



INDUSTRY



MANUFACTURING INDUSTRY

The factors which give competitive strength to the Turkish manufacturing industry are its geographical proximity to export markets, developed infrastructure and telecommunications systems, the existence of young and trained human resources, a large domestic market and the liberal economic policies in force.

The Turkish manufacturing industry, including investment goods, intermediate goods and consumer-oriented manufacturing industries, will continue to play a central role in the economy. Vehicles and auto parts, textiles and clothing, machinery and electronics have been the most dynamic industrial sectors in recent years. In 2009 manufacturing industry exports reached US\$ 78.6 billion with a share of 77% in total exports.

Automotive and Auto parts Industries

The Turkish vehicle industry has a total capacity of 1.5 million vehicles, of which 1.3 million (86%) is for light vehicles (passenger cars, minibuses and pick-ups). At present, Turkey is the largest bus and the third largest light commercial vehicle



manufacturer in the European Union. About 78% of automotive industry exports in value were delivered to EU Countries (EU 27).

Today 13 companies are manufacturing various types of vehicles such as passenger cars, buses, trucks, pickups, mini and midibuses and trailers. Five companies are producing passenger



cars (FIAT, HONDA, HYUNDAI, RENAULT, TOYOTA), nine companies are producing pick-ups and trucks (ANADOLU ISUZU, BMC, FORD OTOSAN, HYUNDAI, KARSAN, MERCEDES-BENZ, OTOKAR, TEMSA, TOFAŞ) and nine companies are producing buses and mini buses (BMC, FORD, HYUNDAI, ANADOLU ISUZU, KARSAN, M.A.N, MERCEDES-BENZ, OTOKAR, TEMSA).

The Turkish autoparts industry manufactures parts and pieces for the vehicles manufactured in our country and in the global market, as well as for the OEM and after-market.

Turkey has a strong component sector and in recent years has developed a highly competitive components industry providing products compatible with brands such as GM, Mercedes, BMW, Opel, Toyota, Fiat and Ford. The Turkish autoparts industry with its large capacity, wide variety of production and high standards, supports automotive industry production and the vehicle park in Turkey, and also has ample potential for exports.

Turkey's autoparts industry exports are increasing significantly with the focus on replacement components. The main autoparts products exported are engine parts, accessories for bodies, wheels, rubber parts, transmission shafts and cranks, bearings, brake and servo brakes, batteries, diesel and semi-diesel engines, clutches, seats, electrical lighting and signalling equipment, auto glass, ball bearings, axles, suspension shock absorbers, cylinders and exhaust pipes, safety belts, filters, airbags etc. The number of companies in the autoparts industry is about 4000 and around 70% of their output is exported to the European Union.

Machinery Industry

Turkey is emerging as a machine maker. The product range of the Turkish machinery industry includes combustion engines and turbines, boilers and burners, building machinery, heavy industrial machinery, machine tools, milling machines, drilling machines, cutting and bending machines, woodworking machinery, pumps and compressors,



hand tools, air conditioning units, textile machinery, food processing machinery, hoisting and conveying machinery, sewing machines, refrigerators and washing machines (both domestic and industrial), valves, gears and bearings. The Turkish machinery industry is able to produce almost all of the parts and accessories for the above items with competitive prices and high quality. The average local input content in the production stage is around 80-85%.

The machinery manufacturing industry has particular importance for Turkey due to its promising export potential and recently recorded an outstanding increase in exports compared to Turkey's overall exports.

Germany is the main customer of machinery made in Turkey. Germany is followed by the other EU Countries and most of the neighbouring countries. The main product groups in exports were refrigerators and other household appliances, engines and spare parts, construction and mining machinery, pumps and compressors, machine tools, agricultural machinery and equipment (including farm tractors), food processing and packaging machinery and textile machinery.

