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Summary

The Turkish composites industry has experienced 8%-12% annual growth in recent years. Currently, there are approximately 700 firms in related subsectors of the industry; close to 200 of which are medium and large companies. Total production in the composite industry is roughly 235,000 tons.

Fully mature composite materials markets consume between 4-10 kgs per person. In Turkey however, consumption is only at 3 kgs per person, demonstrating potential for further growth. The average price of composite materials in the world is around 9.2 USD per kg; however the current average price is only 6.27 USD in Turkey. This is primarily due to the distribution of industries that these materials are used as illustrated in the below table:

	World (%)	Europe (%)	Turkey (%)
Construction and Building	24.5	20	20
Transportation	21	30	18
Electric & Electronic	19	14	3
Pipes, Tanks, and Infrastructure	14	13.5	50
Wind Energy	7	12	4
Consumer Goods	6	3	2
Marine	4	5	2
Aerospace	0.5	0.5	-
Others	4	2	1

Source: Turkish Composites Association

As seen in the table above, 50% of the composite materials in Turkey, goes to pipes, tanks and infrastructure, however, it is more evenly distributed among other high level technology industries in other countries.

This report considers the following items as composite materials:

HS #	Description
281810	Artificial corundum
381511	Supported catalysts with nickel or nickel compounds as the active substance
390940	Phenolic resins in primary forms
391723	Tubes, pipes and hoses and fittings of polymers of vinyl chloride
391729	Tubes, pipes and hoses and fittings of other plastics
392190	Other plates, sheets, film, foil and strip of plastics combined with textile components in which vegetable fibers dominate by weight over any other single textile fiber
690390	Other refractory ceramic goods of clay, other than those of siliceous fossil meals or earths not containing by weight more than 50 percent of graphite or alumina
701990	Other glass fibers (inc. glass wool) and articles
854470	Optical fiber cables

Market Demand

Growth in this industry is primarily driven by the expansion of the underlying markets. Therefore, as industries that are heavy users of the composite materials grow, composite production, consumption and demand will grow. Total Turkish market for this industry in 2014 is estimated as \$1.6 billion.

Composite applications with high growth potential in Turkey are noted below:

1. Carbon Fiber Applications: There's an increase in demand for carbon fiber due to its lightness and high resistance properties. To benefit from this growing market, American Dow Chemicals, with the Turkish producer Akxa agreed to make an investment of 1 billion USD in the coming 10 years to increase the carbon fiber production capacity to 3,000 tons. Additionally, the government of Turkey has provided incentives for carbon fiber production. Carbon fiber is primarily used in aerospace and defense industries, wind turbine blades, plastics for electronics, pressurized vessels, automotive, building and construction reinforcement, maritime and oil platforms.

2. GRP Pipe Applications: Due to an increase in irrigation projects, Glass Fiber Reinforced Polyester (GRP) pipe production is particularly increasing in Turkey. Currently, pipes with a diameter of up to 4 meters are being produced in the country.

3. Automotive and Transport: Increased efficiency remains a top priority of the automotive sector. The simplest method is to manufacture lighter vehicles, and increasing composite material utilization is a tool for lighter weight in vehicles. Benefitting from its strategically important location between Europe, Asia, and Middle East, Turkey is an important production base with 19 major automotive producers. Therefore, an increase in composite materials market is expected in this sector.

Other major applications in Turkey promising a growth in the market include: greenhouse applications, wind blades for wind energy, solar energy panels, buildings, bridges, tunnels, technical textiles, heating pipes, engineering plastics like thermoplastic resins, boats and ships, glass mat reinforced thermoplastic applications (GMT-Glass Mat Thermoplastics) such as car roofs.

Additional reasons why the composite materials sector in Turkey is likely to continue to grow include:

- Expected economic growth and population
- Low tax rates for such products
- European Union Customs Union member since 1996
- Large domestic market

Market Data

Unit: USD millions

	2012	2013	2014 (estimated)	2015 (estimated)
Total Market Size	1,306.8	1,439.8	1,600.0	1,730.0
Total Local Production	1,450.0	1,607.0	1,750.0	1,900.0
Total Exports	441.8	495.5	530.0	580.0
Total Imports	298.6	328.3	380.0	410.0
Imports from the U.S.	10.4	13.3	38.0	42.0
Exchange Rate: 1 USD	1.8	1.9	2.1	2.3

Total Market Size = (Total Local Production + Total Imports) – (Total Exports)

2013 import market share: China: 24.9%; Germany: 24.7%; France: 7.0%; Italy: 7.0%; U.S.A.: 4.0%; U.K.: 3.0%; Austria: 2.9%; Spain: 2.8%; Belgium: 2.1%

Sources: The Turkish State Institute of Statistics, "Dunya" Newspaper, various association publications

Best Prospects

Due to the increasing market demand, all kinds of composite materials can be considered as best prospects.

