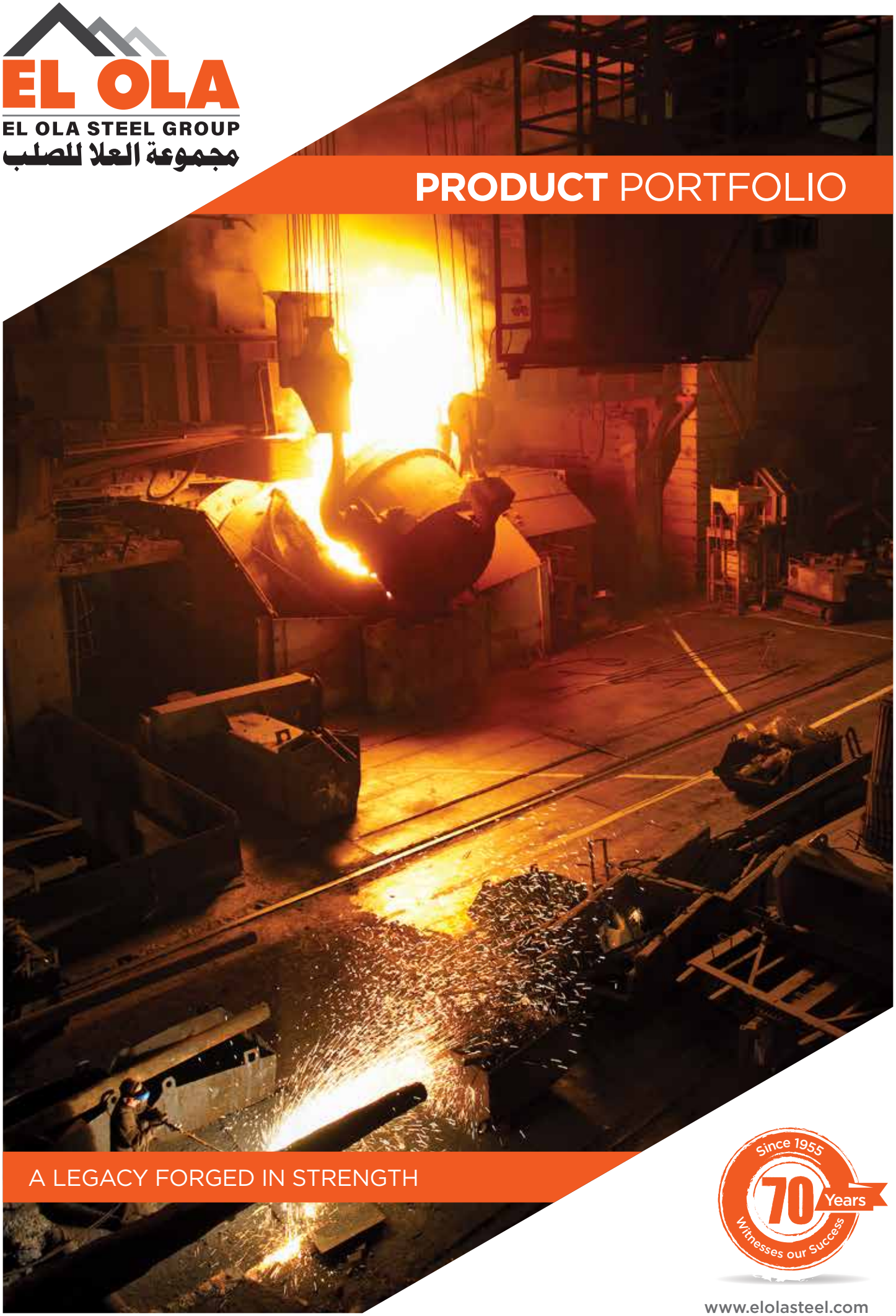
EL OLA

EL OLA STEEL GROUP

مجموعة العلا للصلب

PRODUCT PORTFOLIO



A LEGACY FORGED IN STRENGTH

Since 1955

70 Years

Witnesses our Success

www.elolasteel.com

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El Ola Steel A Legacy Forged in Strength

With over **70 years** of expertise in the steel structure industry, **El Ola Steel** has grown from humble beginnings into Egypt's **leading reference for steel manufacturing**—trusted by customers and stakeholders alike for its reliability, innovation, and commitment to quality.

