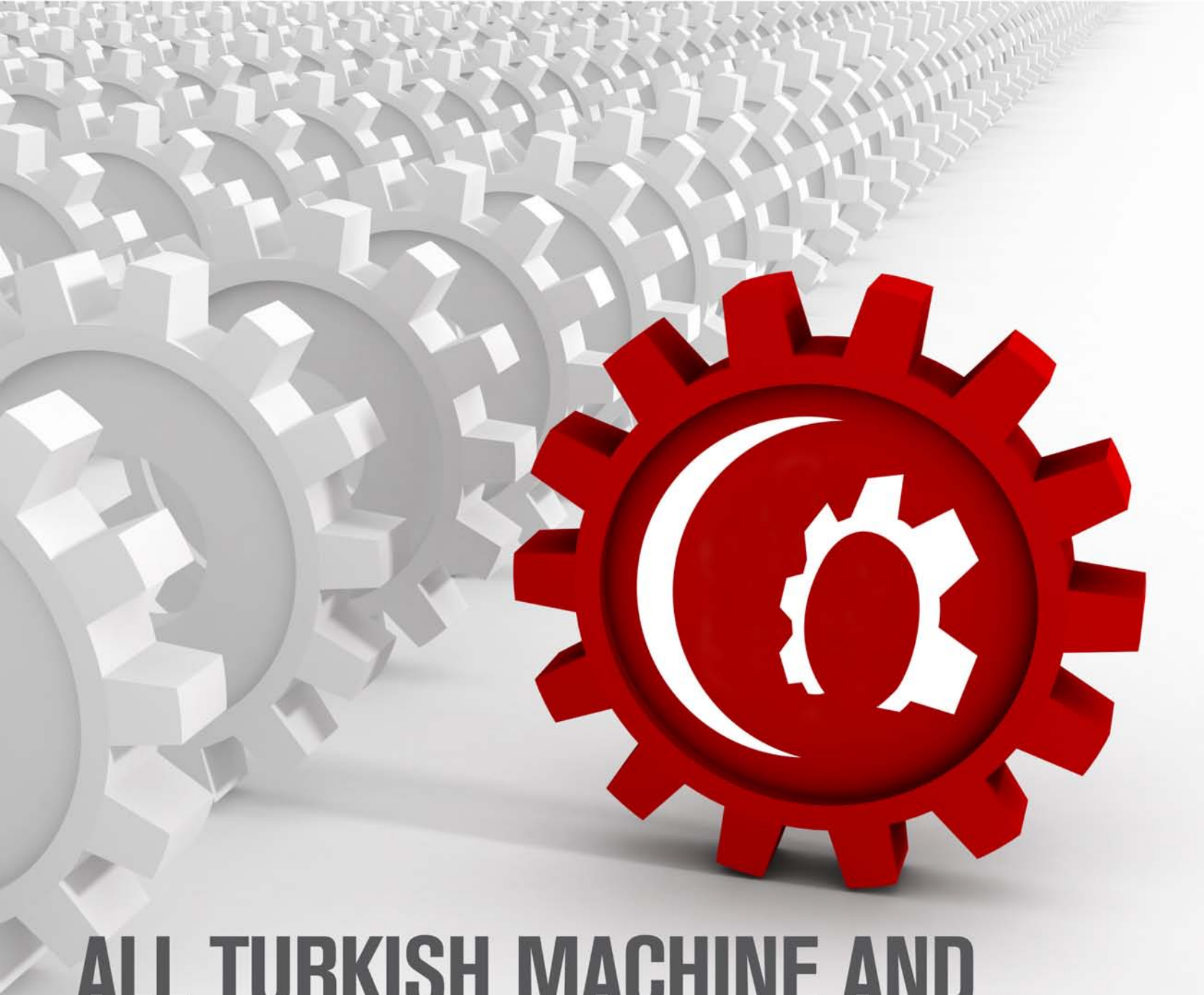


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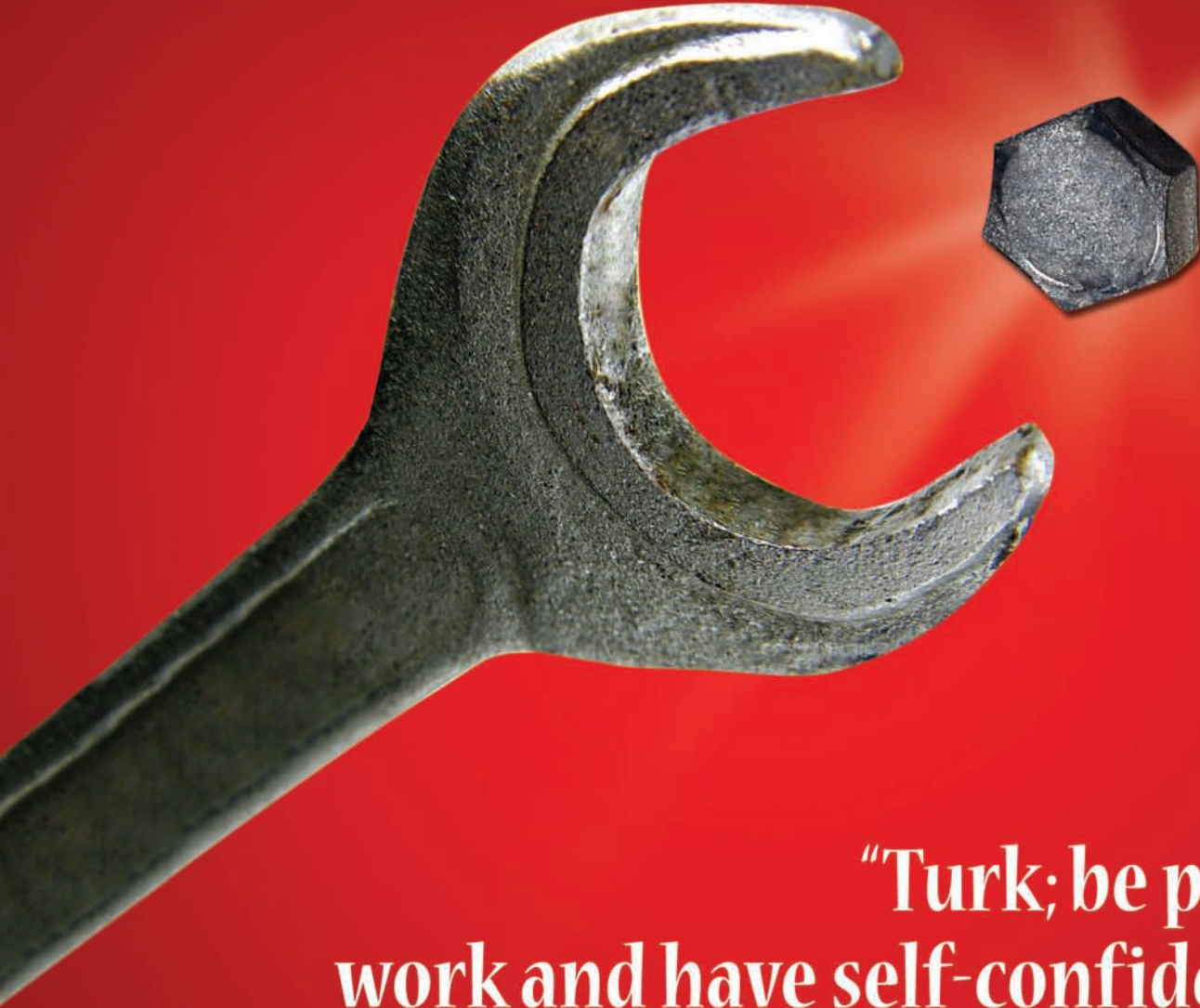
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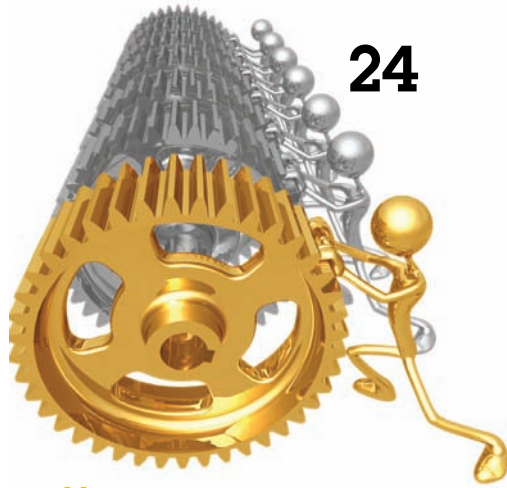
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“How do you know Turkey?”

