# Address for Exceptional Alternatives

Seçkin Metal Product Catalog





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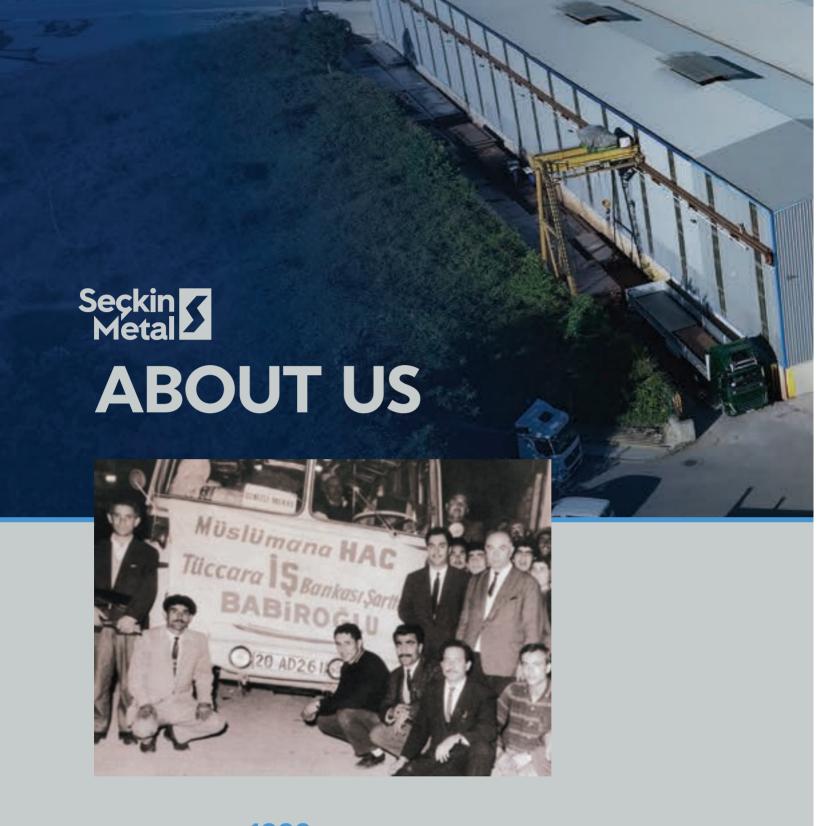
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## SEÇKIN METAL PRODUCT CATALOG 5

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Our journey began in 1993 in Denizli, Turkey, when we established Seçkin Nakliyat and started providing transportation services to leading industry players. In 2010, we embarked on a new chapter, expanding our operations into the steel industry with the goal of becoming a leading provider of exceptional alternatives. Today, as Seçkin Metal, we serve a wide range of sectors.

Our operations commenced with procuring materials from domestic manufacturers, utilizing our 1100 m² indoor warehouse in Gebze-Kocaeli. In 2011, we expanded our reach into the global market by importing 3.1-certified steel plates, ranging from 6 to 400 mm in thickness, from countries including South Korea, Germany, Italy, Ukraine, Romania, Egypt, China, and Bulgaria.



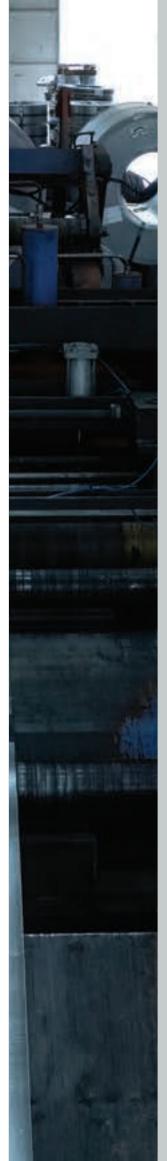
In 2013, Seçkin Metal's Sales Department relocated to Dilovası, Kocaeli, where we acquired a 2000 m² enclosed warehouse. In 2024, we continued our operations by incorporating a 4500 m² capacity warehouse in Dilovası into our facilities.

In the second half of 2024, we established a warehouse in Dilovasi, Kocaeli, and started offering alternative services to our exporting customers. With the Inward Processing Authorization Certificate (IPAC) added to our company, we began supplying materials to our customers without nationalization.

As Seçkin Metal, we aim to support our exporting customers, particularly those contributing to the national capital, by providing ready-made stock for mass production, thus facilitating their production and export processes. We achieve this by shaping steel to high standards and offering comprehensive metal trade and logistics services within the framework of societal values and ethical principles.

Among the companies with the widest product range in the sheet metal sector, we continue to be the address for Seçkin Alternatives by combining our sustainable service approach with our sheet metal products of various origins, dimensions, and qualities, which are periodically added to our Kocaeli Dilovası and Zonguldak Ereğli depot stocks.