Our Journey of Growth and Leadership

1955

Founded in 1955 as a small trading company with just

- 01 Warehouses
- 26 Vehicles
- 60 Employees

1970

Operations scaled up with

- 01 Warehouses
- 45 Vehicles
- 80 Employees

1985

Infrastructure doubled
Fleet & workforce grew

- 02 Warehouses
- 60 Vehicles
- 250 Employees

2000

A major milestone with the launch of our first manufacturing facility
boosting operations to

- 02 Warehouses
- 135 Vehicles
- 850 Employees
- 01 Factory

2016

The opening of the second factory marked a new era with

- 03 Warehouses
- 220 Vehicles
- 1,950 Employees
- 02 Factories

2017 2019

The third factory came online, increasing capacity and solidifying El Ola's leadership with

- 04 Warehouses
- 403 Vehicles
- 3,000 Employees
- 03 Factories

2025

Fully Integrated Solutions
ISO 9001 Certified

Today, El Ola Steel operates three specialized factories:

- **Steel Structures Plant**
  Offering Egypt's **widest range of structural steel solutions**, supporting national and regional infrastructure and industrial projects.
- **Flat Steel Production Plant**
  Serving critical sectors with precision-engineered flat steel products.
- **Lattice Towers Plant**
  Dedicated to producing lattice towers essential for communication and power transmission networks.

OUR COMMITMENT

El Ola Steel continues to **set industry benchmarks**, evolve with cutting-edge technology, and maintain the **trust built over seven decades**. Our story is one of perseverance, innovation, and national pride—shaping the future of steel manufacturing in Egypt and beyond.

Our Product Range

Engineered for Excellence

At El Ola Steel, our manufacturing capabilities span across a diverse and high-performance range of steel products tailored to meet the demands of modern infrastructure, construction, and industrial applications. We take pride in offering precision - engineered solutions that combine **durability, functionality, and structural integrity**.

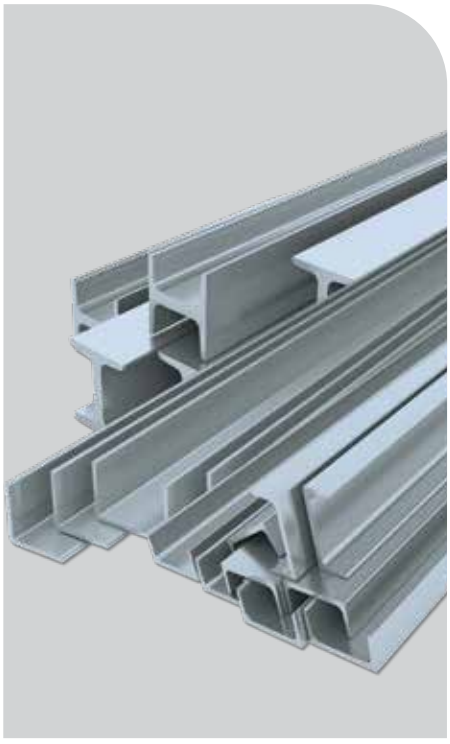
1. Structural Steel Beams & Angles

Essential for construction and heavy engineering, our structural steel sections provide the backbone for strong and stable frameworks across a variety of projects—from residential and commercial buildings to bridges and industrial complexes.

Our range includes:

- **Equal Leg Angles**
- **IPE & IPE-AA Beams**
- **U Channel**

These components are manufactured to the highest quality standards, ensuring **reliability under load, resistance to deformation**, and long-term performance.



2. Flat Steel Production

Our advanced flat steel production lines deliver precision and consistency across all applications. We operate **three specialized lines** to meet the varying needs of the market:

- **Cut-to-Length Lines** – Delivering precise, sheet-ready steel products.
- **Slitting Lines (Slitter)** – Providing customized widths for flexible industrial use.
- **Cold Rolling Mill** – Producing high-strength steel with excellent surface finish and dimensional control.