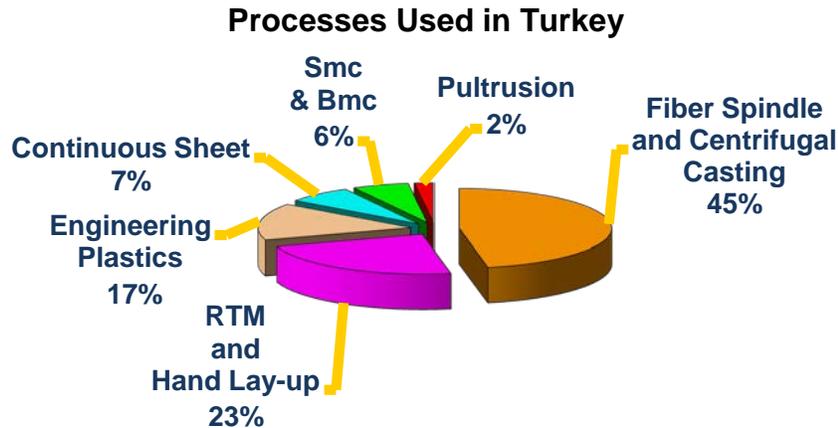
Key Suppliers

Key contacts in 200+ local suppliers can be reached at <http://www.kompozit.org.tr/uyeler/uye-listesi>

Local Production

Currently, there are approximately 700 firms in related subsectors of the industry; close to 200 of which are medium and large companies. Total production in the composite industry is roughly 235,000 tons.

However, Turkey is still behind with the technology needed for the production of composite materials. GRP pipe production (around 50% of the market), maintains the highest production share in this industry. RTM is expected to maintain its share, especially in the wind energy, maritime, automotive and transportation industries. Yet pultrusion, SMC-BMC and thermoplastic Injection are increasing their market shares. The following chart shows the existing methods used in the composite industry in Turkey:



Third Country Imports

China and Germany together control almost the half of the total import market of composite materials in Turkey with 24.9% and 24.7% respectively. France and Italy follow with 7% share each. The U.S. follows with a 4% share, followed by The U.K. (3.0%), Austria (2.9%), Spain (2.8%), and Belgium (2.1%).

U.S. Imports

Of the United States share of imports, Supported Catalysts, etc. has nearly a quarter of all the imports for the subject material from the world. The complete breakdown of the sector imports is outlined in the table below.

Composite Materials Imported into Turkey from all Countries					
HS #	Description	Total Imports	Share of Imports	U.S. Imports	U.S. Share of Imports
281810	Artificial corundum	\$27,985,214	8.5%	\$224,106	0.8%
381511	Supported catalysts with nickel or nickel compounds as the active substance	\$7,190,289	2.2%	\$1,683,154	23.4%
390940	Phenolic resins in primary forms	\$49,115,701	15.0%	\$264,473	0.5%
391723	Tubes, pipes and hoses and fittings of polymers of vinyl chloride	\$6,604,068	2.0%	\$202,617	3.1%
391729	Tubes, pipes and hoses and fittings of other plastics	\$22,240,111	6.8%	\$2,466,307	11.15%
392190	Other plates, sheets, film, foil and strip of plastics combined with textile components in which vegetable fibers dominate by weight over any other single textile fiber	\$157,117,398	47.8%	\$6,629,594	4.2%
690390	Other refractory ceramic goods of clay, other than those of siliceous fossil meals or earths not containing by weight more than 50 percent of graphite or alumina	\$21,491,304	6.55%	\$88,577	0.4%
701990	other glass fibers (inc. glass wool) and articles	\$16,858,128	5.1%	\$1,021,240	6.1%
854470	Optical fiber cables	\$19,770,923	6.1%	\$680,984	3.4%
TOTAL		\$328,373,136	100%		4.04%

As seen in the above table, imports of composite materials with the HS number 392190 are almost half of the total materials imported. Phenolic resins follow with a 15% share.

Market Entry

To be successful in the Turkish market, most U.S. companies opt to have a local representative or a liaison office. As their business develops, companies can open up subsidiaries. Companies often rely on local experience and knowledge as to how business is most effective in this market. Understanding the local regulatory and business dynamic is almost an impossible task without the support of a local business partner.

Some “Good-to-know” information to a newcomer to the Turkish market:

- Recognize the strategic importance of Turkey in accessing to other markets in the region: (Europe, Caspian, Middle East, CIS, North Africa)
- Plan, prepare and execute an effective, long term strategy
- Investing in professionally translated marketing material is worth every “kurus” (cent)
- Visit Turkey Often -- Personal contact remains key even in the age of Webinars
- Get “on the ground” advice from professionals already engaged in the market
- Take time to conduct due diligence before structuring the deal, including IPR protection
- Networking is key -- Use contacts, including CS Turkey to help you meet prospective partners/customers. Be aware that iron and steel producers are often slow to change suppliers.
- Local Agent is only as good as the U.S. firm is to its agent. It’s a partnership.

