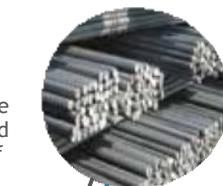
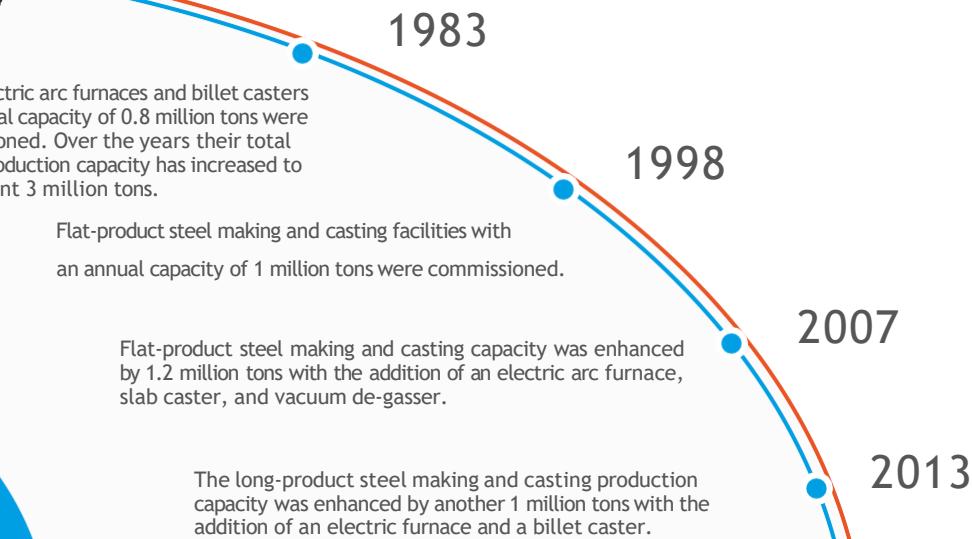
DATES THAT CHANGED THE STEEL INDUSTRY AT HADDED

1 The Direct Reduction Plant

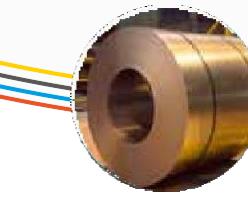
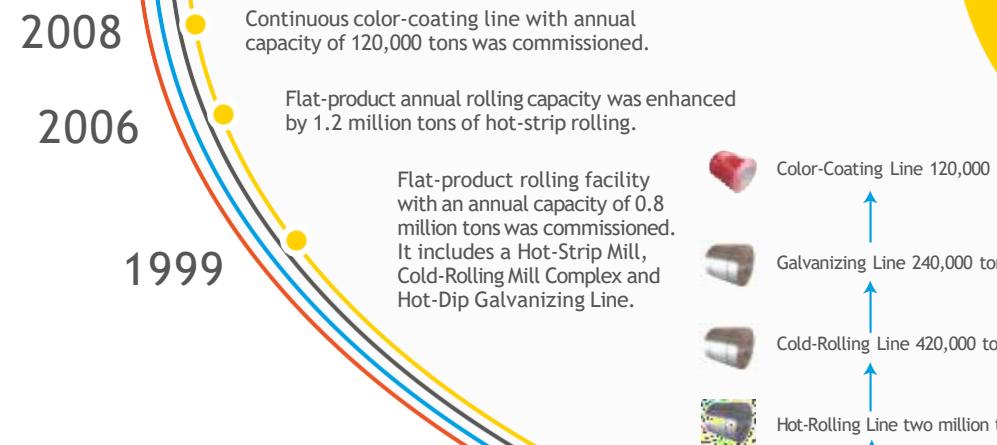


Three electric arc furnaces and billet casters with a total capacity of 0.8 million tons were commissioned. Over the years their total annual production capacity has increased to the present 3 million tons.

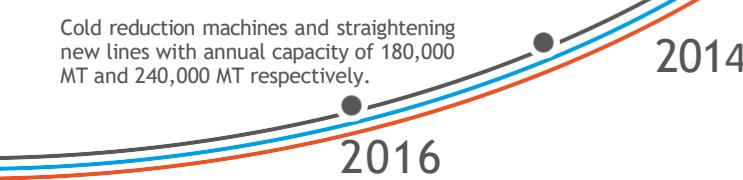
2 The Steel Plant



4 The Flat Product Rolling Mills



3 The Long Product Rolling Mills



ENVIRONMENTAL HEALTH IS TOP PRIORITY

HADDED, an environmentally conscious company, is committed to minimizing the ecological impact of its steel-production operations.

The cleanliness of our environment is as important to us as the quality of our steel products. HADDED continuously monitors emissions and implements an effective environment-management program to ensure that we comply with – and exceed – global standards. Through sustainability programs, we contribute to the conservation of our environment and provide a better life for future generations.



LONG PRODUCTS

LONG PRODUCTS



Billet

Billets are the raw material for producing long-steel products. They are produced in various grades and standards based on customer requirements.



Rebar

Concrete reinforcing bars (rebars) represent the majority of HADDED'S production. They are made according to international standards.



Rebar in coil

Rebar in coil is further processed by downstream cut and bend operations and straightening lines to produce shapes and straight bars for construction. Plain coils are used for reinforcing concrete pipes by cut and bend facilities.



Wire rod

Drawing grade wire rods are used by downstream industries to produce mesh, nails, hangers, screws, barbed wires, fencing mesh, binding wires, etc. Mesh grade wire rods are used for downstream cold indentation process to make cold deformed bars for construction.



Compact Coil

Cold deformed compact coil is processed by downstream cut and bend operations and straightening lines to produce straight bars and welded fabric. Weight range is from three to five tons.

BILLET SPECIFICATIONS

HADDED manufactures steel billets in accordance with international standards to provide steel products that meet specific customer requirements.

Chemical Composition % (max)

Billet Size (mm)	C	Si	Mn	P	S
130x130	0.40	0.45	1.50	0.05	0.05
150x150	0.93	0.60	1.50	0.05	0.05

Dimension / Appearance

Length	Section Tolerance	Corner Radius	Rhombicity	Twist	Straightness
12-14 m ± 50 mm	± 3 mm	4 mm	10 mm	0.5 degrees/m	5 mm/m

Other chemical compositions are possible. Please contact Sales and Marketing for details.



REINFORCING BARS

HADDED's steel strengthens structures and reinforces the foundations of prosperity in Saudi Arabia and the region.

Mechanical Properties of HADDED Steel

Rebars								
Standard	Grade	Nominal Diameter mm	Yield Strength MPa (min.)	Tensile Strength MPa (min.)	Tensile to Yield Ratio (min.)	Elongation in 200mm (min.)	Elongation (A5) (min.)	Agt % (min.)
SASO ASTM A615M	280(40)	12	280	420	N/A	12	N/A	N/A
		14 - 18						
	420(60)	12 - 20	420	620	N/A	9	N/A	N/A
		25				8		
		32 - 40				7		
		520(75)	12 - 25	520	690	N/A	7	N/A
			32 - 40			6		
	420(60)	12 - 20	420-540	550	1.25	14	N/A	N/A
		25 - 36				12		
		40				10		
BS 4449	460 B	12 - 40	460	N/A	1.08	N/A	14	5
BS 4449	B500B	12 - 32	500	N/A	1.08	N/A	N/A	5
GCC Standard GS06/ISO 6935-2	B400BR	12 - 40	400	N/A	1.08	N/A	14	5
	B400BWR	12 - 32	500	N/A	1.08	N/A	14	5
B500BR								
B500BWR								

*Saudi standards adopted from SASO ASTM (A615M and A706M)

Chemical Composition of HADDED Steel Rebars

Standard	Grade	Chemical composition % (maximum)							
		C	Si	Mn	S	P	N	Cu	C.E.V
SASO ASTM A615M	280/420/520 (40/60/75)	0.06
SASO ASTM A706M	420(60)	0.3	0.50	1.5	0.045	0.035	0.55
BS 4449	460 B	0.25	0.05	0.05	0.012	...	0.51
BS 4449	B500B	0.22	0.05	0.05	...	0.80	0.50
GCC Standard GS06/ISO 6935-2	B400BR / B500BR	0.06	0.06
	B400BWR / B500BWR	0.22	0.60	1.60	0.05	0.05	0.012	...	0.50

NOTE:

1. Other elements like, Ni, Cr, Mo, V, Nb, Ti ... etc. may be added if required.
2. Higher nitrogen contents are permissible if sufficient quantities of nitrogen binding elements are present.
3. Product analysis may differ. Standard tolerances will apply.

