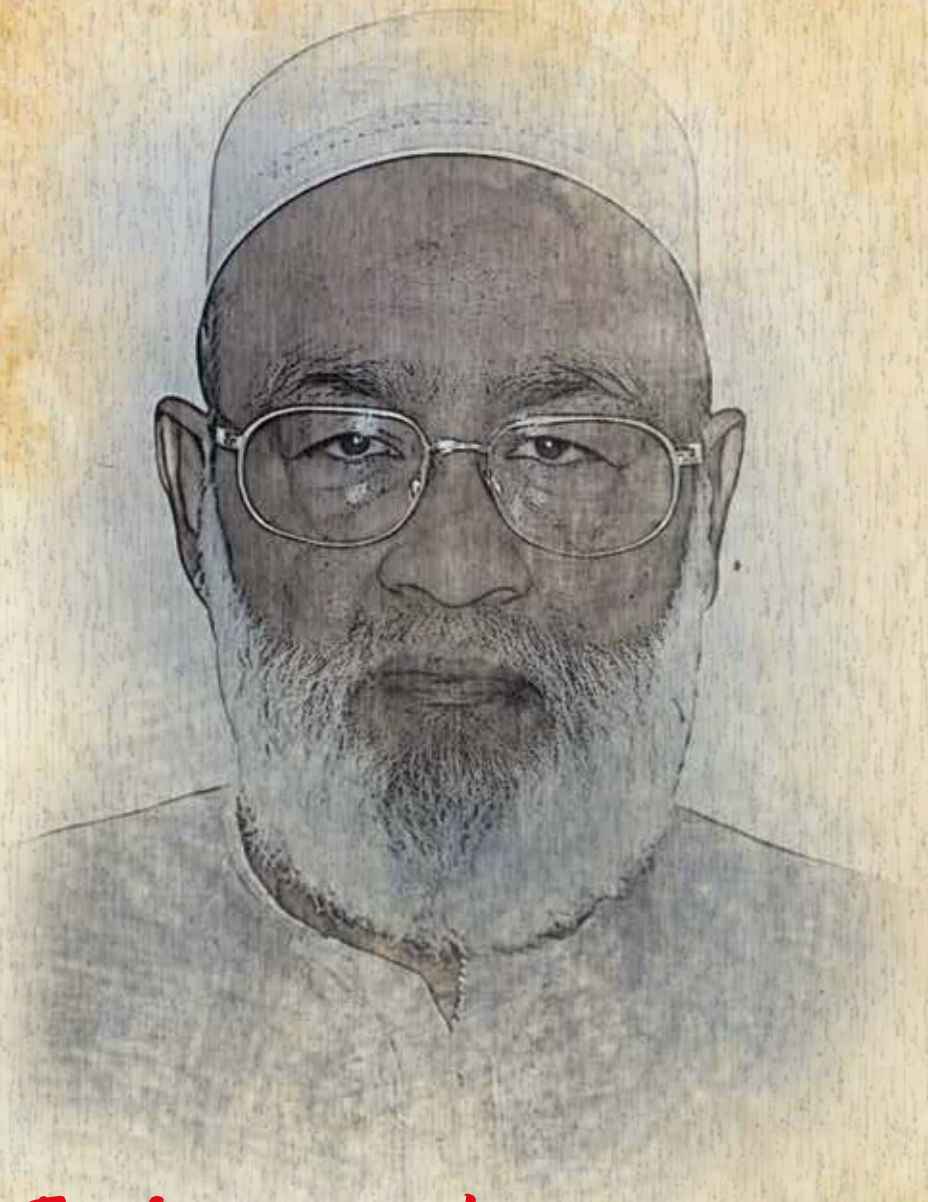
SINCE 1958

Symbol of
QUALITY

RAHIM STEEL

MS PLATE





In Loving Memory of

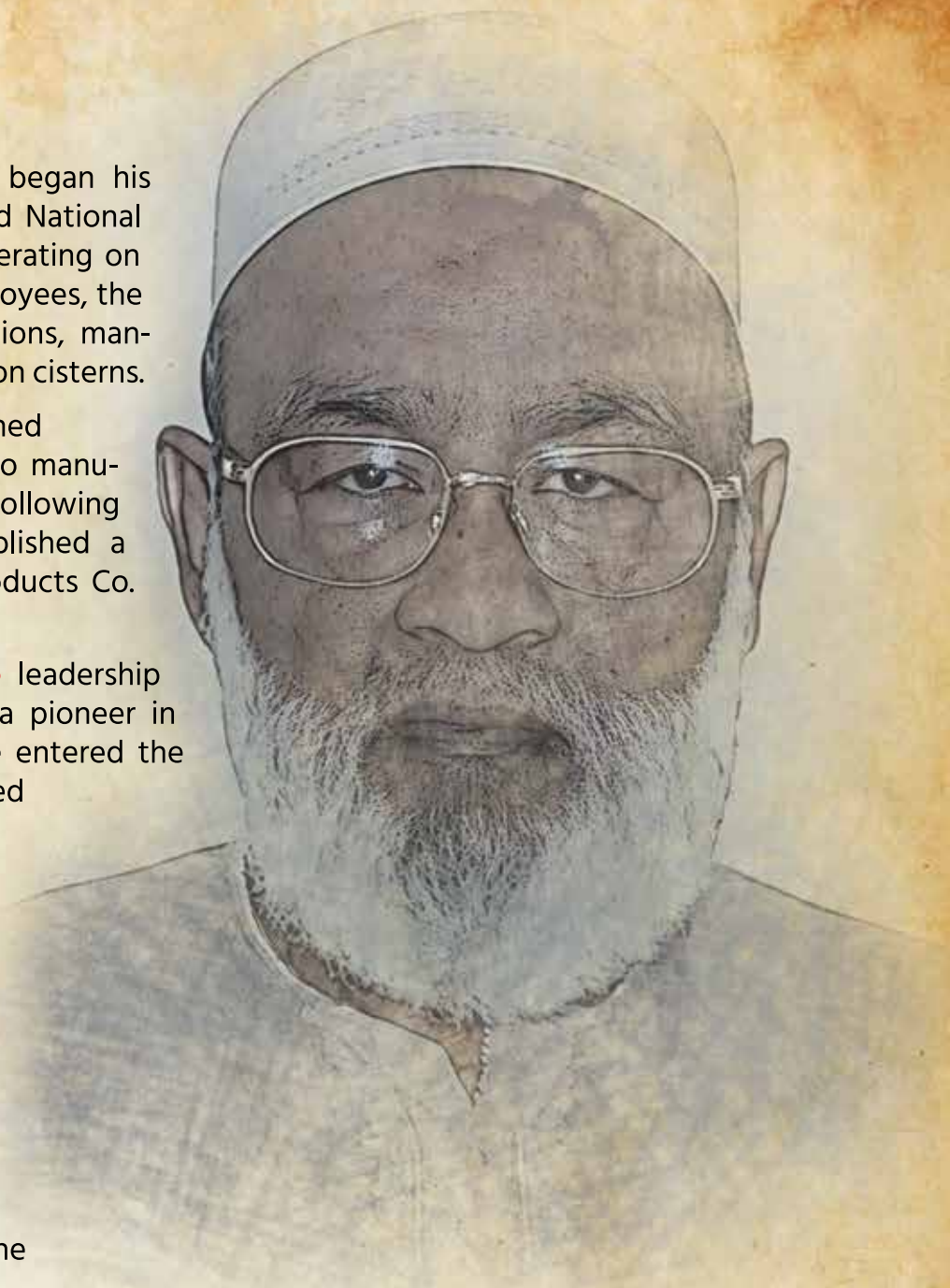
Founder of Rahim Steel Mills Co. (Pvt) Ltd.

Al - Haj Abdur Rahim

(known as "Steel King of Bangladesh")

(June 17, 1923 - May 30, 2014)

"We believe in dynamism. We are sensitive & responsive to the changing needs of time. We plan our future on the experience of the past. We like to work and the present is vital for us. Our commitment to quality products are for the present & for time to come. We are determined to go ahead with our mission and meet the emerging needs & challenges of the new millennium with courage & confidence."



MR. AL-HAJ Abdur Rahim began his journey in 1958 when he founded National Foundry in Shyampur, Dhaka. Operating on just 4 bighas of land with 30 employees, the foundry produced handloom pinions, man-hole covers, iron pipes, and cast iron cisterns.

In 1968, **ABDUR** Rahim established Bangladesh's first re-rolling mill to manufacture 40-grade deformed bars. Following growing demand, he also established a second mill – Diamond Steel Products Co. Pvt. Ltd. – in 1976 at Shyampur.

By the early 1980s, **RAHIM'S** leadership had already established him as a pioneer in construction industry. In 1983, he entered the shipbreaking sector and established Rahim Steel Mills Co. (Pvt) Ltd. in Kachpur, Sonargaon.

In 1984, he went further and founded the country's first steel plant — marking the start of a **LEGACY** that would redefine Bangladesh's industrial landscape.

Known for his innovative spirit, he **CONTINUES** to inspire entrepreneurs to this day. In 1995, he set up Sonargaon Steels **TO** produce mild steel angles, channels, shafts, and plain bars.

His efforts didn't stop there. In 2002, he moved to the energy sector, launching Rahim Energy — a 30 MW power plant.

This relentless drive helped **LEAD** the company into new territories. In March 2003, Rahim Steel Mills Co. (Pvt) Ltd. began producing mild steel commercial plates, meeting 20% of national demand. A year later, they earned Germanischer Lloyd (GL-A) certification for shipbuilding - grade plates — an achievement that elevated **BANGLADESH'S** reputation in global markets.

By 2005, he had already transformed the **STEEL** sector with the launch of Carbon Bangladesh Limited — the nation's first coke plant. In 2010, he added another milestone by exporting Ferro Silicon valued at $5 million. Today, his whole **INDUSTRY** spans over 100 acres and employs more than 6,000 people. From modest beginnings to monumental **SUCCESS**, Mr. Al-Haj Abdur Rahim's legacy remains a testament to hard work, vision, and dedication.