## PRODUCT GROUPS

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\* 6 - 400 mm

## **Steel Plate Group**

S235 JR / S235 JRO / S275 / S355 / S355 JR / S355 J2+N / S355 J2C+N / S355JO+N

\*Certified to 3.1 and S2, E2 standards

Hot Rolled Steel Plate is one of the most preferred steel products in terms of usage. Slabs, which are rectangular or square semi-finished products obtained by continuously casting and solidifying liquid steel, are used as the starting material. Through hot rolling in mills at temperatures of at least 1700 °F, sheet metals of various thicknesses and dimensions are produced. These metal products, suitable for welding, are widely used due to their resistance to wear and their suitability for cold forming.

#### Areas of use

Machinery
Manufacturers
Construction
Equipment
Manufacturers
Hydraulic Press
Manufacturers
Automotive Industry
Train Wagon
Manufacturers
Shipbuilding Industry



\* 4 - 30 mm

## **Ship Plate Group**

Grade A / B / D / E / AH / EH / DH / LRA-BVA-DNV-AH36-DH36-EH36

Ships are constructed entirely from steel, making it the primary raw material for shipbuilders. Every component of a vessel, from its keel to its superstructure, is fabricated from specialized shipbuilding steels. Chemically, shipbuilding steels are quite similar to commercial-grade steels. For instance, the carbon content of Grade A shipbuilding steel is approximately 0.21%, comparable to that of ST 37 steel. However, shipbuilding steels typically exhibit higher manganese content compared to commercial-grade steels.

One of the primary reasons shipbuilding yards utilize steel plates is their **durability**. Before assembly, shipbuilding steels undergo surface preparation and painting, a process commonly referred to as '**sandblasting and painting**'. In this process, steel shot is employed to achieve a clean and smooth surface. Following the shot blasting, an epoxy primer is applied.

Sandblasting significantly extends the lifespan of steel components by slowing down the oxidation process. While the tensile strength of the steel remains unchanged, the sandblasted surface provides an ideal substrate for coatings, enhancing corrosion resistance. Although galvanization is another method to prolong steel's life, its higher cost compared to sandblasting makes the latter a more common choice in shipbuilding.









#### \* 3 - 20 mm

## **S700 MC**

**S700 MC** is a hot-rolled structural steel designed for cold forming, offering a minimum yield strength of 700 MPa for stronger and lighter structures. Produced in accordance with or exceeding EN 10149-2, S700MC is typically used for components and parts in demanding load-bearing structures. It is available in coils, slit coils, or cut sheets and is commonly employed in applications requiring high flexibility, high impact toughness, and mechanical cutting in cold conditions.

#### **S700 MC Applications:**

**Transportation:** Used in the bodies and chassis of trucks, buses, and trains.

Energy: Used in energy production facilities such as wind turbines and power plants.

Agriculture: Used in agricultural equipment and buildings.



\* 4 - 50 mm

## NM-450 Wear-Resistant Plate

**NM-450 Wear-resistant Steel**, boasting a hardness of 450 HBW, is engineered to provide exceptional wear resistance and extended service life. It is commonly used in structures and components subjected to abrasive conditions. Available in thicknesses ranging from 4 to 80 mm, NM-450 steel exhibits outstanding performance in applications such as concrete mixers, significantly enhancing their lifespan. Similarly, in equipment operating under high-wear conditions, like woodworking machinery, NM-450's superior hardness contributes to increased durability and longevity.

In recent years, technological advancements have significantly expanded the applications of NM-450. Abrasion is a major concern across various industries, and NM-450 is an ideal solution for mitigating this issue. Some examples of machinery and equipment utilizing NM-450 include concrete mixers, rock crushers, snow blowers, roll-on/roll-off containers, excavator and front loader buckets, grapples, shears, garbage trucks, dump truck bodies, concrete drums, asphalt rollers, potato harvesters, recycling equipment, crushers, and chutes.

The industries where NM-450 is not utilized are quite limited, as abrasion is a significant problem in many industries, and NM-450 provides an effective solution to overcome these challenges.



\* 1.5 - 4 mm

## Magnelis / Posmac

**Magnelis Coating – EN 10327:** Magnelis is a durable metallic steel coating that provides excellent long-term surface protection against wear and tear in various applications. It is a low-carbon steel product coated on both sides with a zinc-aluminum-magnesium alloy.

As Seçkin Metal, with our vision to continuously improve the services we offer our customers, we have added Posmac and ZM 310 products featuring innovative Magnelis coating technology to our product range, specifically for use in ground-mounted solar installation systems in the energy sector. Magnelis coating aligns perfectly with your sustainable production processes, offering significant advantages compared to traditional galvanizing coatings.