The Turkish machinery

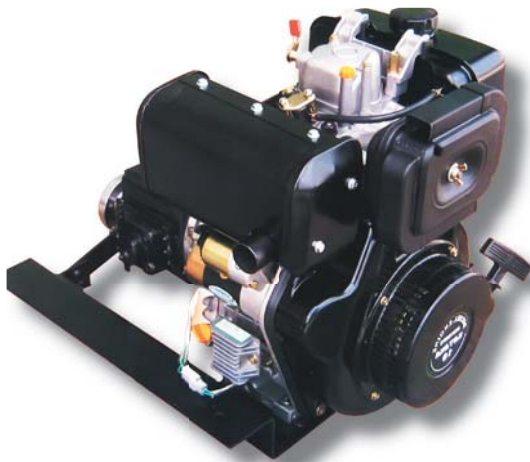


manufacturers/exporters follow European and international standards and norms. Under the process of technical harmonization with EU, the obligation to affix the “CE Mark” is in effect in the Turkish market.

Electrical Machinery Industry

The electrical machinery sector, which consists of investment and intermediate goods, has vital importance in Turkey. The Turkish electrical machinery sector vitalized itself in the 1990s by diversifying its products and adopting recent technologies and innovations in product design and in production processes. Turkey produces almost all types of electrical machinery. Major products manufactured by the industry include cables and wires, transformers, electrical equipment, electrical distribution and control equipment, accumulators, electric motors and generators.

The neighbouring countries and the EU are the main buyers of Turkish electrical machinery products.



Electronics Industry

The Turkish electronics industry has been investing more in R&D in the recent years and is taking elements of non-price competition such as quality and technology into account. As a result, exports have increased.



The electronics industry in Turkey has developed sizeable capacity especially in two sub-sectors: telecommunications and consumer electronics. Developments in the world telecommunications sub-sector, such as intensive infrastructure investments, were reflected in the telecommunications sub-sector exports. Turkish telecommunications sector exports with its large potential in telecommunication cables production are expected to increase further.





In consumer electronics, color TVs have the largest share in total production and exports. TVs made in Turkey were exported to 98 different countries, mainly to the European Union.

Iron & Steel Industry

As the iron and steel industry is linked to almost all manufacturing sectors, it plays an important role in the industrialization and development of a country. Raw steel production in Turkey rose to 25.3 million tons and Turkey became the 10th largest steel producing country in the world by the end of 2009. By product type, 81% of total steel production was directed to long products which are mostly used in the construction sector, about 19% was for flat products.

The iron and steel industry has become one of the major driving forces in the development of Turkish exports. In recent years, with the positive developments in the economy in general, the iron and steel sector has shown outstanding performance due to a high increase in exports and an increase in domestic demand. Developments in the iron and steel sector have also had a positive influence on the growth of production in iron or steel articles. At present, Turkey produces a wide range of iron and steel articles which meet almost all the domestic

demand. Among iron or steel articles, in welded and seamless iron and steel pipes and tubes, in casting products, and in steel industrial kitchen products Turkey has build a considerable production and export capacity.

Shipbuilding

Shipbuilding is a 600 year old tradition in Anatolia. Today's Turkish shipbuilding industry has modern, technologically developed and quality-certified shipyards, together with a well experienced work force.

Istanbul is the centre of the Turkish shipbuilding industry, and its influence extends far into the neighbouring regions.

In Turkey's 87 shipyards (3 military and 84 private), brand new ships, yachts, mega-yachts and sailing boats are being manufactured. In addition to these, repair and maintenance services are provided for vessels. Turkish shipyards have;

- 10 million DWT repair and maintenance capacity
- 600,000 ton steel processing capacity
- 80,000 DWT new ship building capacity as one piece

Turkish shipyards, which have some of the largest floating docks of the world with 80 m length, 355 m width and 300,000 DWT floating capacity, also provide services with other various floating docks.

Turkish and foreign flag ships which are produced by Turkish shipbuilders vary according to their types





and tonnage capacities. They are classified as petrol tankers, chromium-nickel tank chemical ships with coating, container ships, multi- and special-purpose ships, military vessels, vessels for fishing purposes, servicing tankers, bunker barges, tugboats, mega yachts and other types of sailing or motor boats. These vessels were manufactured in accordance with international standards and under the supervision of various societies.