ABOUT US

About Us

Since 1958, Rahim Steel Mills Co. Pvt. Ltd. is the only company in the country that has been providing a complete steel solution. We are the first company in Bangladesh to establish production facilities that played a pivotal role in building the city of Dhaka. Today, we are the only MS plate mill in the country and the sole producer of essential steel-making raw materials. Having unmatched industry experience and strength, we hold a huge local market share and deal in global exports to different parts of the world.

Production Process of MS PLATE



Slabs size of
(1240 x 900 x 115) mm
act as the raw material
for the MS Plate

AUTOMATIC CUTTING MACHINE
is used to prepare the slab



Production Process of MS PLATE

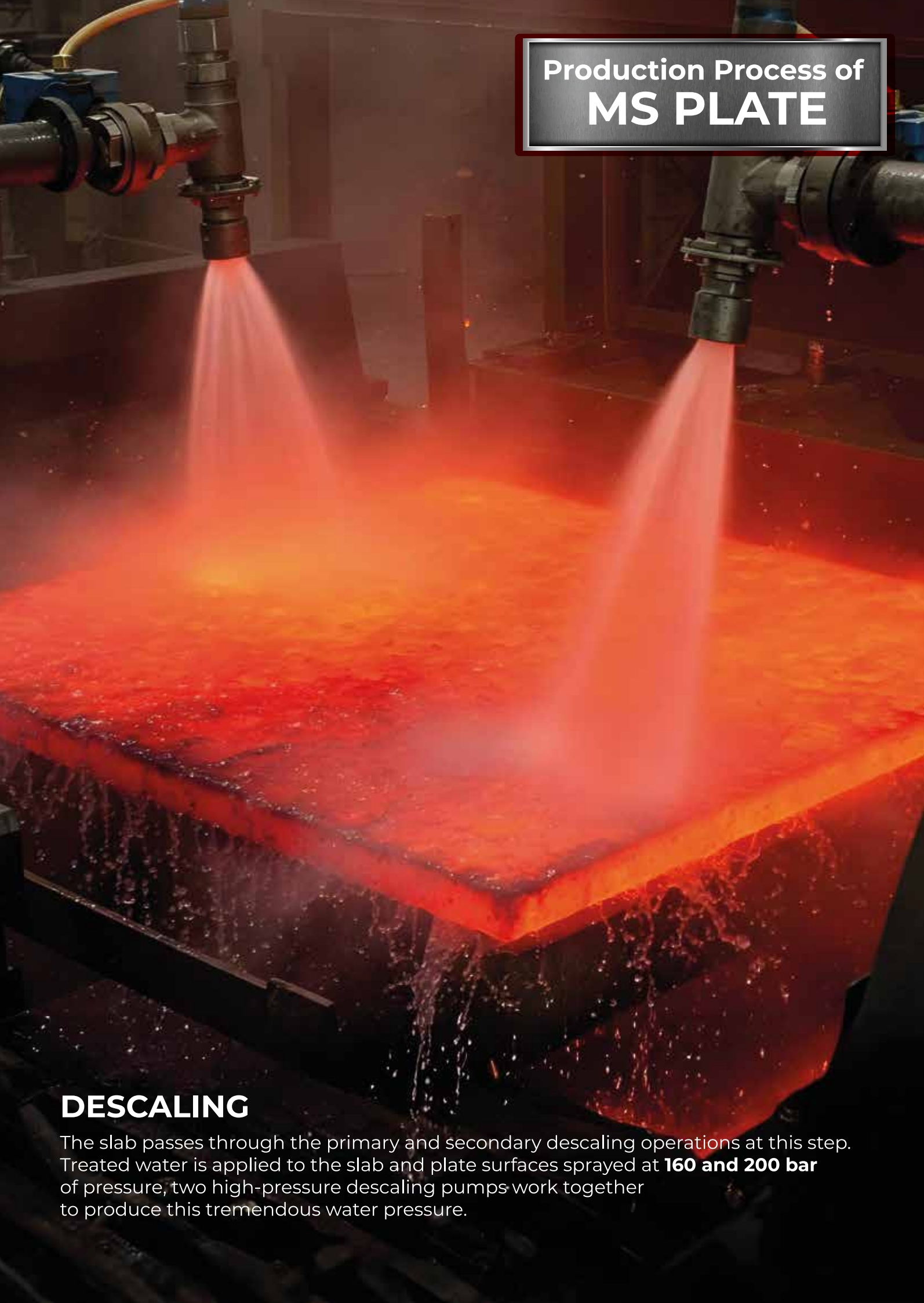




Softening the Slab by the Reheating Furnace

Two re-heating furnaces of latest technology are used to soften the slabs with the extreme temperature of 1350°C.

Production Process of MS PLATE



DESCALING

The slab passes through the primary and secondary descaling operations at this step. Treated water is applied to the slab and plate surfaces sprayed at **160 and 200 bar** of pressure, two high-pressure descaling pumps work together to produce this tremendous water pressure.

Production Process of MS PLATE



ROLLING

The heated softened slab goes into a two high rolling mills, which is powered by **3000 HP DC motor**, where the slabs turn into plates.

