



INDUSTRY



PUMPS AND COMPRESSORS



TURKEY'S PUMPS AND COMPRESSORS INDUSTRIES

PUMPS AND COMPRESSORS

Pumps and compressors have the function of transporting liquids and gases in factories, plants and other locations. Pumps and compressors are vital for a modern economy and without which our entire society would be inconceivable.

Industrialization and huge agricultural production have resulted in the emergence of a strong pumps and compressors sector in Turkey. Today the share of the pumps and compressors sector accounts for 4% of the exports of the Turkish machinery industry.

Pumps are increasingly used in agricultural irrigation and in the manufacturing industry. Turkey is trying to improve land and water resources and expand irrigation. Pumps and compressors have a wide variety of applications in almost all subsectors of the Turkish manufacturing industry, mainly in the strong food, chemical, fertilizer and petroleum industries. Other important consumer sectors for liquid pumps are the energy, tourism and building sectors.

TURKEY'S GIANT IRRIGATION PROJECT: GAP

The most important irrigation project in Turkey is the Southeastern Anatolia Project. The Southeastern Anatolia Project, or GAP, is the largest development project ever undertaken by Turkey and one of the biggest of its kind in the world. This integrated, multi-sector project which includes 13 major projects primarily for irrigation and hydropower generation was planned by the State Hydraulic Works (DSI).

Within the GAP project, a significant part of the total irrigation area will be irrigated by high capacity pumps and Turkey's available pumping capacity will increase considerably. It is projected that at full development over 1.8 million ha. of land will be irrigated and 27 billion kWh of electricity will be generated annually with an installed capacity over 7476 MW.

The recently announced GAP Action Plan aims to improve irrigation and infrastructure needs and to accelerate economic development and social progress in the region.

The area to be irrigated accounts for 20% of the economically irrigable area in Turkey (8.5 million ha) and the annual electricity generation accounts for 22% of the country's economically viable hydropower potential (118 billion kWh). Within the GAP Action Plan, it is now planned to complete the irrigation infrastructure of 1,060,000 hectares of land by 2012. The plan also envisages the completion of irrigation networks related to these projects through bilateral cooperation and public-private partnerships.

Upon the completion of the project, per capita income will rise by 209% and about 3.8 million people will be provided employment opportunities. Thus, Turkey's economic growth will develop significantly and the pumps sector as well.

PRODUCTION

The Turkish pumps and compressors industry manufactures and exports various kinds of pumps and compressors including: pumps fitted with a measuring device for dispensing fuel in filling stations or in garages; pumps for other liquids fitted with a measuring device; hand pumps; fuel, lubricating or cooling medium pumps for internal combustion piston engines; concrete pumps; reciprocating positive displacement pumps; rotary positive displacement pumps; centrifugal pumps and parts of pumps for liquids and compressors. In the compressors sector in Turkey, industrial type piston and screw compressors are manufactured as air compressors.

Pumps industry production in Turkey began in the mid-1950s and the industry began to develop rapidly in the early 1960s. Small capacity pumps of all types were produced in Turkey. Modern irrigation pumps were first manufactured in 1970. As a result of climate change, energy saving technologies have gained great importance. In Turkey, there are a few large sized companies which have specialized in the production of environmentally-friendly high-capacity modern irrigation pumps. Irrigation pumps are equipped with time, labour, water and energy saving technologies. Compared with old, traditional methods, irrigation with pumps does not consume large amounts of water. Advanced production methods, such as Computer Numerical Control (CNC) and Computer Aided Design (CAD) are being utilized successfully in the large sized enterprises. Production planning, quality control and tests are realized by means of modern methods in these enterprises. In addition, research and development work also contributes to the success recorded by these companies.

Despite the lack of water supplies in agricultural areas, modern irrigation and submersible pump technologies lead to a significant increase in agricultural productivity. In addition, drip irrigation and sprinkler irrigation techniques are being used widely in Turkey. These techniques require the least possible water supply, which is the driving force for the growth of the pumps sector.

According to POMSAD data, small and medium-sized companies dominate the Turkish pumps and compressors industry. There are approximately 135 manufacturing companies in the pumps sector. 10% of these companies are big players in the competitive global environment with their own brands. They have optimum techno-economic capacity and rational production activities. The number of people employed in the sector is about 12000. The manufacturing sites of the Turkish pumps and compressors industry are mainly located in the Marmara, Central Anatolian, and Aegean regions of Turkey. İstanbul, Konya and İzmir are the major cities in pumps, compressors and parts production. The sector has been organized under POMSAD. At present POMSAD has 38 members.

EXPORTS

At present, pumps and compressors industry exports comprise 9% of the exports of the Turkish machinery sector and have an increasing trend. The total export value of pumps and compressors rose to US \$ 718,5 million in 2011.

If the two important product groups, pumps and compressors, are taken into account separately, exports of pumps have a share of %50,9 with an export value of US \$ 365 million and that of compressors was %49,1 with 353 million US \$ export volume in 2011. Main export products in the pumps and compressors industry are: compressors, pump

parts, rotary positive displacement pumps, centrifugal pumps, other pumps and fuel, lubricating or cooling medium pumps for internal combustion piston engines. Considerable growth in the exports of both products has been recorded in the last few years. of Turkish products.