Being the top manufacturer of low-tonnage chemical tankers in Europe, Turkish shipyards receive many orders for petrol tankers, chemical tankers and multipurpose container ships.

Mega-yacht manufacturing is another important production area of Turkish shipyards. Turkey has been number four on the world list of mega-yacht (yachts longer than 25m.) manufacturers for the last three years.

Due to developments in the Turkish shipbuilding industry and growing world demand, there has been a sharp increase in production volume and product diversity. Currently, Turkey's worldwide market share in shipbuilding has risen to 1.4%.

The main export products were cruise ships, excursion boats, ferry-boats, cargo ships, barges and similar vessels for the transport of persons or goods and yachts and other vessels for pleasure or sports; row boats and canoes.

Chemical Industry

Turkey has been manufacturing chemicals for very long time, being a producer of many basic and intermediate chemicals and petrochemicals. Production includes petrochemicals, inorganic and organic chemicals, fertilizers, paints, pharmaceuticals, soaps and detergents, synthetic fibers, essential oils, cosmetics and personal care products.



Turkey has two petrochemical complexes. A wide range of petrochemicals, all common plastics (HDPE, LDPE, PS, PVC, and PP), aromatics, ethylene glycol, phthalic anhydride, terephthalic acid, carbon black, synthetic rubber, acrylonitril and caustic soda are produced.

The Turkish chemical industry has competitive power for various chemicals because of raw material advantages. Turkey is among the main producers of soda ash, chrome and boron chemicals. Being among the top five countries supplying chrome ore to world markets, Turkey produces and exports some of the most important chrome chemicals and derivatives such as sodium bichromate, basic chrome sulfate, chromic acid and chrome oxide. Turkey also enjoys a comparative advantage in boron chemicals (borax decahydrate, borax pentahydrate, boric acid and sodium perborate) due to the size of her reserves, the quality of minerals and proximity to consumer markets. Turkey has developed a substantial capacity and production of sodium sulphate. In sodium sulphate production, Turkey is the second largest in Europe and sixth in the world.





Medical Products

The Turkish medical devices and supplies industry is a fast developing sector. In recent years, investments in this sector have accelerated. In fact, during the past decade the industry has undergone a significant change. The number of items produced has increased and at the same time the quality has improved. The number of manufacturers in the industry has increased as well.

The Turkish medical devices and supplies industry fulfills domestic demand for some products and also exports a relatively significant amount. The major product groups in exports were medical



and diagnostic equipment, syringes, needles and catheters, dental instruments, medical and surgical instruments and appliances and wadding, gauze, bandages. Turkey exports these products to more than 100 countries throughout the world.

Textiles and Clothing

Turkey is one of the most important textile and clothing exporters in the world. The Turkish textile and clothing industry has the capability to meet high standards and can compete in international markets in terms of high quality and a wide range of products. With its fashion-oriented and high quality products, Turkey has been increasing her share





in the main markets, especially in the European market which has high standards and sophisticated customer needs.

Turkey ranks 4th for home textiles, 4th for knitted clothing, 8th for woven clothing, 1st for machine made carpets and 3rd for socks and stockings in world exports.

Turkey, as a traditional cotton grower, has a great advantage in the production of textile and clothing. With the completion of the Southeastern Anatolian Project (GAP), it is estimated that Turkey's cotton production will be twofold.

Jewellery

Turkey has a great jewellery tradition. The Turkish art of jewellery making is the outcome of a unique heritage dating back to 3000 B.C. which has been passed down from the Hittites to the Trojans, Urartians, Ionians, Romans, Seljuks and Ottomans. The Turkish jewellery industry reflects this rich cultural heritage combined with the latest technology, outstanding craftsmanship and modern designs. Today, Turkey is one of the global leaders,

both in production and in exports, ranking among the top five countries in the world in gold jewellery production. Turkey has the total capacity to produce 400 tons of gold annually.