REINFORCING BARS

Linear Mass and Number of Bars in Bundles

Diameter (mm)	Nominal linear mass Kg/m	Tolerance in linear mass (maximum)			Number of 12 m long bars in a bundle of nominal weight of 2 tons
		ASTM A615	BS 4449:2005	GCC Standard GS06/ISO 6935-2/2007	
12	0.888	- 6 %	± 4.5 %	± 6 %	188
14	1.210	- 6 %	± 4.5 %	± 5 %	138
16	1.580	- 6 %	± 4.5 %	± 5 %	105
18	2.000	- 6 %	± 4.5 %	± 5 %	84
20	2.470	- 6 %	± 4.5 %	± 5 %	68
22	2.980	- 6 %	± 4.5 %	± 4 %	56
25	3.850	- 6 %	± 4.5 %	± 4 %	44
28	4.830	- 6 %	± 4.5 %	± 4 %	34
32	6.310	- 6 %	± 4.5 %	± 4 %	26
36	7.990	- 6 %	± 4.5 %	± 4 %	21
40	9.870	- 6 %	± 4.5 %	± 4 %	17

Other specifications are possible. Please contact Sales & Marketing for details.



WIRE ROD AND REBAR IN COILS

HADDED produces a range of low, medium and high carbon steel-wire rods according to international standards for various applications. Concrete-reinforcing bars in coil meeting SASO ASTM A615, BS 4449 and GCC standard GSO6 requirements are also available.

1 WIRE ROD

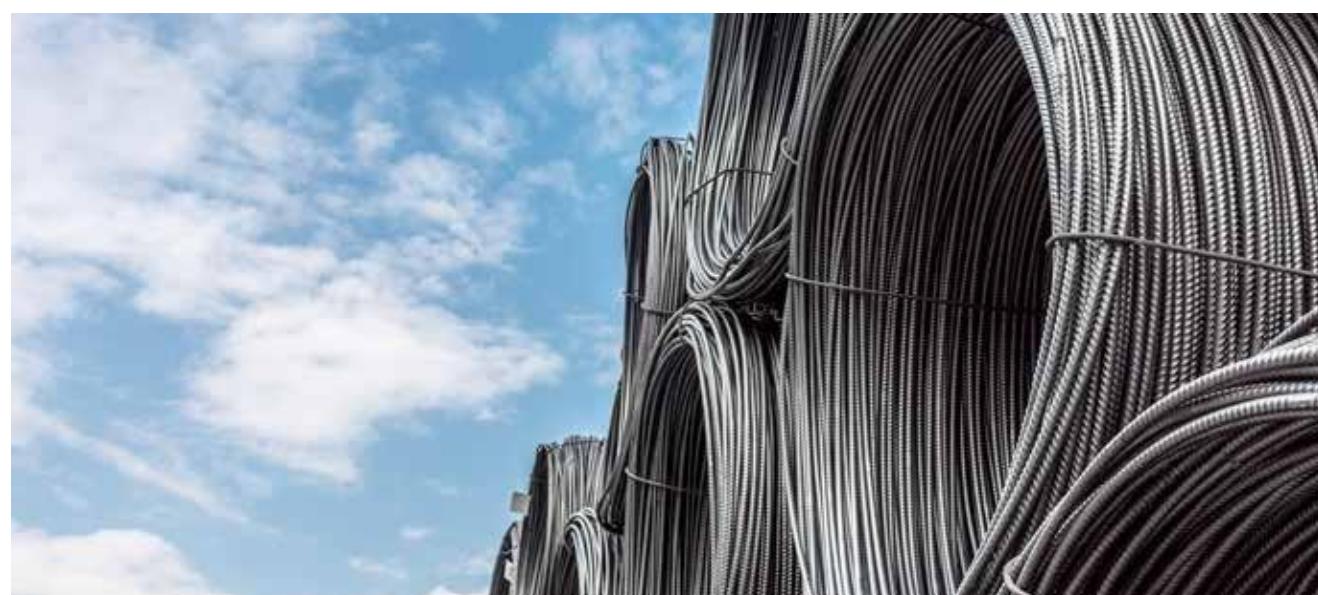
1 Drawing-grade wire rods

Wire rods used for drawing wires for various applications.

Chemical Composition and Mechanical Properties of Drawing Grade Wire Rods

Chemical Composition and Mechanical Properties of Drawing Grade Wire Rods

Grade	Chemical Composition %					Mechanical Properties		
	C	Si	Mn	P	S	Yield Strength MPa	Tensile Strength MPa	Elongation %
AISI 1005	0.06 max.	0.05 max.	0.35 max.	0.03 max.	0.03 max.	220 - 280	300 - 380	20 Min
AISI 1006	0.08 max.	0.07 - 0.10	0.25 - 0.40	0.04 max.	0.05 max.	210 - 270	350 - 400	28 - 38
AISI 1008	0.06 - 0.09	0.08 - 0.13	0.35 - 0.45	0.03 max.	0.03 max.	220 - 280	360 - 420	28 - 35
AISI 1010	0.09 - 0.12	0.10 - 0.15	0.40 - 0.50	0.03 max.	0.03 max.	260 - 290	400 - 430	29 - 32
AISI 1012	0.11 - 0.14	0.10 - 0.15	0.40 - 0.50	0.03 max.	0.03 max.	260 - 300	400 - 440	25 - 30
AISI 1015	0.14 - 0.17	0.10 - 0.15	0.44 - 0.55	0.03 max.	0.03 max.	260 - 310	430 - 470	24 - 29
AISI 1018	0.16 - 0.19	0.18 - 0.30	0.70 - 0.80	0.03 max.	0.03 max.	300 - 350	470 - 520	22 - 28
AISI 1021	0.19 - 0.23	0.18 - 0.30	0.70 - 0.80	0.03 max.	0.03 max.	330 - 360	500 - 540	20 - 25
AISI 1030	0.29 - 0.33	0.18 - 0.30	0.70 - 0.80	0.03 max.	0.03 max.	360 - 390	580 - 640	18 - 23



1-2 Mesh grade wire rods.

Wire rods are used for making cold-drawn/cold-indented concrete reinforcement bars and welded mesh.

Grade	Chemical Composition %					Tensile Strength MPa
	C	Si	Mn	P	S	
Mesh-1	N/A	N/A	N/A	0.05	0.05	360 - 450
Mesh-2	N/A	N/A	N/A	0.05	0.05	440 - 500

1-3 Wire rod for welding electrodes

Welding quality wire rods with restricted Si content of 0.05% Max. are used for making wires for welding electrodes.