Turkish-made pumps and compressors are exported to almost 201 countries in the world. In 2011, the Germany was the major buyer of Turkish pumps and compressors. Other principal export markets of the Turkish compressors are USA, Iraq, Russia, United Kingdom Italy, and Romania.

Pumps and Compressors Exports (Value: US\$ 1,000)

Products	2007	2008	2009	2010	2011
Pumps fitted with a measuring device for dispensing fuel	4.794	6.751	5.398	4.893	8.173
Other pumps for liquids fitted with a measuring device	3.437	5.493	4.787	6.637	7.295
Hand pumps	1.548	1.943	1.530	2.915	3.265
Fuel, lubricating or cooling medium pumps for internal combustion piston engines	18.509	17.949	14.702	22.083	26.384
Concrete pumps	14.522	8.231	5.846	5.738	7.927
Reciprocating positive displacement pumps	5.714	6.227	9.153	9.427	72.622
Rotary positive displacement pumps	34.560	44.994	28.173	43.410	34.335
Centrifugal pumps	28.291	35.185	34.494	38.962	43.245
Other pumps	24.428	36.940	31.653	36.845	44.874
Liquid elevators	762	1.673	812	923	1.187
Pump parts	134.406	115.834	63.971	97.110	115.931
Liquid elevator parts	152	299	541	486	234
Compressors	264.600	316.025	268.391	308.336	353.103
Total	535.723	597.544	469.450	577.766	718.576

Source: Ministry of Economy of Turkey

Pumps and Compressors Exports by Countries (Value: US\$ 1,000)

Tumps and Compress	ors Exports	by Countric	s (vaiac. C)	3ψ 1,000)		
Countries	2007	2008	2009	2010	2011	Share (2011) %
Germany	133.798	125.826	84.260	125.216	182.311	25,4
Iraq	24.312	15.965	20.889	29.992	35.453	4,9
U.S.A.	28.132	31.587	27.383	31.753	34.649	4,8
Russia Fed.	34.140	43.056	15.038	31.234	33.696	4,7
United Kingdom	20.831	23.815	16.470	27.630	32.130	4,5
Italy	28.328	34.479	26.412	26.906	30.440	4,2
Romania	30.279	37.834	26.960	26.236	27.768	3,9
Iran	9.040	11.882	12.985	16.958	26.642	3,7
Azerbaijan	10.333	14.389	14.185	15.428	23.042	3,2
Turkmenistan	4.110	9.557	12.716	15.334	18.283	2,5
France	14.075	18.111	12.721	14.963	15.112	2,1
Belgium	19.556	21.429	13.872	13.816	14.491	2,0
Georgia	4.184	4.856	3.882	6.775	12.037	1,7
Poland	5.217	6.968	8.173	9.188	11.426	1,6
P.R.C.	2.285	3.299	4.044	8.110	10.400	1,4
Saudi Arabia	4.226	6.479	5.668	6.873	9.683	1,3
Czech Rep.	2.825	2.425	2.955	8.369	9.666	1,3
Aegean Free Zone	8.060	9.459	2.338	3.435	8.808	1,2
Hungary	5.654	4.957	3.782	7.958	7.456	1,0
Egypt	3.313	5.900	6.422	7.773	6.686	0,9
Ukraine	4.440	8.794	3.756	4.520	6.662	0,9
Syria	3.273	4.322	5.174	6.935	6.359	0,9
Spain	5.135	6.224	6.465	6.068	6.211	0,9
Bulgaria	6.377	7.933	4.885	4.227	6.135	0,9
Kazakhstan	10.898	7.496	4.430	4.875	6.110	0,9
List Total	422.820	467.042	345.865	460.570	581.653	80,9
Grand Total	535.723	597.544	469.450	577.766	718.576	100,0
Course: Ministry of Econ	T					

Source: Ministry of Economy of Turkey

Turkish pumps and compressors manufacturers/exporters follow European and international standards and norms. The obligation to affix the "CE Mark" started in the Turkish market in 2002.

TRADE FAIRS

Four trade fairs related to the pumps and compressors industry will be held in Turkey in 2012. These are:

- "ISK-SODEX 2012", Istanbul, 02-05/05/2012, Heating, Refrigeration, Air -Conditioning, Insulation, Ventilation, Pumps, Valves, Sanitary Appliances, Water Treatment, Pool, Solar Power.
- "IHS KONYA 2012", Konya, 17-20/05/2012, Heating, Cooling, Air Conditioning, Natural Gas Systems, Installation Insulation Equipment, Pump, Valves And Pipes.
- "32. COALTRANS 2012", Istanbul, 12-14/10/2012, Coal Mining, Tunnel Road Systems, Blasting and Drilling, Underground Ventilation and Drilling, Pump Stations and Power Plants, Gas Removal and Control Systems, Health and Protection of Employees.
- "GROWTECH EURASIA 2012", Antalya, 05-08/12/2012, Horticulture, Heating, Cooling, Ventilation, Irrigation Systems Equipments And Pumps, Seeding, Plant, Seed, Disinfection And Fertilizer.

USEFUL LINKS

- General Secretariat of Central Anatolian Exporters Union: www.oaib.org.tr/en
- Turkish Machinery Promotion Group: www.makinetanitimgrubu.com.tr/en/
- Turkish Pump and Valve Manufacturers' Association: www.pomsad.org.tr/index.php/EN/home



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