Production Process of MS PLATE



CUTTING & PRIMARY SIZING

After rolling we cut the plate by a powerful **Shearing Machine**. We cut the half round shaped head of plate and do primary sizing at this step.



LEVELING

At this step, plate goes into a **leveler machine** to level and get the desired surface of the plate.

Production Process of MS PLATE



TRIMMING

After cooling the plate is trimmed by a Trimming Machine, to get desired width and delicate edges of the plate

FINAL SIZING

This is the final step of the process, where we cut the plate as per our customer demand.



MS Plate
GRADES

MS PLATE

Marine Grade

[DNV NV-A]



MARINE GRADE
(DNV NV-A)

Commercial Grade

[50/A-529]

[40/A-36]



COMMERCIAL GRADE | (50/A-529) (40/A-36)

Uses of MS PLATE



1. Construction Industries:

Hot Rolled MS plates are widely used in the construction industry for their strength, versatility, and ease of fabrication. They provide a reliable foundation for structural components like beams, columns, and frames.

2. Steel Manufacturing and Fabrication:

Hot Rolled MS plates are fundamental in steel manufacturing and fabrication for their consistent quality and excellent machinability. They serve as base material for a wide range of components, from industrial machinery to structural parts.





3. Shipbuilding:

Hot Rolled MS plates are vital in shipbuilding for their high strength, durability, and excellent weldability. They form the core structure of hulls, decks, and bulkheads, ensuring safety and longevity at sea.

4. Heavy Equipment and Machinery:

Hot Rolled MS plates are ideal for heavy equipment and machinery due to their toughness and load-bearing capacity. They ensure structural strength and durability under extreme operational conditions.





5. Storage and Transportation:

Hot Rolled MS plates are essential in storage and transportation for building containers, trailers, and warehouse structures. Their high load-bearing capacity and durability ensure safe handling and long-term performance under heavy use.

Uses of MS PLATE



6. Agricultural Equipment:

Hot Rolled MS plates are commonly used in agricultural equipment for their strength, wear resistance, and ease of fabrication. They provide durable support for machinery parts exposed to rough field conditions.

7. Energy Sector:

Hot Rolled MS plates are essential in the energy sector for constructing power plants, transmission towers, and pipeline infrastructure. Their strength, heat resistance, and weldability ensure long-term performance in demanding environments.





8. Furniture Manufacturing:

Hot Rolled MS plates are used in furniture manufacturing for their strength, smooth surface, and ease of fabrication. They provide a sturdy and modern base for industrial-style tables, racks, and frames.

9. Engineering and Welding:

Hot Rolled MS plates are widely used in engineering and welding for their excellent weldability, formability, and structural integrity. They serve as a reliable base material for fabricating frames, components, and custom structures.





10. Pier Assembly :

Hot Rolled MS plates lay the foundation in building submerged or semi-submerged piers/docks. The plates help build vertical, load-bearing supports, often cylindrical, to transfer the structure's weight to the ground, especially in areas with unstable soil or where a foundation needs to be elevated.

Uses of

MS PLATE

MS PLATE
in Shipbuilding

MARINE GRADE HOT ROLLED MS PLATES ARE SPECIFICALLY DESIGNED FOR SHIPBUILDING AND OTHER OFFSHORE APPLICATIONS, WHERE STRENGTH, DURABILITY, AND WELDABILITY ARE CRITICAL. THESE PLATES UNDERGO SPECIALIZED PRODUCTION AND QUALITY CONTROL PROCESSES, RESULTING IN A TOUGH AND UNIFORM STRUCTURE THAT CAN WITHSTAND THE HARSH CONDITIONS OF MARINE ENVIRONMENTS. THEIR SUPERIOR WELDABILITY AND FORMABILITY MAKE THEM IDEAL FOR CONSTRUCTING HULLS, DECKS, AND INTERNAL STRUCTURES OF SHIPS. MARINE GRADE MS PLATES ARE ALSO TREATED WITH SPECIFIC CHEMICAL COMPOSITIONS TO ENHANCE RESISTANCE AGAINST SALTWATER CORROSION, IMPROVING THE VESSEL'S LONGEVITY AND SAFETY. AS A RESULT, THEY ARE A TRUSTED MATERIAL CHOICE IN BOTH COMMERCIAL AND DEFENSE MARITIME SECTORS.

MARINE GRADE (DNV NV-A)



MADE IN BANGLADESH
RAHIM STEEL MILLS
CO. (PVT) LTD.