## HELLO CHINA

We are a country that produces machines, increases import and export every year and believe in the motto 'quality for reasonable prices.' We are here because you are a country that buys a big share of the world wide production and we are here with our machines the national heroes of production in our country.

Tugay SOYKAN

Since the day it has been established the Central Anatolian Machinery and Accessories Exporters encouraged Turkish Machine Exporters to take part in international exhibitions, organising trade and purchasing groups, and once again Central Anatolian Machinery and Accessories Exporters is attending the Cimes 2008 (China International Machine Tool Exhibition) International Machine Exhibition, one of the most important and biggest machine exhibitions with the same reasons.

This year for the first time we will have an information stand of 600 square metres together with the Machinery Promotion Groups and The Turkish Mechanical Industry Platform member associations within the Central Anatolian Exporters Associations Union, Machinery and Accessories Ex-

porters Union promote the Turkish Machinery Sector effectively.

In our current issue we prepared a special guide for our readers to be better informed of the Turkish Machinery Sector especially for the Cimes Exhibition. You can find information on the current status of the Turkish Machinery Sector, future targets and also the history of the sector in our guide. There are also several data that you can use, such as communication information and web addresses in our special issue.

“Today the economy of Turkey is the 16th biggest economy in the world. The objective is being among the 10 biggest economies in the world in the 100th year of the Republic (2023). Our country is aware that one of the fastest ways to achieve this aim is the machine sector hence increasing investment in the sector every day and continue to support the machine sector knowing that it is one of the strategically important sectors.”





## >>ADNAN DALGAKIRAN

The Chairman of the Board of Directors of Central Anatolian Machinery and Accessories Exporters' Union

# We will be present in the Chinese machinery market

**THE TURKISH MACHINERY SECTOR WHICH DEVELOPED A UNIQUE DESIGN AND TALENT FOR INNOVATION BY PRODUCING QUALITY INVESTMENT GOODS WITH HIGH ADDED VALUE AND WITH ITS WELL ESTABLISHED FIRMS, IS AIMING TO BE ONE OF THE TOP FIFTEEN MACHINERY MANUFACTURING COUNTRIES AND MAKE A NAME IN THE CHINESE MARKET IN THE LIGHT OF THIS VISION**

This is a first in Expo CIMES 2008 that we attended as part of an organization by the Machinery Promotion Group. The member associations and federations of the Machinery Industry Sector Platform are taking part in this expo. The Turkish Mechanical Industry Platform is a roof organization that brings together the associations and sector specific federations together, representing the whole sector. It defines the general problems and looks for joint solutions, bringing together the joint power to solve problems. The participation of this roof organization which represents the entire sector is certainly very important to promote the distant area in the market.

Central Anatolian Machinery and Accessories Exporter's Union and Machinery Promotion Group enthusiastically perform different activities to secure fair force for the Turkish firms in the machinery sector so they can compete in the domestic and foreign markets. Participation to "CIMES 2008" exposition which took place in Peoples Republic of China, a target machinery market for the sector was very important in promoting the Turkish machinery sector effec-

tively and also in reaching large masses.

The firms in the sector achieved great increase in export -in spite of the rising competition in the markets they do business most-, by applying new technologies and giving important attention to improving design. The achievement also came with the publicity made and participation in the expositions abroad. These indicate an important success. As a result our industry improved its connections and both import and export were increased.

China doubled her machinery import within 5 years, joining the first 5 ranking large importers in the world. When China is assessed from that angle, she is a possible target market for Turkey. To take 1% share of this market means 20% increase in our machinery export.

Turkish machinery sector improved a talent for unique design and innovation, producing quality capital goods. With its established firms, its target is to become one of the top 15 countries that manufacture machinery. We are expecting Turkish machinery sector to receive a better place in the light of this vision.