Grade	Chemical Composition %					Mechanical Properties		
	C	Si	Mn	P	S	Yield Strength MPa	Tensile Strength MPa	Elongation %
0510	0.05 - 0.07	0.00 - 0.05	0.50 - 0.60	0.025 max.	0.025 max.	240 - 290	370 - 490	25 - 35

1-4 Wire Rod for Cable Armoring:

This steel is used to protect the electric cables from mechanical damage which is buried and used in external or underground projects.

Plain wire rod size range: 5.5mm to 12mm.

Grade	Chemical Composition %					Mechanical Properties		
	C	Si	Mn	P	S	Yield Strength MPa	Tensile Strength MPa	Elongation %
AISI 1005	0.06	0.05	0.35	0.03	0.03	220 - 280	300 - 380	20 Min

1-5 High-Carbon Plain Wire Rod:

These steel-wire rods are used as an input material in wire drawing process for high-tensile strength application wires for concrete reinforcement, such as pre-stressed concrete, spring wires, wire ropes, fencing wires, concrete nails, high tensile bailing wires, etc.

Plain wire rod size range: 5.5mm to 12mm.

Grade	Chemical Composition %					Mechanical Properties
	C	Si	Mn	P	S	
AISI 1040	0.37 - 0.44	0.15 - 0.30	0.60 - 0.90	0.04 max.	0.05 max.	
AISI 1045	0.43 - 0.50	0.15 - 0.30	0.60 - 0.90	0.04 max.	0.05 max.	
AISI 1050	0.48 - 0.55	0.15 - 0.30	0.60 - 0.90	0.04 max.	0.05 max.	
AISI 1060	0.55 - 0.65	0.15 - 0.30	0.60 - 0.90	0.04 max.	0.05 max.	
AISI 1065	0.60 - 0.70	0.15 - 0.30	0.60 - 0.90	0.04 max.	0.05 max.	
AISI 1070	0.65 - 0.75	0.15 - 0.30	0.60 - 0.90	0.04 max.	0.05 max.	
AISI 1075	0.70 - 0.80	0.15 - 0.30	0.60 - 0.90	0.04 max.	0.05 max.	
AISI 1080	0.75 - 0.88	0.15 - 0.30	0.60 - 0.90	0.04 max.	0.05 max.	
AISI 1085	0.80 - 0.93	0.15 - 0.30	0.70 - 1.0	0.04 max.	0.05 max.	

As per customers' specific requirements

Other specifications are possible. Please contact Sales & Marketing for details.

TOLERANCES AND COIL DIMENSIONS

Size Tolerances for Coiled Products

Type	Size Range (mm)	Size Tolerance (mm)	Ovality (mm) max.
Plain Drawing Grades	5.5 and 6.5	±0.25	0.40
	7 - 16	±0.30	0.48
Plain Mesh Grades	5.5 - 6.5	±0.30	0.48
	7 - 16	±0.40	0.64
Deformed	6, 8, 10, 12, 14 and 16	Mass tolerance as per applicable standard.	

Coil Dimensions (indicative)

Outside Diameter	1250 mm
Inside Diameter	800 mm
Compacted Length	1650 mm
Mass (indicative)	1800 kg
Packing	Four equidistant straps with 6 mm diameter binding wire.

Other specifications are possible. Please contact Sales & Marketing for details.



2- REBAR IN COILS AND STRAIGHTENED REBAR

Deformed concrete reinforcement rebar is supplied in coil form (RIC) or as straightened rebar (STR). It is produced as per SASO ASTM A615 Grade 40 and Grade 60, BS 4449:1997, Grade 250 and Grade 460B, BS 4449:2005 Grade B500B.

Sizes and Tolerances

Diameter (mm)	Nominal linear mass (kg/m)	Tolerance in linear mass (max.)	
		SASO ASTM A615	BS4449
6	0.222	-6%	-/+6
8	0.395	-6%	-/+6
10	0.617	-6%	-/+4.5
12	0.888	-6%	-/+4.5
14	1.210	-6%	-/+4.5
16	1.580	-6%	-/+4.5



3- COLD ROLLED

Cold-rolled steel compact coils are produced as per ASTM 1064

Grade	Yield Strength MPa (Min)	Tensile Strength MPa (Min)
485 (70)	485	550
515 (75)	515	585
550 (80)	550	620

Sizes and Tolerances

Diameter (mm)	Nominal linear mass (kg/m)	Tolerance in linear mass (max.)
8	0.395	-/+6%
10	0.617	-/+6%
12	0.888	-/+6%
14	1.210	-/+6%

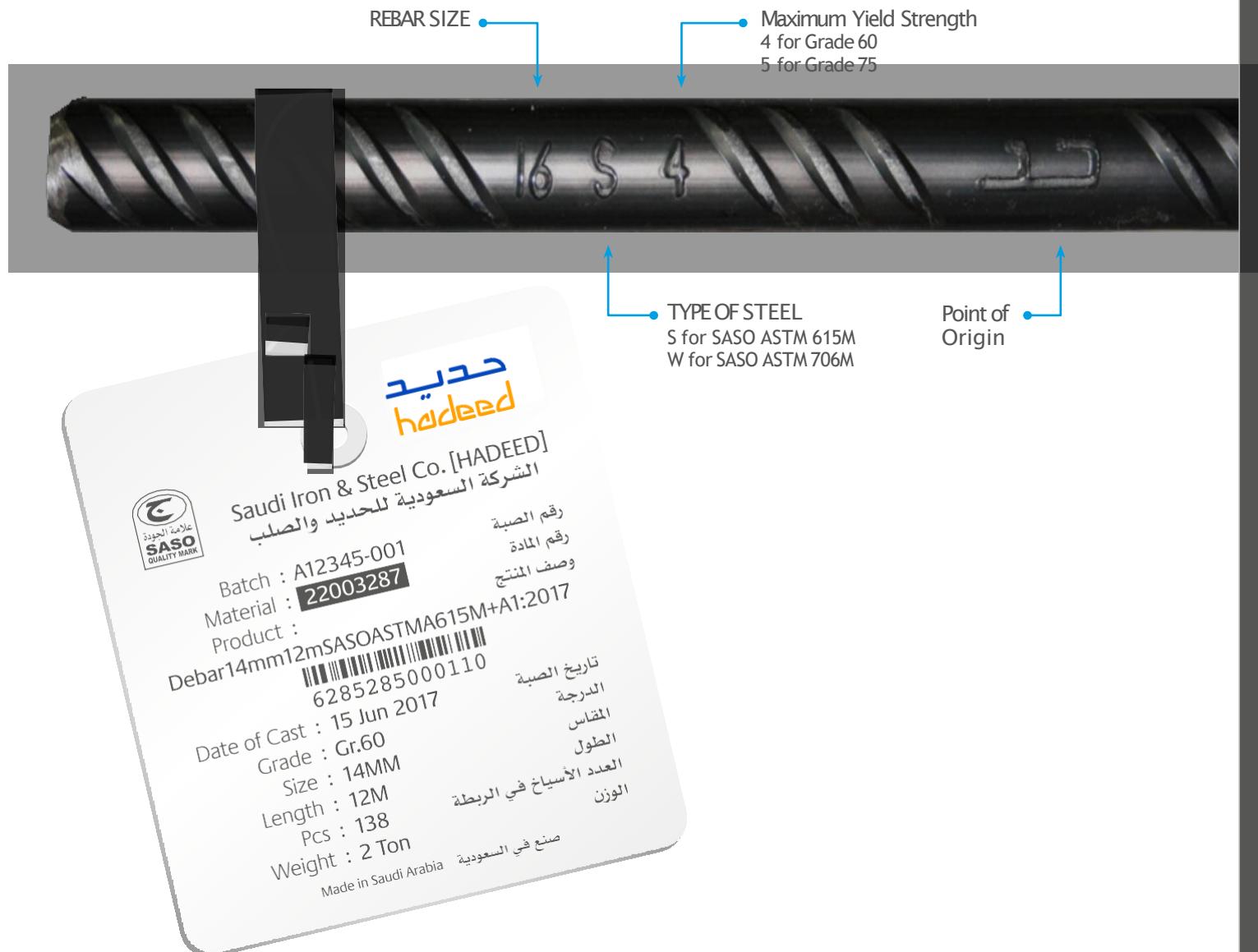


Weight and Coil Dimension

Weight (Mt)	Internal Diameter (mm)	External Diameter (mm)	Height (mm)
3	630	1200	800
4	630	1200	1000
5	630	1300	1000

REBAR MARKING AND PACKING

Bars can be identified by marks inscribed on to the surface of one side of rebar as per SASO ASTM 615 M and SASO ASTM 706M standards.