The Commercial Service in Turkey has a number of programs and services available to assist the U.S. business community in establishing a presence in this market, e.g., the International Partner Search, the Gold Key Service, and the International Company Profile remain popular and effective. In addition, the Commercial Service in Turkey employs experienced Commercial Specialists with industry sector expertise who can tailor your business approach to the right audience. To find out more about what we do to help you, please visit our web site at www.buyusa.gov/turkey. The U.S. Commercial Service prepares a Country Commercial Guide every year. You may find detailed information on 'How to Do Business in Turkey' at <http://export.gov/turkey/doingbusinessinturkey/index.asp>

One more key point that U.S. firms need to know specific to this industry is that many Turkish firms visit the JEC Composites Show in Europe every year. There were 28 Turkish exhibitors at the 2014 show in Paris.

Market Issues & Obstacles

Import Climate

Since 1996, Turkey has a Customs Union agreement with the European Union Countries, meaning customs tax on imports from the EU is zero. However, customs tax on vehicles from non-EU countries, including the United States is high.

Tariffs and Taxes on Composite Materials				
HS #	Description	Customs Tariff	Special Consumption Tax	Value Added Tax
281810	Artificial corundum	5.2%	0	18%
381511	Supported catalysts with nickel or nickel compounds as the active substance	6.5%	0	18%
390940*	Phenolic resins in primary forms	6.5%	0	18%
391723	Tubes, pipes and hoses and fittings of polymers of vinyl chloride	6.5%	0	18%
391729	Tubes, pipes and hoses and fittings of other plastics	6.5%	0	18%
392190	Other plates, sheets, film, foil and strip of plastics combined with textile components in which vegetable fibers dominate by weight over any other single textile fiber	6.5%	0	18%
690390	Other refractory ceramic goods of clay, other than those of siliceous fossil meals or earths not containing by weight more than 50 percent of graphite or alumina	5.0%	0	18%
701990	other glass fibers (inc. glass wool) and articles	7.0%	0	18%
854470	Optical fiber cables	Exempt	0	18%

*There's also an additional tax named CKP with the value of 1%.

Distribution/Marketing Practices

As mentioned above, supplier agents play an essential role in marketing and sales. In fact, due to the complicated import procedures, it is almost impossible to sell without a competent agent. Reputation and integrity are important qualities you should check before moving ahead with a partnership. Agents should have a strong network of contacts in the market to be useful local partners. Some U.S. companies partner with agencies in Europe and expect them to coordinate sales. From our experience, this is rarely an effective strategy. U.S. suppliers are encouraged to work closely with their agents and know what can be expected from them.

In Turkey generally, agency/representation/distributor agreements are private contracts between agents and their foreign suppliers. There are no unusual regulations which govern commission rates or contract terminations. However, in the automotive spare parts and accessories sector, a commission rate of 5 to 10% is the most common fee. Representatives provide proforma invoices to the importers, including their commission in the price, and expect the foreign supplier to reimburse the commission amount to their account after the sale is realized.

Advertisement, promotion, and training both the representative and the customer are essential tools for selling successfully in Turkey. U.S. companies are encouraged to identify motivated agents who can provide these services. U.S. firms can also take advantage of the U.S. Commercial Service to find an appropriate Agent/Distributor and/or to find out more about a particular Turkish firm by going to the nearest USEAC (United States Export Assistance Center) or on the web at www.buyusa.gov/turkey/en

Financing

The most common payment method is by letter of credit (L/C). An irrevocable and confirmed L/C is suggested especially when businesses start new relationships. After both parties, supplier and local representative, get acquainted with each other, cash against documents is a more common payment transaction. Turkish suppliers, who receive payments from their customers in installments, however, might eventually need adapted payment terms from the foreign suppliers in order to increase sales. Local producers provide longer terms of payment to the wholesalers, and the wholesalers reflect similar payment terms to the retailers. However, consumers usually pay in cash.

Other

Trade promotion events

U.S. firms may wish to participate in the following trade promotion opportunities:

Eurasian Composites Show

<http://www.eurasiancomposites.com/>

November 12-14, 2015

Turkish Composites 2015 Summit

Oct. 8-10, 2015

<http://www.kompozit.org.tr/component/content/article/45-duyurular/1459-turk-kompozit-2015-kompozit-zirvesi->

Trade Associations

Kompozit Ureticileri Dernegi (Turkish Composites Manufacturers Association – TCMA)

<http://www.kompozit.org.tr/en/>

Publications

Composites Turkey

<http://compositesturkey.org.tr/component/flippingbook/book/38?page=10>

For More Information

The U.S. Commercial Service in Izmir, Turkey can be contacted via e-mail at: Berrin.Erturk@trade.gov
Phone: [90] (232) 441-2446; Fax: [90] (232) 489-0267; or visit our website: www.export.gov/turkey

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Comments and Suggestions: We welcome your comments and suggestions regarding this market research. You can e-mail us your comments/suggestions to: Customer.Care@trade.gov. Please include the name of the applicable market research in your e-mail. We greatly appreciate your feedback.

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