# How do you know **Turkey?**

**EVERYTHING ON GEOGRAPHY, DEMOGRAPHIC STRUCTURE, TRADITIONS, ECONOMY AND CULTURE OF TURKEY WHOSE PORTION IN THE ECONOMY AND TRADE OF THE WORLD INCREASES EVERY YEAR, IS IN THIS NEWS.**



lation of people who reside in province and district centres) is 49.747.859, the population of village (the population of people who reside in sub-districts and villages) is 20.838.397. 17.8 percent of the population reside in Istanbul.

**T**urkey is a country in the Northern hemisphere, at the intersection point of the Europe and Asia continents. The major part of the land of the country is in the Anatolian Peninsula and the rest of the land is in Thrace which is an extension of the Balkan Peninsula. The three sides of the country are surrounded by the Mediterranean Sea, the Black Sea and the Straits which connect those two seas to each other – the Marmara Sea and the Aegean Sea. Neighbouring countries are Greece, Bulgaria, Georgia, Armenia and Iran, Iraq and Syria.

Turkey is a member of the international organizations such as United Nations, NATO, Council of Europe and Organization for the Islamic Conference. Negotiations for the full membership to the European Union began as of October 3, 2005. The national per capita income of Turkey has approached to 10 thousand USD as of 2007.

## DEMOGRAPHY

The population of Turkey is 70.586.256 people as of December 31, 2007. There are 35.376.533 males and 35.209.723 females in total. 70.5 percent of the population who reside in the country lives in cities. The population of city (the popu-

12.573.836 people live in Istanbul district. Half of the population of Turkey is below the age of 28.3. The median age in the country is 28.3. 66.5 percent of the population is between the ages of 15-64. The population which is between the ages of 15-64 i.e. working age constitutes 66.5 percent of the total population. 26.4 percent of the population of the country is in the 0-14 age group, 7.1 percent is 65 and older age group.

Density of the population is 92 which is the number of people per kilometre square. 98.064 people who reside in Turkey are foreigners and made 0.14 percent of the population that reside in Turkey.

## GEOGRAPHICAL POSITION

The land of Turkey is between 36° - 42° Northern parallels and 26° - 45° Eastern meridians. It has a rectangular shape and its width is 1.660 kilometres. The area it covers including lakes is 814.578 kilometres. The length of territorial borders of Turkey is 2.573 km, its total coastal length including the islands is 8.333 kilometres.

More than half of the country is composed of areas with altitude over 1000 meters. Approximately one-third is covered in lowland, plateau and mountains in medium altitude and 10 percent is cove-

“Today the economy of Turkey is the 16th biggest economy in the world. The objective is being among the 10 biggest economies in the world in 100th year of the Republic (2023). Turkey exports to more than 140 countries in the world. However half of the export is to European countries. As of 2007, the amount of the investments of Turkish companies abroad approached to 16 billion USD. When financing which is provided over third countries is added, this number reaches 22 billion USD. Turkey is also among the most important investors in the fields except the energy sector in Central Asia.”

red in low areas. Highest and mountainous areas are in the east part. The total area of territorial areas is 770.760 kilometre square, the total area of water areas is 9.820 kilometre square.

Turkey is surrounded by seas on three sides, the position of the mountains and geographical shapes being in variety caused different climate types to occur. Cukurova, in which agriculture has been made for 8.000 years, also the Aege-





an Region, Bara and Carsamba Plains are among the most fertile soil in the world. 90 percent of the fruit and vegetable types in the world including tropical plants are grown in Turkey.

## ECONOMY

Today the economy of Turkey is the 16th biggest economy in the world. The objective is being among the 10 biggest economies in the world in 100th year of the Republic (2023). Agriculture, raising livestock, forestry, trade, industry, mines and energy, transport and tourism constitute the economy of Turkey. Turkey makes export to more than 140 countries in the world. However the half of the export is for European countries. As of 2007, the amount of the investments of Turkish companies abroad approached to 16 billion USD. When the financing which is provided over third countries is added, this number reaches 22 billion USD. Turkey is also among the most important investors in the fields except the energy sector in Central Asia. It is growing fast abroad in retail trade and textile sectors.