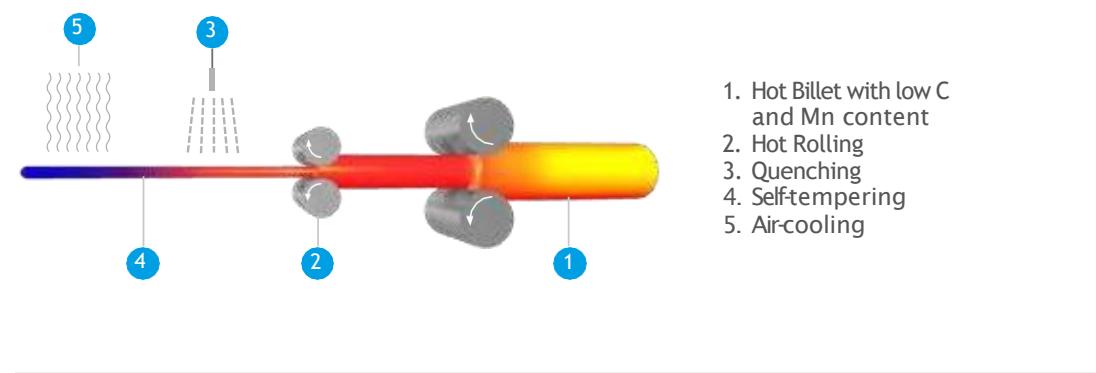
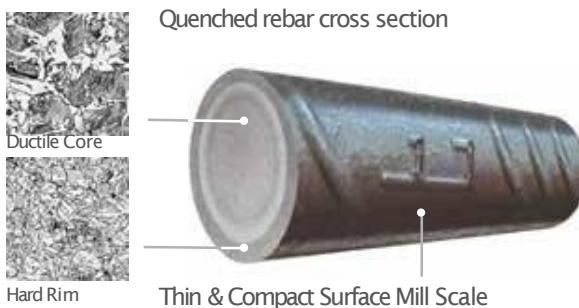


TECHNICAL FACTS

THE QUENCHING PROCESS

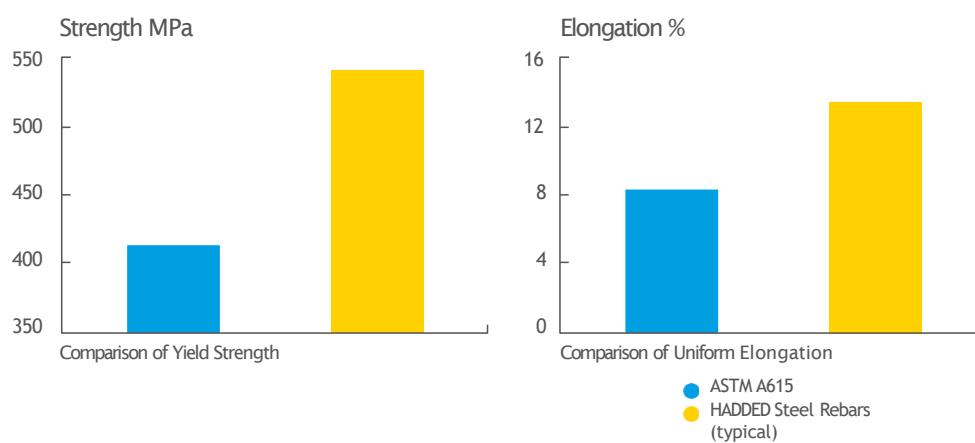
HADDED steel rebars are produced through a bar quenching process, where the properties are attained by regulating the microstructure of the steel giving better rebar ductility and good weldability.

Bar Quenching Process



HADDED steel properties

The precise process control adopted at HADEED results in clean steel with very low content of undesirable residual elements, higher yield strength, good ductility and better bending properties of the steel bar. The lower carbon equivalent values used in HADDED Quenched Steel Rebars also make them readily weldable, particularly for the applications requiring low heat input like tack welding.



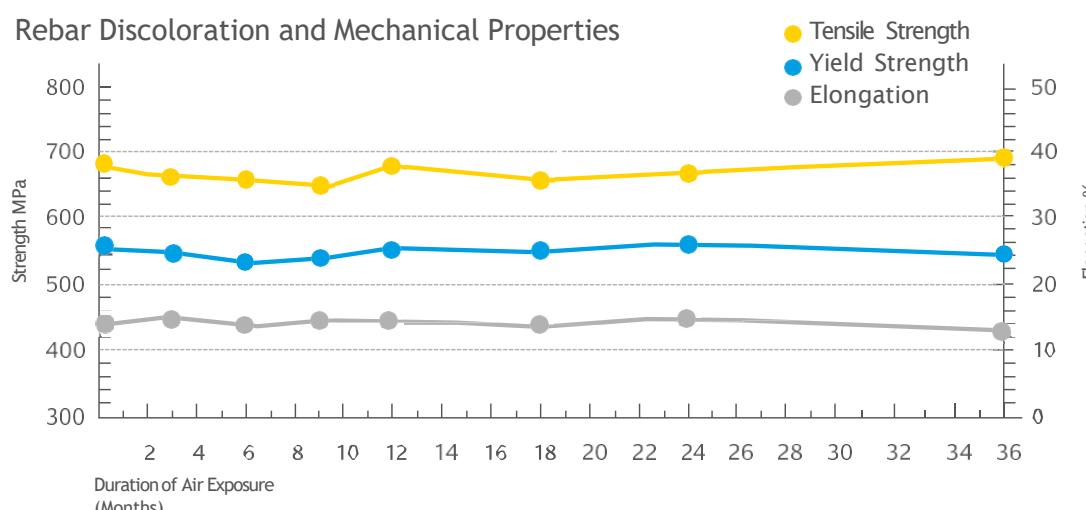
REBAR DISCOLORATION -FACTS AND EFFECTS

The quenched steel rebars inherently change their surface color during open air storage in humid environments. This discoloration is superficial and is associated with the thin mill scale present on the rebar surface and does not extend to the base metal or affect the mechanical properties of the rebars. Rust on the other hand involves the corrosion of the base metal and adversely affects the material properties.