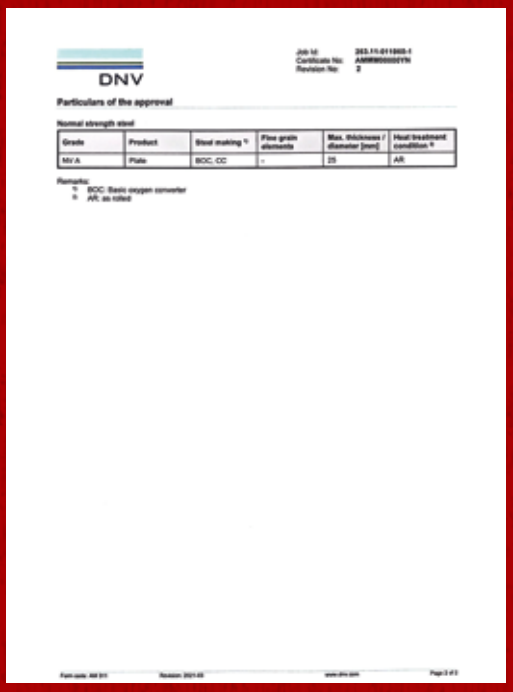
SIZE IN MM
10 X 1220 X 4270
HEAT NUMBER 383
STEEL GRADE NYA

999 042 NYA DATE :

CERTIFICATES

DNV

APPROVAL OF MANUFACTURER CERTIFICATE



DNV

Job Id: 203.11-011800-1
Certificate No: AMMM00000YN
Revision No: 2

Particulars of the approval

Normal strength steel

Grade	Product	Steel making [1]	Fine grain elements	Max. thickness / diameter [mm]	Heat treatment condition [2]
MV A	Plate	BOC, CC	-	25	AR

Remarks:
[1] BOC: Basic oxygen converter
[2] AR: as rolled



DNV

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: AMMM00000YN
Revision No: 2

This is to certify:
That
Rahim Steel Mills Co. (Pvt.) Ltd.
25/10 K.M. Das Lane, Tikatuli, Dhaka 1203, Bangladesh

is an approved manufacturer of
Steelmaking and Rolled Steel Products

in accordance with
DNV rules for classification – Ships

and the following particulars:

Application area	Normal strength steel
Products	Plates
Manufacturing method	Basic oxygen converter, continuous casting
Max. thickness / diameter	25 mm, See page 2
Heat treatment condition	As rolled, See page 2

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules. Materials to be applied to DNV classed object shall fulfil the material requirements in the applicable DNV class rules.

Issued at Hamburg on 2023-08-08
This Certificate is valid until 2029-02-28.
DNV local station: Bangladesh

Approval Engineer: Torben Schilcke

for DNV

Florentin Lohmann
Head of Section

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Form code: AM 011 Revision: 2021-02 www.dnv.com Page 1 of 2



Manufacturers of Alloy Steel Casting, Specialized Steel, High Strength Deformed Bars & Wire Rod in Auto Re-Rolling Mill and Ship Breakers.

রহিম ষ্টীল মিলস্ কোঃ (প্রাঃ) লিমিটেড
Rahim Steel Mills Co. (Pvt) Ltd.

MILL TEST CERTIFICATE

Test Sample: Hot Rolled MS Plate (50 Grade).

Sl. No.	Thickness of Plate (mm)	Nominal Area under test (mm²)	Yield Strength (YS)		Ultimate Tensile Strength (UTS)		%Elongation	Remarks
			psi	MPa	psi	MPa		
1	8	200	54230	374	79895	551	20	OK

Prepared by
Harun-Or-Rashid
Q.C Incharge
Quality Assurance Department
Rahim Steel Mills Co. (Pvt.) Ltd.

Authorized signature
Engr. Kazi Al-Amin Arefin
Head of Plants
Rahim Steel Mills Co. (Pvt.) Ltd.
Rahim Group



Manufacturers of Alloy Steel Casting, Specialized Steel, High Strength Deformed Bars & Wire Rod in Auto Re-Rolling Mill and Ship Breakers.

রহিম ষ্টীল মিলস্ কোঃ (প্রাঃ) লিমিটেড
Rahim Steel Mills Co. (Pvt) Ltd.

MILL TEST CERTIFICATE

Test Sample: **Hot Rolled MS Plate** (Grade –40).

Sl. No.	Thickness of Plate (mm)	Nominal Area under test (mm²)	Yield Strength (YS)		Ultimate Tensile Strength (UTS)		%Elongation
			psi	Mpa	psi	Mpa	
1	8	200	48140	332	72200	498	21

Prepared by
Harun-Or-Rashid
Q.C Incharge
Quality Assurance Department
Rahim Steel Mills Co. (Pvt.) Ltd.

Authorized signature
Engr. Kazi Al-Amin Arefin
Head of Plants
Rahim Steel Mills Co. (Pvt.) Ltd.
Rahim Group

HEAD OFFICE: 25/10, K.M. Das Lane, Tikatuli, Dhaka 1203, Tel: 02-22300394-5, 02-22300446, 02-47112057, Fax: 880-2-7172051, 7172207, E-mail: rahimsm@gmail.com & hmfbd2@gmail.com
FACTORY: Kanchpur, Sonargaon, Narayanganj, Tel: 7617933, 7617922, Mobile: 01711-488098

Symbol of QUALITY

MILL TEST CERTIFICATE

CERTIFICATES

ISO 9001:2015

CERTIFICATE OF REGISTRATION



Certificate of Registration

ISO 9001:2015

This is to Certify that
Quality Management System of

RAHIM STEEL MILLS CO. (PVT.) LIMITED

has been assessed and found to conform to the requirements of

ISO 9001:2015

for the following scope :

MANUFACTURING, SALES AND MARKETING OF STEEL BARS.