Our flat steel offerings include:

- **Full Hard Cold Rolled Flat Steel (Coil)**
- **Cold Rolled Flat Steel (Coil)**

These products serve **construction, automotive, appliance manufacturing, and engineering sectors**, where high-quality flat steel is essential for performance and efficiency.

3. Lattice Towers

El Ola Steel is a **trusted manufacturer of lattice towers**, known for their robustness and efficiency in the most demanding environments.

Designed with a lattice-like framework, these towers are engineered for:

- **Power Transmission Networks**
- **Telecommunication Towers**
- **Wind Energy Structures**

They combine **lightweight construction with high load-bearing capacity**, making them ideal for large-scale infrastructure projects across Egypt and the region.

Precision. Performance. Partnership.

Our product lines are more than just steel—they are solutions.

Backed by decades of experience and a commitment to continuous development, El Ola Steel remains **at the forefront of steel manufacturing in Egypt**, offering a product range that supports the nation's most ambitious infrastructure and industrial ventures.

For more details about each product check the product brochure.

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1. STRUCTURAL STEEL
STEEL SOLUTIONS FOR MODERN CONSTRUCTION

1. Equal Angles

Description:

Equal angles are L-shaped steel sections with two legs of equal length. They are versatile and widely used in construction and manufacturing.

Applications and Uses:

- **Support Structures:** Ideal for framing and bracing in buildings.
- **Fabrication:** Commonly used in the manufacturing of machinery and equipment.
- **Architectural Elements:** Used in decorative features and supports for signs.

Product Range

According to European and British Standard			Chemical & Mechanical BS EN 10025-2:2019 Dimensions BS EN 10056-1:2017 Tolerances BS EN 10056-2:1993	
Size (mm)	Thickness (mm)	Weight KG/1M	Weight KG/6M	Weight KG/12M
Angle 25X25	2.50	0.93	5.59	11.19
	3.00	1.12	6.72	13.44
Angle 30X30	2.20	1.00	6.00	12.00
	2.50	1.13	6.77	13.54
	2.70	1.21	7.29	14.57
	3.00	1.36	8.16	16.32
	3.50	1.55	9.31	18.63
	4.00	1.78	10.68	21.36
Angle 35X35	2.20	1.17	7.02	14.04
	2.50	1.32	795	15.90
	2.80	1.48	8.86	17.72
	3.00	1.60	9.60	19.20
	3.50	1.85	11.10	22.20
	4.00	2.09	12.54	25.08
Angle 40X40	2.20	1.34	8.06	16.12
	2.80	1.70	10.18	20.36
	3.00	1.84	11.04	22.08
	3.50	2.10	12.61	25.22
	3.80	2.27	13.64	27.28
	4.00	2.42	14.52	29.04
	4.80	2.83	17.00	34.00
	5.00	2.97	17.82	35.64
	6.00	3.52	21.12	42.24
Angle 50X50	2.80	2.14	12.82	25.64
	3.00	2.33	13.98	27.96
	3.50	2.65	15.91	31.82
	3.80	2.87	17.22	34.44
	4.00	3.06	18.36	36.72
	4.50	3.37	20.24	40.48
	5.00	3.77	22.62	45.24
	5.50	4.08	24.48	48.96
	6.00	4.47	26.82	53.64
Angle 60X60	5.00	4.57	27.42	54.84
	6.00	5.42	32.52	65.04
Angle 70X70	5.00	5.37	32.22	64.44
	6.00	6.38	38.28	76.56
	7.00	7.38	44.28	88.56
Angle 75X75	5.00	5.76	34.56	69.12
	6.00	6.85	41.10	82.20
	8.00	7.93	47.58	95.16
Angle 80X80	6.00	7.34	44.04	88.08
	7.00	8.49	50.94	101.88
	8.00	9.63	57.78	115.56
Angle 90X90	8.00	10.90	65.40	130.80
	9.00	12.20	73.20	146.40
Angle 100X100	8.00	12.20	73.20	146.40
	9.00	13.60	81.60	136.20
	10.00	15.00	90.00	180.00
Angle 120X120	10.00	18.20	109.20	218.40
	11.00	19.90	119.40	238.80
	12.00	21.60	129.60	259.20

2. U Channels

Description:

U channels are steel sections that have a U-shaped cross-section. They provide excellent strength and stability, making them a preferred choice for various applications.