## TURKISH TOURISM

Turkish Tourism is mostly based on the archaeological and historical areas in the Aegean and Mediterranean coasts. Istanbul is the biggest city in Turkey and it has many important areas since it was the capital city of the Byzantine and Ottoman Empires. Sultanahmet Mosque, Ayasofia and Topkapi Palace are only a few of these important areas. The other important tourism areas are: Ephesus, Troy, Bergama, house of Virgin Mary which remained from the Roman Period and also Cappadocia. Beach areas are important tourism areas generally for people who live in various cities in Turkey and tourist from Western Europe. Most important beac-

hes start from the Aegean coasts and end near Antalya in the Mediterranean. Bodrum, Fethiye, Marmaris, Kusadası, Alanya are important holiday locations. Turkey is an important health tourism region with its medical services high in quality and skilful doctors and with comparatively lower prices and its position between Europe and Central Asia. The number of foreign tourists has reached from 12.8 million to 21.2 million between 2002 and 2005.

## LANGUAGE

The official language of Turkey is Turkish. Today, Turkish is spoken by the majority of the population. Many different accents are used according to the regions. Istanbul dialect is preferred in education and press agencies. Turkish provides the communication of all people and its both the official language and the language of education. There are other languages which are spoken in the daily life. These are Abkhaz language, Albanian, Bosnian in the Marmara region and in Central Anatoli-

a; the Laz language and Georgian in the Black sea region; Kurdish, Zazaki and Arabic in Eastern and South eastern Anatolia. Although there are very few numbers of Greek and Armenian people, a small part of them and a small part of Jewish people speak their own languages in the daily life.

When it is compared with languages which are less common, it is possible to transfer more information with less words and letters. A basic speciality of the Turkish language is that sentences with a single word can be produced by adding suffixes to a radix. This speciality does not exist in many other languages.

## ADMINISTRATIVE DIVISIONS

Turkey was divided into various administrative divisions considering its administrative and local conditions. It was divided to provinces for central administrative organ and provinces divided into districts, districts into villages. Governors, who are assigned by the Government, execute governing and executive duties in provinces. The number of provinces was 63 in the early years of the Republic and today this number increased to 81 as a result of the changing conditions and needs. Many developed districts expect to become provinces. Units which are smaller than provinces are called district. Every province is composed of various numbers of districts and the number of districts de-

## THE IMPORT AND EXPORT NUMBERS OF TURKEY

Years	Export Value ('000 \$)	Import Value ('000 \$)
1997	26 261 072	48 558 721
1998	26 973 952	45 921 392
1999	26 587 225	40 671 272
2000	27 774 906	54 502 821
2001	31 334 216	41 399 083
2002	36 059 089	51 553 797
2003	47 252 836	69 339 692
2004	63 167 153	97 539 766
2005	73 476 408	116 774 151
2006	85 534 676	139 576 174
2007	107 271 750	170 062 715

NOTE: 2007 data is temporary

depends on the size of the province. The civilian administrative in the district is called District Officer (Kaymakam). The smallest administrative unit is called a village. Villages are administrated by village headman and villages are connected with district centres. There are 81 provinces, 850 districts and villages more than 35.000 in Turkey according to the last population census.

## CUISINE

Turkish cuisine is one of the richest cuisines in the world along with Chinese and French cuisines. Turkish cuisine has much diversity because of its geography and history. Turkish cuisine is interacted with Mesopotamia and Balkan cuisines. Istanbul Ottoman Palace cuisine is an important part of the Turkish cuisine. There are various types of soups, vegetables with olive oil, dishes with meat, fish, patty, and desert menus in the Ottoman Palace cuisine. Palace cuisine is an elite cuisine which was formed with palace taste and experience of many centuries from the Byzantine Empire era to the Ottoman Empire era. The cuisine of the people and villages of those periods were plain and simple. Each region and village has distinctive dishes. Today a "Turkish cuisine" is formed with the mixture of Palace culture and people's culture. Many palace dishes are adopted by the people.