Key Features of Magnelis Coating:

**Dense Protection:** Magnelis offers a denser coating compared to traditional galvanized coatings, providing an additional layer of protection against external elements and significantly extending the lifespan of steel structures.

**Self-Healing Properties:** Magnelis effectively addresses red rust issues that may occur at profile edges and holes thanks to its self-healing properties. The dense coating isolates the damaged areas, allowing the coating to repair itself and maintain protection.

**Superior Abrasion Resistance:** Salt spray tests comparing Magnelis to hot-dip galvanized coatings of the same thickness demonstrate that Magnelis corrodes significantly less. This proves the superior performance of Magnelis in harsh corrosive environments.

**Aesthetic Appearance:** Magnelis kaplaması, çelik levhaların üzerine homojen bir şekilde uygulandığından estetik bir görünüm sunar, bu da yapısal ve dekoratif uygulamalar için idealdir.

**Diverse Applications:** Magnelis finds applications in a wide range of industries, from construction and energy to automotive and agriculture. Its durability and versatility make it a preferred choice.





# \* 1,5 - 10 mm S355 MC

(Pickled&Oiled / Dry)

**S355 MC** is a high-strength, low-alloy steel grade. It finds extensive application in various industries such as construction, automotive, and mechanical engineering. The most distinctive feature of S355 MC is its **high tensile strength**. Characterized by a tensile strength of **355 megapascals** (MPa), this steel allows for lighter and thinner sections when used in structural components. This high strength ensures that structures are more reliable and durable.

Additionally, S355 MC exhibits **excellent formability** and can be processed through cold forming. This characteristic facilitates the production of various shapes and complex geometries, optimizing manufacturing processes.

In industrial applications, S355 MC is found in automotive chassis and structural components, construction bridges and buildings, machinery equipment parts, and load-bearing elements. This steel grade is preferred due to its high strength, good weldability, and excellent formability.



+ 1,5 - 10 mm

## S420 and S460 MC

**S420 MC steel plate** is typically used for high-yield, cold-forming applications. S460 MC steels, in particular, possess **high strength** values due to their fine-grained structure, making them suitable for demanding applications such as offshore structures. Both S420 MC and S460 MC steels are high-strength and durable materials, making them popular choices for various applications.

In recent years, the automotive industry has seen an increasing demand for lightweight yet durable materials. To meet this demand, steel manufacturers are continuously introducing new and improved products. S420 MC and S460 MC steels are **low-carbon steels with excellent mechanical properties**. Their high strength and exceptional **impact absorption** make them ideal for automotive component manufacturing. Additionally, these steel grades offer high weldability, facilitating the production of complex components.

S420 MC and S460 MC steels support the weight reduction trend in the automotive industry. Their low density contributes to increased fuel efficiency in vehicles, reducing carbon dioxide emissions while maintaining safety and performance. These steel types enhance the durability of automotive components and optimize energy distribution in the event of a collision.

S460 MC steel and its equivalents play a significant role in the construction industry. Their high strength, durability, formability, and weldability make them preferred materials. As a reliable choice for successful construction projects, S460MC steel and similar grades offer ideal solutions to meet industry demands.





# \* 8 - 100 mm S690 QL

**\$690 QL** is a high-strength steel grade. The letter "S" is a standard designation for structural steel, and the number "690" represents the minimum yield strength of the steel (690 MPa). "QL" stands for "high toughness." This steel grade possesses high strength, good impact resistance, and excellent weldability.

#### Common Applications of S690 QL:

**Construction and Structures:** Used in high-rise buildings, bridges, viaducts, tunnel linings, wind turbines, and other structural components. S690 QL's high strength allows for lighter and stronger structures.

**Heavy Machinery and Equipment:** Used in cranes, construction machinery, mining equipment, excavators, crushers, lifting equipment, and other heavy machinery. S690 QL's high strength helps these machines carry heavy loads and withstand harsh operating conditions.

**Marine and Shipbuilding:** Used for reinforcing steel plates and structural components in shipbuilding. S690 QL provides resistance to seawater and corrosive environments.

**Mining and Energy Sector:** Used in mining machinery, mine shafts, pipelines, and oil and gas equipment. S690 QL offers resistance to abrasive environments and high-stress conditions.

**Vehicles:** Used in heavy-duty trucks, tankers, and railway vehicles. S690 QL's lightweight properties contribute to increased vehicle efficiency



\* 2 - 40 mm

## **Boiler Sheet Group**

P265GH / P355GH

**P265GH** and **P355GH** steels are essential for constructing components in steam-generating facilities like boilers, pipe flanges, and collectors. They can withstand continuous operation up to approximately 200-250°C and wall temperatures of up to 250°C.