Applications and Uses:

- **Structural Support:** Used in beams and frames for added strength in construction.
- **Railings and Guards:** Commonly utilized in safety barriers and fencing.
- **Signage:** Frequently used as supports for outdoor and indoor signs.

Product Range

According to European and British Standard				Chemical & Mechanical BS EN 10025-2:2019 Dimensions BS EN 10365:2017 Tolerances BS EN 10279:2000			
Size	h (mm)	s (mm)	b (mm)	t (mm)	Weight Kg/1M	Weight Kg/6M	Weight Kg/12M
UPN 40	40.00	5.00	20.00	5.50	2.87	17.22	34.44
UPN 50	50.00	5.00	25.00	6.00	3.86	23.16	46.32
UPN 50	50.00	5.00	38.00	7.00	5.60	33.60	67.20
UPN 65	65.00	5.50	42.00	7.50	7.10	42.60	85.20
UPN 80	80.00	6.00	45.00	8.00	8.60	51.60	103.20
UPN 100	100.00	6.00	50.00	8.50	10.60	63.60	127.20
UPN 120	120.00	7.00	55.00	9.00	13.40	80.40	160.80
UPN 140	140.00	7.00	60.00	10.00	16.00	96.00	192.00
UPN 160	160.00	7.50	65.00	10.50	18.80	112.80	225.60
UPN 180	180.00	8.00	70.00	11.00	22.00	132.00	264.00
UPN 200	200.00	8.50	75.00	11.50	25.30	151.80	303.60

According to EL OLA Standard							
Size	h (mm)	s (mm)	b (mm)	t (mm)	Weight Kg/1M	Weight Kg/6M	Weight Kg/12M
UPE 80	80.00	4.00	42.00	5.50	6.10	36.60	73.20
UPE 100	100.00	4.50	45.00	6.50	7.67	46.02	92.04
UPE 120	120.00	4.50	47.00	7.00	8.91	53.46	106.92
UPE 140	140.00	5.50	57.00	8.50	14.00	84.00	168.00

3. I Beams

Description:

I beams are characterized by their I-shaped cross-section. They are known for their high strength-to-weight ratio and are essential in construction.

Applications and Uses:

- **Building Frameworks:** Used extensively in the construction of skyscrapers and bridges.
- **Industrial Applications:** Ideal for heavy-duty support in warehouses and factories.
- **Infrastructure Projects:** Commonly found in roadways and railway bridges for structural integrity.

Product Range

According to European and British Standard					Chemical & Mechanical BS EN 10025-2:2019 Dimensions BS EN 10365:2017 Tolerances BS EN 10034:1993			
Designation	Size	h (mm)	s (mm)	b (mm)	t (mm)	Weight Kg/1M	Weight Kg/6M	Weight Kg/12M
IPE 80	80X46	80.00	3.80	46.00	5.20	6.00	36.00	72.00
IPE 100	100X55	100.00	4.10	55.00	5.70	8.10	48.60	97.20
IPE 120	120X64	120.00	4.40	64.00	6.30	10.40	62.40	124.80
IPE 140	140X73	140.00	4.70	73.00	6.90	12.90	77.40	154.80
IPE 160	160X82	160.00	5.00	82.00	7.40	15.80	94.80	189.60
IPE 180	180X91	180.00	5.30	91.00	8.00	18.80	112.80	225.60
IPE 200	200X100	200.00	5.60	100.00	8.50	22.40	134.40	268.80
IPE-AA 80	78X46	78.00	3.20	46.00	4.20	4.90	29.40	58.80
IPE-AA 100	97.6X55	97.60	3.60	55.00	4.50	6.70	40.20	80.40
IPE-AA 120	117X64	117.00	3.80	64.00	4.80	8.00	48.00	96.00
IPE-AA 140	136.6X73	136.60	3.80	73.00	5.20	10.10	60.60	121.20

Chemical Composition of Structural Steel Sections:

Product Grade	Chemical Composition						
	C%	Si%	Mn%	P%	S%	Cu%	CEV%
	Max.	Max.	Max.	Max.	Max.	Max.	Max.
S235JR +AR	0.19	–	1.5	0.045	0.045	0.6	-
S275JR +AR	0.24	–	1.6	0.045	0.045	0.6	-
S355JR +AR	0.27	0.6	1.7	0.045	0.045	0.6	-

Mechanical Properties of Structural Steel Sections:

Product Grade	Mechanical Properties			
	Yield Strength	Tensile Strength		Elong. %
	Min.	Min.	Max.	Min.
S235JR +AR	235	360	510	26
S275JR +AR	275	410	560	23
S355JR +AR	355	470	630	22

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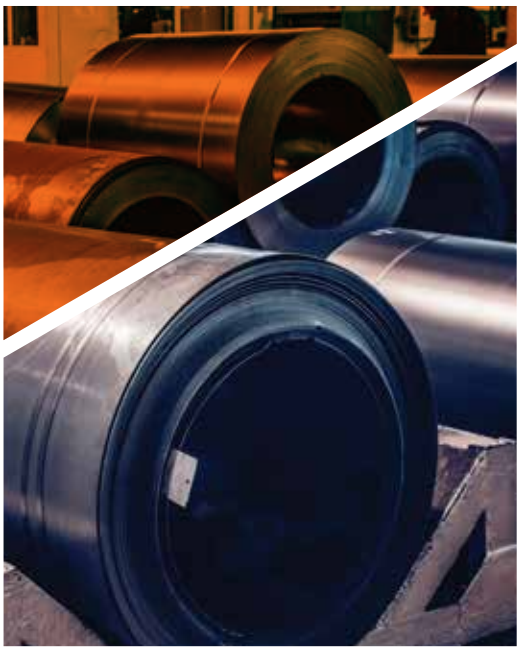
2. FLAT STEEL
STRENGTH IN EVERY STRUCTURE

HOT ROLLED STEEL

Description:

Hot rolled steel is produced by rolling steel at high temperatures, which allows for greater flexibility and shaping. This process results in a rougher surface finish but is suitable for large-scale projects.



Applications:

- **Construction:**
  Widely used for beams, channels, and plates in building frameworks due to its strength.
- **Manufacturing:**
  Common in producing heavy machinery and equipment parts.
- **Oil and Gas Industry:**
  Utilized in pipelines and structural supports due to its durability.
- **Railway Industry:**
  Employed in the fabrication of rail tracks and rolling stock components.

COLD ROLLED STEEL

Description:

Cold rolling is a manufacturing process employed to shape and enhance the properties of steel sheets and coils.

Unlike hot rolling, which involves heating the metal to high temperatures before passing it through rollers, cold rolling is performed at room temperature or slightly below the recrystallization temperature.

This process of compression and elongation refines the material's structure and yields a wide range of benefits, making it an indispensable technique in the steel industry.

Applications:

- **Automotive Industry:**
  Used in manufacturing body panels, frames, and various components.
- **Construction:**
  Ideal for structural applications, including beams, columns, and other load-bearing elements.
- **Home Appliances:**
  Commonly used in the production of washers, dryers, and refrigerators due to its aesthetic finish.
- **Furniture Manufacturing:**
  Used for making modern furniture frames and components.

Flat Steel Factory Services

1. Cold Rolling Mill

In our cold rolling mill, we can reduce the thickness of steel from 3 mm to 0.3 mm and adjust the width from 600 mm to 1250 mm.

2. Cut-to-Length Lines

Our cut-to-length lines are designed to process steel sheets with thicknesses ranging from 6 mm to 12 mm, widths from 300 mm to 2000 mm, and lengths from 1 m to 12 m, ensuring they meet the expectations and needs of our customers.

Maximum belt width	1,500	mm
Thicknesses	6 – 12	mm
Maximum format length	12	m
Achievable flatness	16	I-u
Length tolerance	± 10	mm
Maximum coil weight	30	Tons

3. Slitting Lines (Slitter)

Our slitting lines are engineered to guarantee the best strip surface quality and the highest production capacity. These lines are capable of performing decoiling, slitting, and recoiling operations, converting coil steel into any required width. They are mainly used for processing coils of hot-rolled carbon steel, silicon steel, and various other metal materials with surface spreading. This line can be adjusted for recoiling or dividing work to meet customer demands.