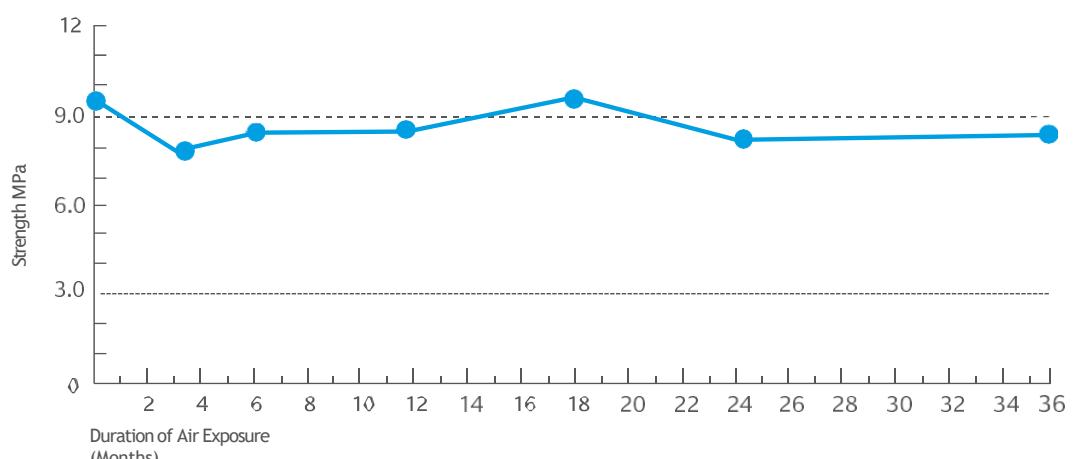
Long-term studies conducted at HADDED technology centers and other universities have concluded that rebar discoloration is a surface phenomenon and does not affect the rebar strength, ductility, bending, or bond with concrete.



Rebar Discoloration and Mechanical Properties



Rebar Discoloration and Concrete Bond Strength

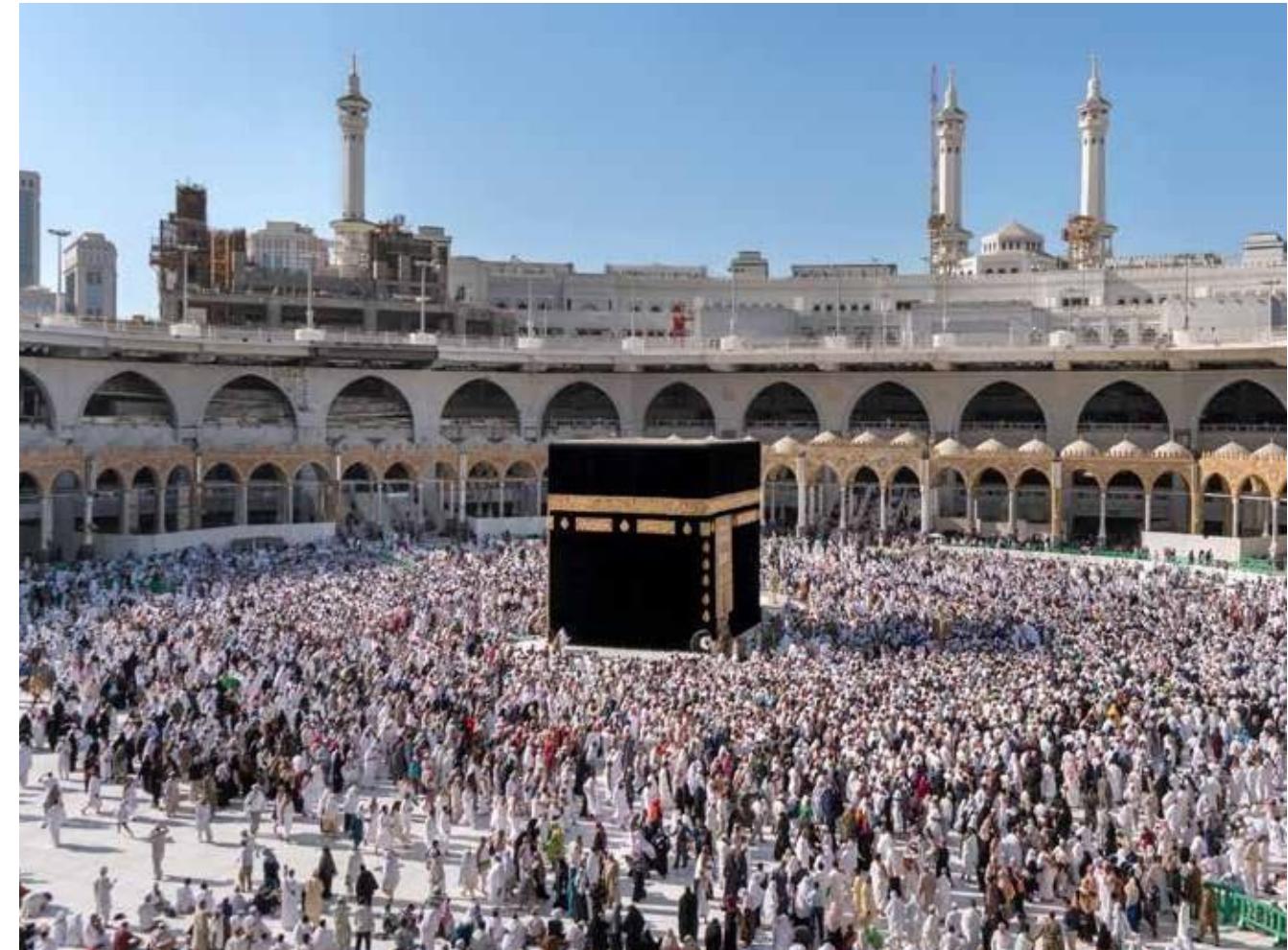


REBAR CORROSION IN CONCRETE

LONG PRODUCTS

DESIGNS LIFTING OUR PORTFOLIO

HADDED is known for a wide range of products with incredible quality. Many famous projects were constructed with HADDED 's trusted steel.



[Holy Mosque, Makkah](#)

More than 3.5 million pilgrims' journeys to the ancient city of Mecca every year. HADDED materials were at the heart of its multi-billion-dollar construction and modernization program, which has been the most important expansion to the Holy Mosque in recent times, providing new buildings and facilities for visitors and spectacular minarets.

**The Kingdom Tower, Riyadh**

The Kingdom Tower is one of the best-known landmarks of modern Saudi Arabia. Built with HADDED steel, the tower stands 367 meters high and forms part of a \$510 million complex that includes a five-star hotel, luxury apartments, and a shopping mall.

**Burj Al-Arab, Dubai**

The Burj Al-Arab, or Arab Tower, is one of the Middle East's most easily recognized landmarks and a high-profile resort in Dubai. Built on a man-made island a quarter of a kilometer from the shore, its stunning sail-shaped structure soars 321 meters above the Arabian Gulf.

**Chek Lap Kok Airport, Hong Kong**

HADDED steel was essential to the \$20 billion construction program to build an airport capable of accommodating the dramatic increase in passengers flowing through the gateway to the Far East.

FLAT PRODUCTS

FLAT STEEL PRODUCTS

HADDED offers a broad range of hot-rolled and cold-rolled flat products.

These products are suitable for a wide range of applications.

The following are the four types of products:



Hot Rolled Coil

Hot-rolled products are available in different dimensions and grades. They are supplied in mill and trimmed edge, slit, skin passed, checkered and pickled coils.



Cold Rolled Coil

Cold-rolled products are available in different dimensions and grades. They are supplied as mill and trimmed-edge coils and slit coils with excellent surface quality and mechanical properties such as hardness, tensile strength, and ductility suited for many sophisticated manufacturing applications.



Hot Dip Galvanized Coil

Cold-rolled galvanized products are available in different dimensions and grades. The coils are well protected with uniform zinc coating for long durability, strong corrosion resistance, and a shiny finish. HADDED galvanized steel features excellent forming properties, printability, weldability; it is suitable for fabrication by forming, pressing, and bending operations.



Pre Painted Coil

Pre-Painted Products are available in different dimensions and grades. The coated coils are produced through a sophisticated line at Hadeed. The line is capable to paint in various colors and textures on different substrate that has the advantage of uniform surface/finish, long Durability of product, color stability, chemical resistance, good adhesion of the paint film and corrosion protection.