1.0425 is a type of fine-grained pressure vessel steel and is used for steam boilers and pressure vessel structures.

P265GH is a carbon steel pipe material used for pipelines and equipment operating under high temperatures and pressure. The letter "P" represents pressure pipes, "265" indicates the minimum yield strength, and "GH" is typically used for steels used at high temperatures. P355GH steel plates are characterized by a minimum yield strength of 280-355 MPa and excellent weldability. Therefore, P355GH steel is used in the production of boilers, pressure vessels, and pipes that carry hot fluids.

**Applications:** Boilers, pipes, flanges, and all heat-exposed components, suitable for use in environments up to 250°C.

Specific Applications:

Machine Manufacturing
Architectural Works
Defense Industry
Appliance Manufacturing

Commercial Kitchen Equipment Manufacturers Boiler Manufacturers Steam Engine Manufacturers Drilling Machine Manufacturers







\* 10 - 400 mm

## **Steel Plate Group**

C45 / CK45 / 5045

**C45**, standardized under the European standard EN 10028-1, and CK45, standardized under the German standard DIN 1026, are essentially the same material. This slight difference in designation often leads to varying names and labeling across different countries.

C45 is a carbon steel belonging to the non-alloy steel group. Due to its high carbon content, it's also known as tool steel. High-carbon materials and alloys are recommended for producing components that will undergo heat treatment, as the high carbon content enhances the steel's hardenability.

C45 material is a medium-strength steel supplied in either hot-rolled or annealed condition. AISI C45 steel offers excellent machinability, weldability, and high impact strength, making it ideal for surface hardening.



# **Patterned Sheet Metal Group**

(Diamond/Teardrop)

It is formed by embossing a pattern onto the surface of hot-rolled steel. Produced as an alternative to black sheet metal, this product is highly preferred due to its surface patterns and the benefits it provides.

Diamond and teardrop patterned sheets can be measured in terms of thickness (mm), area (mm x mm), and weight (kg).

#### Standard sheet sizes are as follows:

2/3 mm	1.000 x 2.000 mm	42 kg
2/3 mm	1.250 x 2.500 mm	65 kg
3/4 mm	1.000 x 2.000 mm	58 kg
3/4 mm	1.250 x 2.500 mm	90 kg
4/5 mm	1.000 x 2.000 mm	74 kg
4/5 mm	1.250 x 2.500 mm	115 kg
5/6 mm	1.000 x 2.000 mm	90 kg
5/6 mm	1.250 x 2.500 mm	140 kg

Diamond and teardrop patterned sheets are preferred for various applications in shipbuilding (decks, walkways, etc.), damper and trailer manufacturing, fire escape production, loading ramps, construction (industrial steel structures, stair manufacturing, fire escapes, steel steps, etc.), and machinery manufacturing.



\* 1,5 - 25 mm

## Coil Group

S235 JR / S355 JR / S355J2+N / S355J2C+N

Seçkin Metal collaborates with domestic and international manufacturers of pipe profiles, drawn steel tubes, and rolled profiles to provide package-based sales in various thicknesses and specifications.



## Pipe and Profile Group

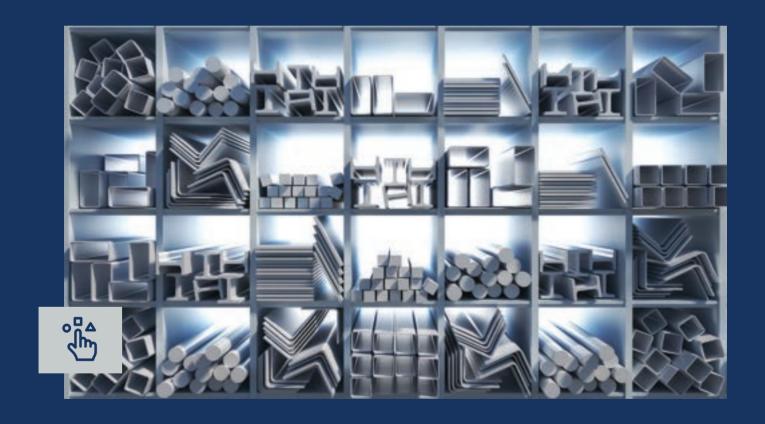


## Seamless Steel Tube



## **Rolled Products**

HEA, HEB, NPU, NPI



## **Special Products**

2.000 mm / 2.500 mm / 3.000 mm / 3.500 mm / 3.650 mm / 3.750 mm / 3.800 mm

\*Adhering to our principles of service quality and customer satisfaction, we provide custom services for project sheets in specific widths and qualities, meeting the minimum tonnage requirements of our customers.



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