Leather

The leather industry is among the traditional export sectors of Turkey. The major markets are European countries and the Russian Federation,



but exports to more than 140 countries. The Turkish leather garments industry has become the eight largest exporter in the world. Quite a number of companies in the sector are exporting their original collections with their own brand names.

Ceramic Industry

The Turkish ceramics industry has a long history starting several thousand years before and with its experience and design capacity it has a unique beauty. The Turkish classical art of Cini is



famous throughout the world. At present, both the traditional types of ceramics and modern pieces are produced in Turkey.

The majority of production in the ceramics industry is for ceramic wall and floor tiles. In addition to large production capacity, Turkish wall and floor tiles and sanitaryware have exquisite design and superior quality. Turkey ranks 4th in world exports of ceramic tiles and 5th in ceramic sanitaryware.

Glass Industry

The Turkish glass industry has highly intensive production technology and a vast accumulation of know-how. Historically, glass production dates back to the Seljuk Period. Furthermore, substantial improvements were achieved in the 17th and 18th centuries during the Ottoman Empire. The high level of production and outstanding design capacity, good quality, wide sales services and other related activities have placed the country second in Europe and third in the world.

At present, "Türkiye Şişe ve Cam Fab. A.Ş.," a group of companies in the sector, accounts for approximately 90% of annual production with its 26 manufacturing establishments and ten marketing and financial companies. The "Şişe Cam" group ranks 10th among the top 25 glass firms in the world. Production includes flat glass, glass containers, glass household articles, safety glass, glasswool and insulation glass.





Glass industry exports are directed to over 180 countries and approximately 50% of the exports are directed to the EU countries. Glass household articles constitute the major part of the exports. Turkey ranks 5th in world exports of glassware and 7th of multiple-walled insulating glass.

Furniture

Turkey is now the furniture production center of the Middle East. Furniture exports demonstrated outstanding performance mainly due to improvements in quality and design. The main export products were: wooden bedroom furniture and dining room and living room furniture; seats convertible into beds; and seats for motor vehicles. Turkey ranked third in world exports of seats convertible into beds which are a traditional item showing the large family, hospitality and past nomadic characteristics of our nation.

Turkey has exported furniture to 166 countries



throughout the world. In the last five years, Turkish furniture companies have established showrooms and depots in increasing numbers in most countries.



Turkish Carpets and Kilims

The carpet is a gift from the Turkish people to world civilization. Turkish woven carpets and kilims are in the most valuable collections of museums and collectors around the world, especially ones from the Seljuk period and the Ottoman Empire. Turkish hand-made carpets and kilims are exported to a wide range of countries throughout the world. The major export markets are the developed countries.

Turkey not only has a strong position in traditional Turkish hand-made carpets but also in



machine-made carpet production. Turkey's total machine-made carpet capacity is over 190 billion square meters. Turkey is the number one world exporter of machine made carpets.

MINING INDUSTRY

Turkey possesses the greatest mine resources for most of the minerals in the world. Excluding

petroleum and coal, there are 53 exploitable minerals and metals, and 4,500 mineral deposits in Turkey. Turkey's major minerals produced are boron minerals, marble, basalt, feldspar, magnesite, perlite, pumice, barite and bentonite. A wide variety of primary metallic minerals are produced as well. Chrome and copper ore are the most significant minerals in the metals sector. Turkey is a major world producer of processed mineral commodities, including refined borates and related chemicals, cement, ceramics and glass. In addition, Turkey is a significant producer of ferrochromium and steel.

In recent years, as in the rest of the world, mining activities, the search and production of mainly silver, gold, manganese, copper and chrome ore have increased considerably in Turkey. In addition to metallic ore, trona mine production activities have already started.

Turkey possesses approximately 72% of world boron reserves and is the leading exporter of the mineral and boron chemicals in the world.

Turkey contains 40% of the world's marble reserves, most of which is considered to be excellent quality and exclusive due to the great variety of colours and textures. Turkey is among the world's most important natural stone manufacturers with its huge reserves and well developed processing industry, making Turkey number one in world exports of marble.