Material	HRC, CRC, GI, PPGI 90% for St37 and remaining for St 52 and stainless steel 304
Coil Weight	Max. 25 Ton
Coil ID	508 - 600 mm & 762 mm (padded)
Coil OD	800 mm - 2000 mm
Coil Width	300 mm - 1300 mm
Material Thickness	0. 2 - 3.0 mm Low carbon steel
	0.2 - 1.5 mm SS304
	0.2 - 3.0 mm St37
	0.2 - 2.0 mm St52
Min. Strip Width	20 mm
Recoil ID	300mm – 508mm
Recoil OD	Max. 2000mm
Recoil Weight	Max. 25 Ton & 7 Ton

Standards & Specs:

- EN 10130 for quality and shape
- EN 10131 for dimensions tolerance

Mechanical properties of cold rolling according to EN 10130

Grade	Max. Y. S (N/mm^2)	U.T. S (N/mm^2)	(Min.) ε %	(Min.) R-value
DC01	280	270 - 410	28	--
DC03	240	270 - 370	34	1.3
DC04	210	270 - 350	38	1.6
DC05	180	270 - 330	40	1.9
DC06	180	270 - 350	38	2.1

Surface finish according to EN 10130

Surface finish	Symbol	Roughness
Bright	b	Ra ≤ 0.4 µm
Semi - bright	g	Ra ≤ 0.9 µm
Normal	m	0.6 µm< Ra ≤ 1.9 µm
Rough	r	Ra > 1.6 µm

Tolerances on thickness according to EN 10131

Normal Thickness Range	Normal Tolerance (mm)		Special Tolerance (mm)	
	≤1200	>1200 to ≤1500	≤1200	>1200 to ≤1500
= 3.35 to 0.40	± 0.04	± 0.05	± 0.025	± 0.030
>0.40 to ≤0.60	± 0.04	± 0.05	± 0.030	± 0.035
>0.60 to ≤0.80	± 0.05	± 0.06	± 0.035	± 0.040
>0.80 to ≤1.00	± 0.06	± 0.07	± 0.040	± 0.050
>1.00 to ≤1.20	± 0.07	± 0.08	± 0.050	± 0.060
>1.20 to ≤1.60	± 0.09	± 0.11	± 0.060	± 0.070
>1.60 to ≤2.00	± 0.12	± 0.13	± 0.070	± 0.080
>2.00 to ≤2.50	± 0.14	± 0.15	± 0.100	± 0.110
>2.50 to ≤3.00	± 0.17	± 0.18	± 0.120	± 0.130

Tolerances on width of sheet and wide strip according to EN 10131

Nominal width Normal (w)	Normal tolerances		Special tolerances (S)	
	Under	Over	Under	Over
w ≤ 1200	0	+4	0	+2
1200 < w ≤ 1500	0	+5	0	+2
w > 1500	0	+6	0	+3

Tolerances on slit wide strip of width less than 600 mm according to EN 10131

Tolerance Class	Nominal Thickness (t)	Nominal Width							
		w< 125		125 ≤ w < 250		250 ≤ w <400		400 ≤ w < 600	
		Under	Over	Under	Over	Under	Over	Under	Over
Normal	t < 0.6	0	0.4	0	0.5	0	0.7	0	1
	0.6 ≤ t < 1	0	0.5	0	0.6	0	0.9	0	1.2
	1 ≤ t < 2	0	0.6	0	0.8	0	1.1	0	1.4
	2 ≤ t < 3	0	0.7	0	1	0	1.3	0	1.6
Special (S)	t < 0.6	0	0.2	0	0.2	0	0.3	0	0.5
	0.6 ≤ t < 1	0	0.2	0	0.3	0	0.4	0	0.6
	1 ≤ t < 2	0	0.3	0	0.4	0	0.5	0	0.7
	2 ≤ t < 3	0	0.4	0	0.5	0	0.6	0	0.8

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3. LATTICE TOWERS
STRENGTH IN EVERY STRUCTURE

Lattice towers stand as a testament to engineering excellence, offering efficient and reliable solutions for a wide range of infrastructure needs. These towers, characterized by their lattice-like framework, are designed to withstand demanding conditions while providing optimal support for various applications such as power transmission, telecommunications, and wind energy. The lattice structure offers exceptional strength-to-weight ratio, enabling the towers to handle heavy loads and withstand extreme weather conditions with ease. With their modular design, lattice towers are cost-effective, easily transportable, and quick to assemble on-site.
They provide a versatile and scalable solution, allowing for height adjustments and future expansions. Lattice towers are the backbone of modern infrastructure, ensuring the efficient and reliable delivery of critical services across the globe.