HOT-ROLLED COIL

HOT-ROLLED COIL

Hot-Rolled Steel Grades

- Commercial Quality
- API* Line Pipe Quality
- Structural Quality
- Pressure Vessel Quality
- HSLA Quality
- Corten Quality

* API Line Pipe Steel can be produced to cover both sour and non-sour applications with the following ranges:

API 5L (Non-Sour): Gr. B through X80

API 5L (Sour): Gr. B through X65

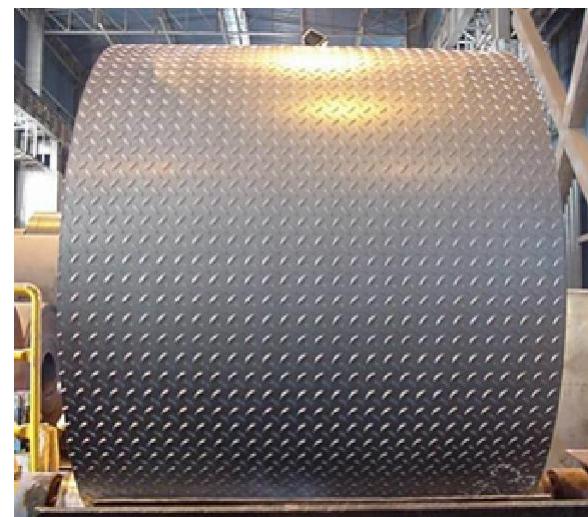
API 5CT (Casing and Tubing): Gr. H40, Gr. J55 and Gr. K55

Dimensions/ Sizes

Hot-Rolled Non-Pickled	Thickness (mm)		Width (mm)		Inner Diameter (mm)
	From	To	From	To	
Hot-Rolled Coil Mill Edge	1.2	17.5	850	1650	762
Hot-Rolled Coil Trim Edge	1.5	10	800	1600	762
Hot-Rolled Slit Coil	1.5	8	75	800	762
Hot-Rolled Chequered Coil	2.3	8	850	1500	762
Hot-Rolled Skin Pass Coil	1.2	5	850	1650	762

Hot-Rolled Pickled	Thickness (mm)		Width (mm)		Inner Diameter (mm)
	From	To	From	To	
Hot-Rolled Coil	1.5	6	850	1650	762
Hot-Rolled Trimmed Coil	1.5	6	850	1600	762

Coil specific weight (Max): 20 kg/mm as max



STEEL CATEGORIES & APPLICATIONS

API Line Pipe Steel

Steel for sour & non-sour applications
Oil & gas pipelines
Water pipelines

Steel for Pressure Vessels

Pressure vessels tanks
Gas cylinders.

Commercial Steel

General Fabrication
Sheets
Commercial
Tubes Corrugated
sheets

Chequered steel

Anti-skid applications
industrial Floors

Corten steel

Atmospheric-corrosion applications
Steel containers for Shipping

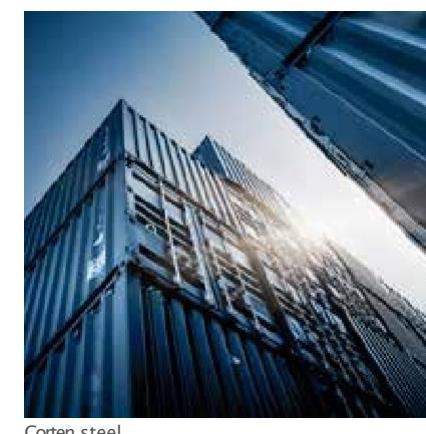
Structural Steel

Construction applications
Structures
Lighting poles
Electric transmission poles

HSLA Steel

High-strength low-Alloy steel
Structural and Automotive
Applications

Steel for Cold Rolling Applications



Corten steel



HSLA



Structural Steel



API Steel



Pressure-vessel Steel



Commercial Steel

COLD-ROLLED COIL

FLAT PRODUCTS

COLD-ROLLED COIL

HADDED offers a broad range of cold-rolled products in the form of mill-edge and slit-edge coils with an excellent strip surface, shape, and mechanical properties suitable for manufacturing of commercial and sophisticated applications.

Dimensions/ Sizes

Product	Thickness (mm)	Width (mm)	Inner Diameter (mm)
Cold-Rolled Coils	0.3-3.0	850-1650	610
Cold-Rolled Slit Coils	0.3-3.0	75-800	610



QUALITY AND APPLICATIONS FOR COLD ROLLED COILS

Commercial Quality (CQ)

Exposed or unexposed applications requiring low level of forming and bending operations.

Drawing Quality (DQ)

Applications that need moderate deformation or forming compared to commercial grades.

Structural Quality (SQ)

Applications where the strength, usually in load-bearing structures, of finished parts is important, as well as weldability.

Deep Drawing Quality (DDQ)

Produced with carbon content less than DQ quality which makes it suitable for producing deep-drawn parts. However, It is not as formable as the extra-deep-drawing steel.

Extra-Deep Drawing Quality (EDDQ)

Suitable for the most critical and complex applications. These grades are produced through a vacuum degasser to provide superior internal cleanliness and reduced carbon levels.

APPLICATION OF COLD ROLLED STEEL

Cold-rolled steels can be used in drums, filters, racks, air-conditioning, roll-forming, tubes, shelves, heat-exchanger tubes, furniture, wheel barrows, sign board, etc.



Drawing Quality



Extra Deep Drawing Quality (EDDQ)



Commercial Quality

Structural Quality (SQ)

HOT DIP GALVANIZED COIL

HOT-DIP GALVANIZED COIL

HADDED offers a broad range of hot-dip galvanized products in the form of mill-edge and slit-edge coils with an excellent formability, paintability, weldability, etc. Suitable for domestic and building applications.

HADDED galvanized steel coil is well protected with uniform zinc-coating thickness for durability, corrosion resistance, and a shiny or dull finish.

Product	Thickness (mm)	Width (mm)	Inner/Outer Diameter(mm)
Galvanized Coil	0.30 to 2.0	850 to 1480	610/1950
Galvanized Slit Coil	0.30 to 2.0	75 to 720	610/1950
Trimmed Coil	0.30 to 2.0	75 to 720	610/1950

HADDED galvanized steel coil is produced as per the following standards:

Standards	Grade
SASO ASTM A653/A653M	CS,FS,DDS,SS,HSLA
ASTM A653/A653M	CS,FS,DDS,SS,HSLA
JIS G3302	SGCC,SGCH,SGCD,SGCD1,SGCD2,SGCD3,SGCD4,SGC340,SGC400,SGC440,SGC490
EN10346	DX51D,DX52D,DX53D,DX54D,DX55D,S220GD,S250GD,S280GD,S320GD,S350GD

Coating

- G90 (275g/m²)
- G60 (180g/m²)
- G40(120g/m²)
- G30 (90g/m²)

Surface Treatment

- Chemical passivation
- Oiling
- Chemical passivation with oiling

Surface Finish

- Regular spangle surface
- Skin passing with mini-spangle surface



QUALITY & APPLICATIONS FOR GALVANIZED COIL

Steel Quality

- Commercial or lock-forming quality
- Drawing quality
- Deep-drawing quality
- Structural quality

Application of Galvanized Steel

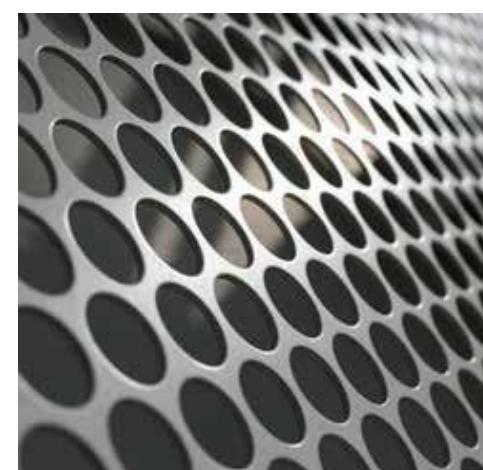
Galvanized coils can be used for air-conditioning panels and ducts, door frames, industrial racks, home appliances, electrical appliances, ceilings, etc.