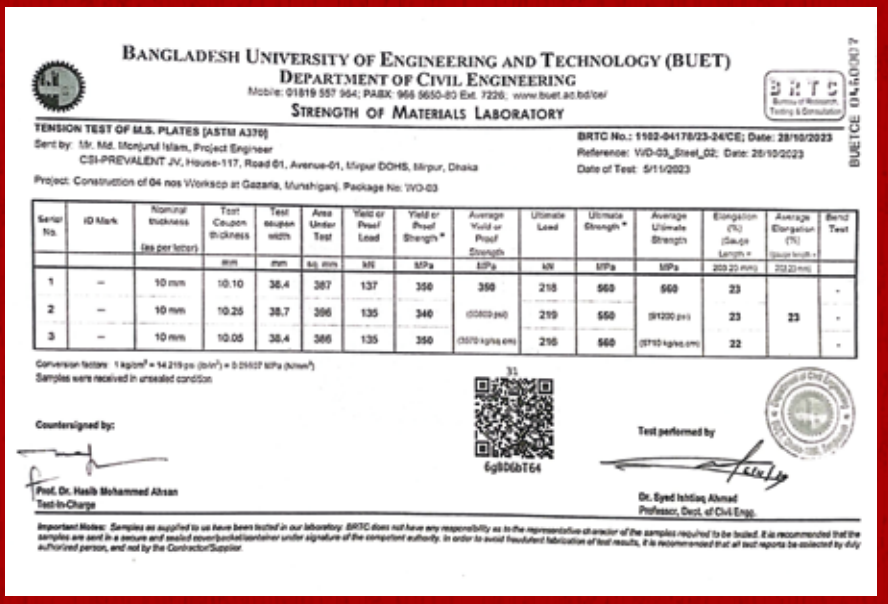
Director

EGAC Accredited QMS Certification CAB-F0127S

IAF

BUET

BUET TEST CERTIFICATES



BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY (BUET)
DEPARTMENT OF CIVIL ENGINEERING
Mobile: 01819 557 964; PABX: 966 5650-60 Ext. 7226; www.buet.ac.bd/ce/
STRENGTH OF MATERIALS LABORATORY

BUETCE 0N-60007

TENSION TEST OF M.S. PLATES [ASTM A370]

Sent by: Mr. Md. Monjurul Islam, Project Engineer
CSI-PREVALENT JV, House-117, Road 01, Avenue-01, Mirpur DOHS, Mirpur, Dhaka

BRTC No.: 1102-04178/23-24/CE; Date: 28/10/2023
Reference: WO-03_Steel_02; Date: 26/10/2023
Date of Test: 5/11/2023

Project: Construction of 04 nos Workscp at Gazaria, Munshiganj. Package No: WO-03

Serial No.	ID Mark	Nominal thickness (as per letter)	Test Coupon thickness	Test coupon width	Area Under Test	Yield or Proof Load	Yield or Proof Strength *	Average Yield or Proof Strength	Ultimate Load	Ultimate Strength *	Average Ultimate Strength	Elongation (%) (Gauge Length = 203.20 mm)	Average Elongation (%) (Gauge length = 203.20 mm)	Bend Test
			mm	mm	sq. mm	kN	MPa	MPa	kN	MPa	MPa			
1	--	10 mm	10.10	38.4	387	137	350	350	215	560	560	23	23	-
2	--	10 mm	10.25	38.7	396	135	340	(03630 psi)	219	550	(81200 psi)	23		-
3	--	10 mm	10.05	38.4	386	135	350	(3570 kg/sq cm)	216	560	(5710 kg/sq cm)	22		-

Conversion factors: 1 kg/cm² = 14.219 psi (lb/in²) = 0.09807 MPa (N/mm²)
Samples were received in unsealed condition

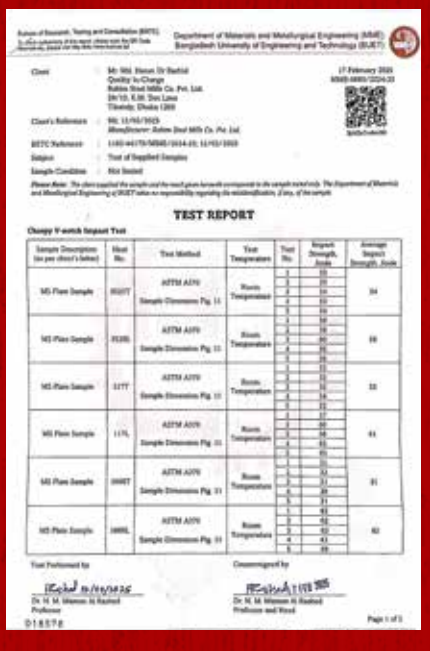
Countersigned by:

Prof. Dr. Hasib Mohammed Ahsan
Test-In-Charge

Test performed by

Dr. Syed Ishtiaq Ahmad
Professor, Dept. of Civil Engg.