LATTICE
COMMUNICATION TOWERS

Description:

Lattice communication towers are designed for telecommunication purposes. Constructed from high-strength steel, these towers provide stability and support for antennas and communication equipment.

Applications and Uses:

- **Telecommunication:**
  Ideal for cellular networks, broadcasting, and radio communications.
- **Data Transmission:**
  Supports microwave links and other data transmission technologies.
- **Emergency Services:**
  Used by public safety organizations for reliable communication.

LATTICE
TRANSMISSION TOWERS

Description:

These towers are built to support high-voltage transmission lines. Their triangular lattice design offers strength and stability, allowing for efficient power distribution.

Applications and Uses:

- **Electricity Transmission:**
  Essential for overhead power lines and energy distribution.
- **Infrastructure Support:**
  Used in substations and electrical grids.
- **Renewable Energy:**
  Supports wind turbines and solar panel installations.

LATTICE
OBSERVATION TOWERS

Description:

Lattice observation towers provide a safe and sturdy platform for observation and monitoring. These towers are designed for public access and scenic views.

Applications and Uses:

- **Tourism:**
  Used in parks, reserves, and scenic locations for sightseeing.
- **Wildlife Observation:**
  Ideal for bird watching and monitoring wildlife habitats.
- **Research Facilities:**
  Supports environmental research and data collection.

LATTICE
LIGHTING TOWERS

Description:

Designed for outdoor lighting, these towers feature a lattice structure to support high-intensity lighting fixtures.

Applications and Uses:

- **Sports Facilities:**
  Commonly used in stadiums and sports complexes.
- **Public Spaces:**
  Illuminates parks, parking lots, and event venues.
- **Construction Sites:**
  Provides temporary lighting solutions for safety and visibility.

Product Range

Tower Parts	Suspension Tower	Tension Tower 30 Degree	Tension Tower 60 Degree	Crossing Tower
Main Angle	50x50x5	70x70x7	80X80X8	50x50x5
Reinforcement Angle	25x25x3	40x40x4	40x40x4	25x25x3
Top Reinforcement Angle	50x50x5	50x50x5	50x50x5	50x50x5
Reinforcement Angle Cantilever (120m under top Reinforcement Angle)	70x70x7	70x70x7	70x70x7	70x70x7
Reinforcement Flat Bar Angle (400m under Cantilever)	50x50x5	70x70x7	70x70x7	50x50x5
Reinforcement Angle of Basement	50x50x5	70x70x7	70x70x7	----
Top Cantilever	100x50x5 height 310	100x50x4 height 320	100x50x4 height 360	100x50x5 height 400
Top Lattice Reinforcement of Cantilever by Welding	50x50x5 height 50	50x50x5 height 50	50x50x5 height 50	50x50x5 height 50
Top Lattice Reinforcement of Cantilever by Bolt Tighten	50x50x5 height 70	50x50x5 height 70	50x50x5 height 70	50x50x5 height 70
Cantilever UPN Angle	100x50x5	100x50x5	100x50x5	100x50x5
Reinforcement Angle from Top to end of Basement Edge	50x50x5 each 3 M	70x70x7 each 3 M	70x70x7 each 3 M	50x50x5 each 3 M
Flat Bar Holding Cantilever	50x10	50x10	50x10	50x10
Joints Angles (count 8)	----	----	----	----
Gross Weight before Hot Deep Galvanized including Cantilever height 1.6 meter	325	617	729	384
Gross Weight before Hot Deep Galvanized including Cantilever height 2 meter	329	621	733	388

PRODUCT PORTFOLIO

A LEGACY FORGED IN STRENGTH

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يشهدوا لنا

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