Drawing Quality (DQ)



Commercial Quality (CQ)



Structural Quality (SQ)



Deep Drawing Quality (DDQ)

COLOR-COATED COIL

FLAT PRODUCTS

COLOR-COATED COIL

HADDED offers color-coated products in various color shades with uniform surface finish and coating textures, aesthetic appearance, color stability and chemical resistance.

Substrate	Thickness Range	
	Min. (mm)	Max. (mm)
GI, CR, Galvalume	0.28	1.6
Aluminum	0.50	1.6

Substrate	Width Range	
	Min. (mm)	Max. (mm)
Coating Line	500	1400
Hot Laminator	500	1250

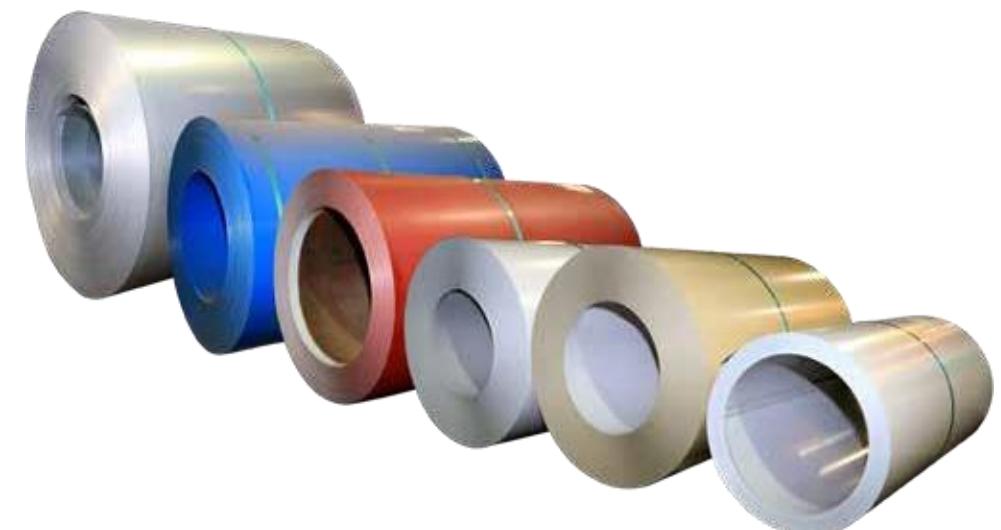
Substrate	Coil Weight Range		
	Min. (Mt)	Max. (Mt)	
	ETW*	ETS*	
GI, CR, Galvalume	2	12	7
Aluminum	2	5	4.5

*ETW : Eye to Wall, ETS : Eye to Sky

	Coil Diameter	
	Min. (mm)	Max. (mm)
Inner diameter	508	610
Outer Diameter	700	1600

Type of Sleeves

- Steel
- Cardboard



QUALITY AND APPLICATIONS FOR COLOR-COATED COILS

Steel Quality

- Commercial and lock-forming quality
- Drawing quality
- Deep-drawing quality
- Structural quality

Examples of Color-Coated Steel Product Applications

- Building (roofing and cladding, etc.)
- Household goods (fridges, washing machines, microwaves, ovens, etc.)
- Furniture
- Packaging and drums
- Shelves
- Electrical appliances
- Roller shutters, etc.
- Cool chemistry for roofing, wall cladding and sandwich panels.
- Anti-bacterial for interior facing walls and facilities requires hygiene conditions such as hospitals and refrigeration units.



Garage Doors



Pre-Engineering Buildings



Corrugated Sheets



Sandwich Panels with cool chemistry coating



Interior walls with Anti-bacterial coating

TYPES OF COATING

Type of Paint Coating

- Polyester
- PVDF and SMP
- Plastisol
- Epoxy (suitable for foam adhesion)
- Polyurethane

Lamination

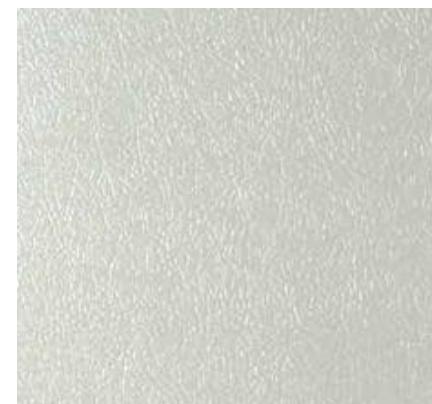
- Hot-Film
- Cold-Film

Special Surface Finish

- Metallic Finish RAL9006
- Wrinkle Finish RAL3003

Hot-Lamination
Wood Glassia GP J881

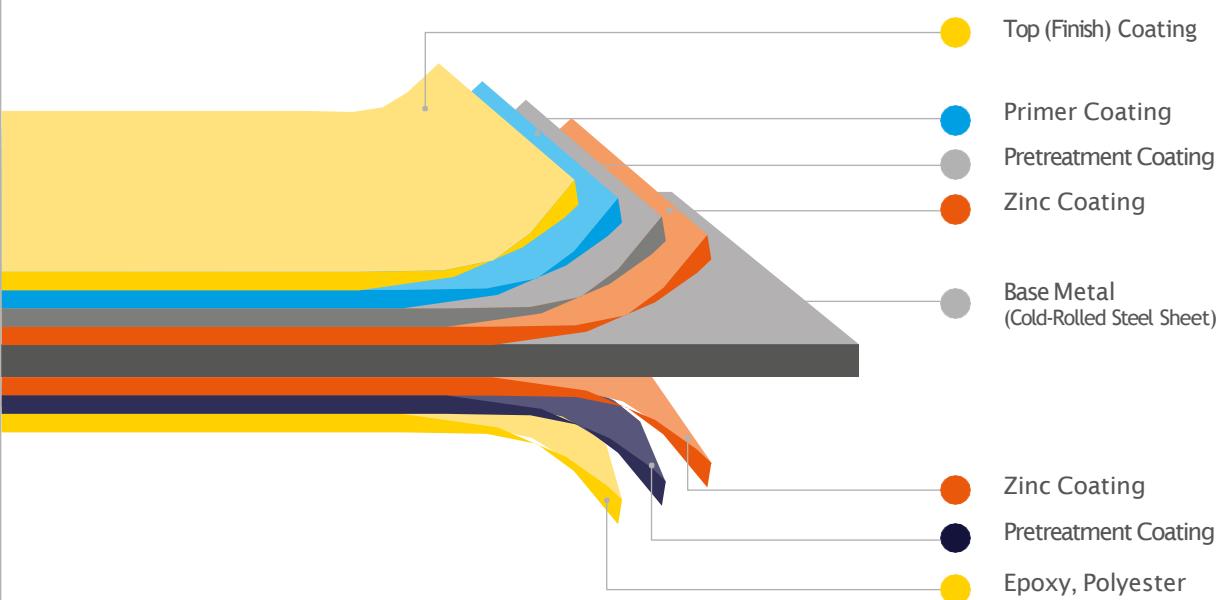
Hot-Lamination Glassia GPJ 4001



Plastisol, RAL9002

COATING THICKNESS AND PAINT SPECIFICATION

Coating	Dry Coating	Paint Type
Finish Coat	Top	10 - 25
		20 - 200
Service / Reverse Coat	Bottom	5 - 10
Primer Coat	Top	5 - 10
		20 - 50
	Bottom	5 - 10



PACKAGING

PACKAGING

Packaging should be selected based on the material type, surface treatment, end use, and steel-coil storage time.