Important Notes: Samples as supplied to us have been tested in our laboratory. BRTC does not have any responsibility as to the representative character of the samples required to be tested. It is recommended that the samples are sent in a secure and sealed cover/bucket/container under signature of the competent authority. In order to avoid fraudulent fabrication of test results, it is recommended that all test reports be collected by duly authorized person, and not by the Contractor/Supplier.



Department of Materials and Metallurgical Engineering (MME)
Bangladesh University of Engineering and Technology (BUET)

TEST REPORT

Charpy V-notch Impact Test

Sample Description (as per client's letter)	Heat No.	Test Method	Test Temperature	Test No.	Impact Strength, Joule	Average Impact Strength, Joule
MS Plate Sample	01077	ASTM A370 Sample Dimension: Fig. 11	Room Temperature	1	35	34
				2	33	
				3	34	
MS Plate Sample	01181	ASTM A370 Sample Dimension: Fig. 11	Room Temperature	1	38	38
				2	40	
				3	36	
MS Plate Sample	1177	ASTM A370 Sample Dimension: Fig. 11	Room Temperature	1	33	33
				2	32	
				3	34	
MS Plate Sample	1176	ASTM A370 Sample Dimension: Fig. 11	Room Temperature	1	40	41
				2	42	
				3	40	
MS Plate Sample	00407	ASTM A370 Sample Dimension: Fig. 11	Room Temperature	1	31	31
				2	30	
				3	32	
MS Plate Sample	00408	ASTM A370 Sample Dimension: Fig. 11	Room Temperature	1	43	42
				2	42	
				3	41	

Test Performed by
Dr. M. M. Monsur Al Rashed
Professor

Countersigned by
Dr. M. M. Monsur Al Rashed
Professor and Head

Page 1 of 1



Department of Materials and Metallurgical Engineering (MME)
Bangladesh University of Engineering and Technology (BUET)

Sample Description (as per client's letter)	Heat No.	Test Method	Test Temperature	Test No.	Impact Strength, Joule	Average Impact Strength, Joule
MS Plate Sample	00407	ASTM A370 Sample Dimension: Fig. 11	Room Temperature	1	37	37
				2	36	
				3	38	
MS Plate Sample	00408	ASTM A370 Sample Dimension: Fig. 11	Room Temperature	1	44	43
				2	42	
				3	43	
MS Plate Sample	00407	ASTM A370 Sample Dimension: Fig. 11	Room Temperature	1	35	35
				2	34	
				3	36	
MS Plate Sample	00408	ASTM A370 Sample Dimension: Fig. 11	Room Temperature	1	38	37
				2	36	
				3	37	

Test Performed by
Dr. M. M. Monsur Al Rashed
Professor and Head

Countersigned by
Dr. M. M. Monsur Al Rashed
Professor and Head

SCAN TO SEE LATEST CERTIFICATES

CHEMICAL COMPOSITION AND PHYSICAL PROPERTIES OF MS PLATE

Composition & PROPERTIES

Specification	Grade	C% (Max)	Mn% (Max)	P% (Max)	S% (Max)	Si% (Max)	Al% (Max)	N(ppm) % (Max)	YS (Min) N/mm2	UTS N/mm2	Elongation % GL-200mm (Min)	Application
Marine Grade	DNV NV-A	0.21	2.5xc% (min)	0.035	0.035	0.50	-----	----	235	400-520	16	Ideal for structural works such as Ships, Oil tanker/storage and other construc-tions where dynamic load and weld ability are prime factors
JIS G311	SG225 SG295 SG325 SG365	0.20	0.30(min) 1.0(max) 1.50(max) 1.50	0.040 0.040 0.040 0.040	0.040 0.040 0.040 0.040	----- 0.35 0.55 0.55	-----	----	255 295 325 365	400 440 490 540	28 26 22 20	Suitable for LPG Cylinders.
ASTM	A-36	0.25	1.20	0.040	0.050	0.40	-----	----	250	400 - 500	20	Suitable for ordinary structural fabrication works where dynamic load is not required.
IRS	M-41	0.10	0.25-0.45	0.0752 0.140	0.030	0.28-0.72	Cu-.30.60	---- ----	340 ----	480 ----	22 ----	Suitable for the construction of railway wagons
DIN 17100	qst 37.2 qst 44.2 qst 52.3	0.17 0.21 0.20	---- 1.5	0.05 0.04 0.04	0.05 0.05 0.05	---- ---- 0.65	-----	90 90	235 275 355	340-470 410-510 490-640	26 22 22	Suitable for ordinary structural works where dynamic load is not involved.

Thickness (mm)	≤5	≤10	≤15	≤20	≤25	≤30	≤40	≤50
Elongation (%)	14	16	17	18	19	20	21	22

Composition & PROPERTIES

CHEMICAL COMPOSITION OF MS PLATE

Grade	C (Max) %	Mn %	Si (Max) %	S (Max) %	P (Max) %	CE %
ASTM A-36	0.25	0.50 - 1.20	0.40	0.05	0.05	
ASTM A-529	0.27	1.35 (Max)	0.40	0.05	0.04	0.55
NV A	0.21	2.5XC	0.50	0.035	0.035	0.40

MECHANICAL PROPERTIES OF MS PLATE

Grade	Yield Strength (Min) [MPa]	Tensile Strength (MPa)		Elongation in (200mm) (Min) %
		(Min) [MPa]	(Max) [MPa]	
ASTM A-36	250	400	550	20
ASTM A-529	345	485	690	18
NV A	235	400	520	16

MS Plate WEIGHT TABLE

WEIGHT TABLE OF PLATES 40 GRADE:

Thickness	Weight of (8×4)' Plate Approx	Rft/MT	Cutting Size	Remarks
06 mm	140 Kgs	50-52	As per customer's demand	Without End/Front/Side cuts
07 mm	163 Kgs	42-44	"	"
08 mm	186 Kgs	36-38	"	"
09 mm	210 Kgs	32-33	"	"
10 mm	233 Kgs	30-32	"	"
11 mm	256 Kgs	26-28	"	"
12 mm	280 Kgs	24-26	"	"
16 mm	930 Kgs (full size)	18-19	Full Size/Single Piece	Without End/Front cuts
20 mm	930 Kgs (full size)	15-16	"	"
22 mm	930 Kgs (full size)	13-14	"	"
25 mm	930 Kgs (full size)	12-13	"	"
32 mm	930 Kgs (full size)	9-10	"	"

WEIGHT TABLE OF PLATES 50 GRADE:

Thickness	Weight of (8×4)' Plate Approx	Rft/MT	Cutting Size	Remarks
06 mm	140 Kgs	50-52	As per customer's demand	Without End/Front/Side cuts
07 mm	163 Kgs	42-44	"	"
08 mm	186 Kgs	36-38	"	"
09 mm	210 Kgs	32-33	"	"
10 mm	233 Kgs	30-32	"	"
11 mm	256 Kgs	26-28	"	"
12 mm	280 Kgs	24-26	"	"
16 mm	930 Kgs (full size)	18-19	Full Size/Single Piece	Without End/Front cuts
20 mm	930 Kgs (full size)	15-16	"	"
22 mm	930 Kgs (full size)	13-14	"	"
25 mm	930 Kgs (full size)	12-13	"	"

MS Plate
WEIGHT TABLE

DNV NV-A:

Thickness	Weight of (8×4)' Plate Approx	Rft/MT	Cutting Size	Remarks
06 mm	140 Kgs	50-52	As per customer's demand	Without End/Front/Side cuts
07 mm	163 Kgs	42-44	"	"
08 mm	186 Kgs	36-38	"	"
09 mm	210 Kgs	32-33	"	"
10 mm	233 Kgs	30-32	"	"
11 mm	256 Kgs	26-28	"	"
12 mm	280 Kgs	24-26	"	"
14 mm	930 Kgs (full size)	18-19	Full Size/Single Piece	"



Rahim Steel Mills Co. (Pvt) Ltd.

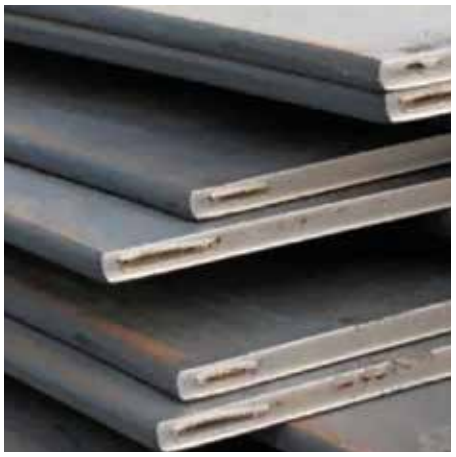
PRODUCT OVERVIEW



RSM B420DWR



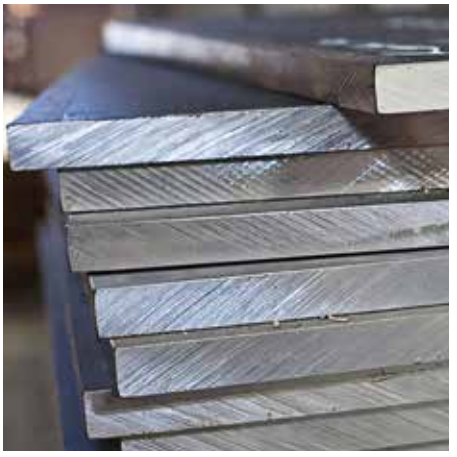
RSM 60 (420)



RSM STEEL PLATE (50 Gr.)



RSM STEEL PLATE (40 Gr.)



RSM STEEL PLATE (GL Gr.)

Rahim Steel Mills Co. (Pvt) Ltd.

PROJECT OVERVIEW



Payra Sea Port



Airport Village Shopping Mall



City Center



Bashundhara Shopping Complex



Brac University



IDB Bhaban



Rangs RK Square



Dhaka Metro Rail Project



Hotel Intercontinental, Dhaka



Mohakhali Flyover



Radisson Blu Water Garden, Dhaka



Suvastu Skyline Avenue



Shanta Pinnacle & Forum



Symbol of
QUALITY

RAHIM STEEL

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