[Hot Rolled Coils](#)

Export and local packaging.

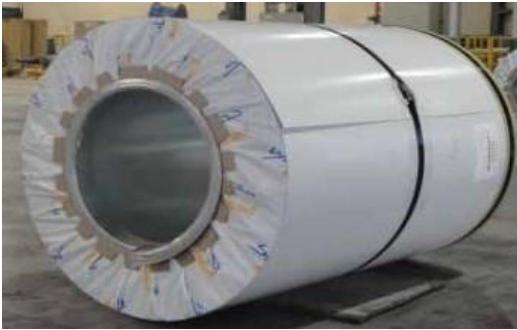
- Steel Straps
(3 circumferential & 4 axial)
- Labels on both sides



[Color-Coated Steel Coil](#)

Export and local packaging.

- VCI Paper (inner and outer)
- Edge protectors (Kraft hardboard paper, inner and outer)
- Pre-painted metallic cover sheet (inner)
- Metallic-edge protectors (inner and outer)
- Eye blank metal (side cover)



[Cold-Rolled and Hot-Dip Galvanized Coils](#)

Export packaging

- Metallic cover sheet (outer and inner)
- Inner-diameter metallic ring
- VCI paper (inner and outer)
- Eye blank metal (side cover)
- Two edge protectors



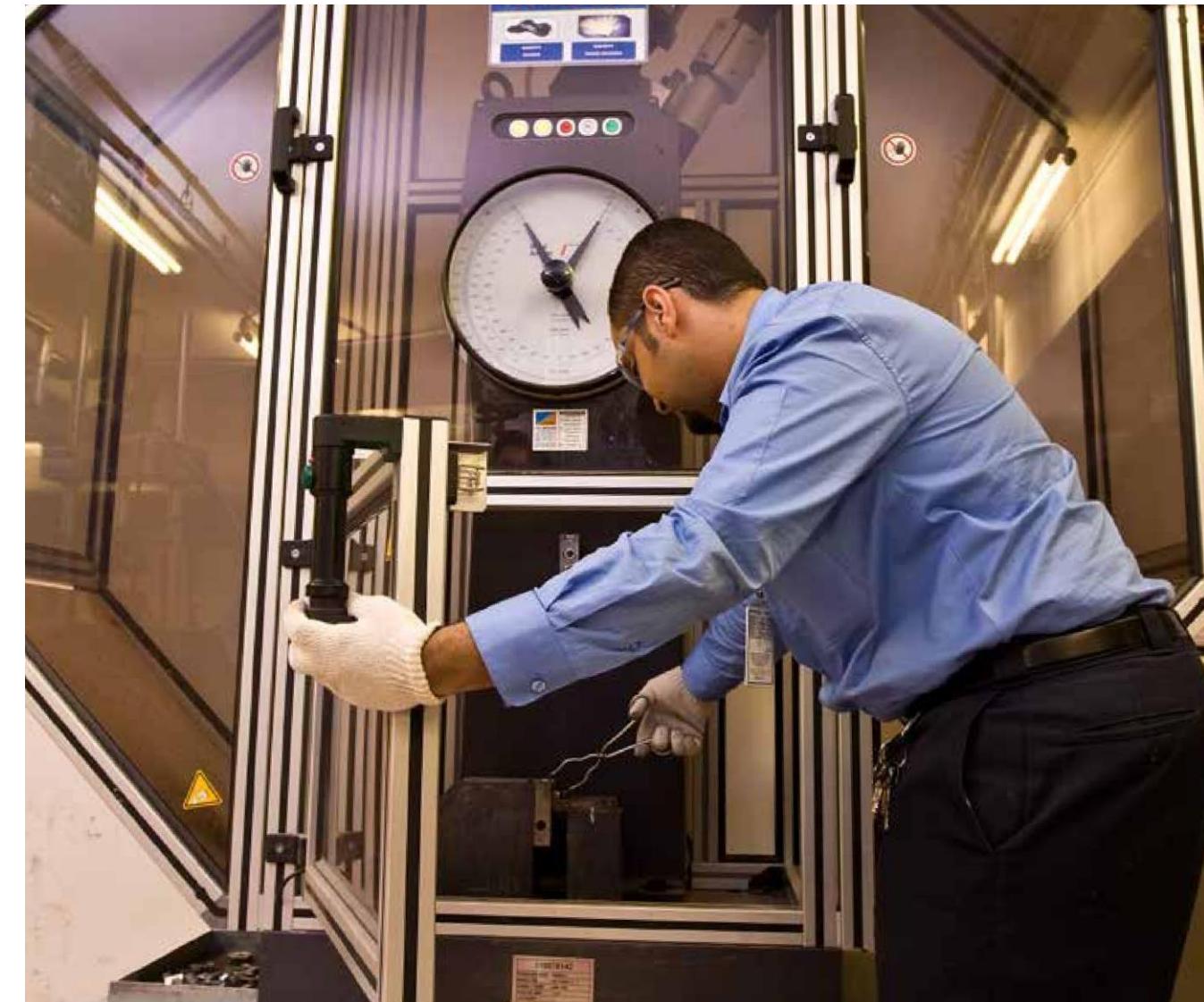
Local packaging

- Inner and outer metallic cover sheet
- Inner-diameter metallic ring
- Two stickers (inner and outer)
- VCI paper (inner and outer)



TECHNOLOGY & INNOVATION: A MUST TO STAY AHEAD

HADDED maintains a market-leading position by keeping up-to-date with global advances in technology. To keep high standards, we regularly carry out independent studies to inspect and maintain the excellence of our products, evaluate the manufacturing processes, and develop new products according to market requirements.



HADDED Technology Center in Al Jubail has dedicated research facilities for steel product development, process optimization, product quality improvement, energy conservation, sustainability and by-product utilization.

Using the latest physical and computer-based simulation tools, it carries out studies for metallurgical process mapping, developing microstructure-property relationships and process improvement.



WE INVEST IN YOUR TRUST

The Supreme Committee, chaired by his Excellency the Minister of Industry and Commerce, awarded Hadeed the "King Abdulaziz Quality Award," one of three large-production establishments recognized in Saudi Arabia in 2016.

The King of Saudi Arabia approved this award under decree (# 7/B/18670 on 27-11-1420H) to recognize enterprises with the highest achievement of excellence and quality in their products and services.

In addition, the King Khalid Foundation awarded Hadeed second place in the 2016 King Khalid Award for Responsible Competitiveness. The award honours companies for delivering positive benefits to communities, ecosystems, employees, and stakeholders while strategically achieving a competitive business advantage.





We do what others said can't be done. We know that our success depends on your success. When you grow, we grow. We know that in the end what matters most is the strength of our relationships, the positive impact that we make, and the science we work with. Our work benefits our stakeholders, and we're here to change the world for good. This is what we do.

We call this...

CONTACT US

LONG PRODUCTS BUSINESS

Tel: +966 13 357 1033

Fax: +966 13 358 6812

Mob. +966 53901 4207

Email:ghamid@Hadded.com

FLAT PRODUCTS BUSINESS

Tel: +966 13 357 1055

Fax: +966 13 358 1069

Email:Yamisaab@hadeed.Hadded.com

HADEED CUSTOMER SUPPORT

Email:HADDEEdcustomersupport@HADDED.com



© 2017 Copyright by HADDED . All rights reserved.