## SPORTS

It is known that Turkish people have been wrestling since the 4th century BC. Wrestling competitions were made in the celebrations which were made to celebrate the enlivening of nature in spring, in wedding ceremonies, in vic-

tory feasts. Traditional Wrestling Sports Federation was established in 1996 and an important step for oiled wrestling has been taken. The most popular sport in Turkey is football. Football is played in leagues and the biggest league is Turkcell Super League. Three of the teams that have become champions the most are teams from Istanbul (Besiktas, Fenerbahce and Galatasaray) and only one team (Trabzonspor) is an Anatolian team. Football clubs are under the roof of the Football Federation of Turkey.

Turkish national football team was 6th in Euro 2000, 3rd in FIFA World Cup in 2002 and 3rd in Euro 2008. Also the goal-scored in the shortest time (first 9 seconds) was by Hakan Sukur.

Galatasaray is one of the two teams which won the UEFA Cup without being defeated and also it is the only team which finished the League of Champions in the 3rd place and won this cup. Galatasaray defeated Arsenal team of England with penalties in the final in 1999-2000 and became the first Turkish football club which won a European Cup. In the same year, Galatasaray won the Super Cup by defeating Real Madrid with a score of 2-1. Also Galatasaray played twice, Fenerbahce played once in the quarterfinal in the Champions League. The rate of people who do sports is 1-2 percent of the population of Turkey. The number of the sportive people who are licensed to present sport federations is 122.939. Sports federations are established in the following branches: athletics, hunting and shooting, badminton, baseball, basketball, orthopedically challenged, billiards/pool, riding, bicycle, bocce, boxing, bridge, ice skating, gymnastics, climbing, fencing,

## TURKEY

Official language	Turkish
Capital	Ankara
Type of State	Republic
Regime	Democracy
Founder	Mustafa Kemal Ataturk
President	Abdullah Gul
Prime Minister	Recep Tayyip Erdogan
Area	Projection area (on the map) 779.452 km <sup>2</sup> Real area 814.578 km <sup>2</sup> Covers 1.3 % of the world, 36th largest country... It is in 2nd place in Europe after Russia.
Population	70.586.266 (2007 population census)
Density of population	92 person/km <sup>2</sup>
National days	23 April: Opening of TGNA (1920) 19 May: the beginning of the War of Independence (1919) 30 August: Victory of Independence (1922) 29 October: Declaration of the Republic (1923)
National income, Current (GNP)	658.8 billion USD (2007)
National income, SAGP (GNP)	1.026 trillion USD (2008 estimated)
National Per Capita Income	9.333 USD (2007)
Export	14.535 USD (2007)
Import	127.2 billion USD
Annual Inflation	175.7 billion USD Consumer Price Index: %11.77 (2008 August)
Producer Price Index:	%14.67 (2008 August)
Currency	New Turkish Lira (YTL) <sup>1</sup>
Hour	EET (UTC+2)
Summer time	EEST (UTC+3)
Motto	Peace at home, peace in the world
National Anthem	The Anthem of Independence
National colours	Red and white
Internet TLD	.tr
Calling code	+90
	<sup>1</sup> The new Turkish Lira will be replaced with the Turkish Lira as of January 1, 2009.



football, traditional sports, golf, wrestling, folk dances, weight-lifting, hapkido, handball, scouting, judo, canoe and rafting, karate, skiing, kickboxing, rowing, table tennis, modern pentathlon, motorcycling, mu-tai, archery, automobile and motor, orienteering, chess, sayokan (Turkish martial sport), underwater sports and rescuing, water polo, taekwondo, tennis, triathlon, university sports, volleyball, body building, sailing, swimming.

# The world is on the **look for Turkish** machines

**EVERY KIND OF MACHINE AND SPARE PARTS ARE PRODUCED IN HIGH QUALITY AND COMPETITIVE PRICES IN THE TURKISH MACHINE MANUFACTURING INDUSTRY THAT HAS HIGH COMPETITIVE POWER ESPECIALLY IN MACHINES AND COMPLETE FACILITIES WHICH ARE MANUFACTURED UPON ORDER AND IT ATTACHES GREAT IMPORTANCE ON R & D AND INNOVATION, CREATES PRODUCTS IN HIGH QUALITY WITH SUITABLE PRICES. CONSEQUENTLY, THE SHARE OF TURKISH MACHINES IS INCREASING RAPIDLY IN THE WORLD MACHINE TRADE.**





**M**achine manufacturing industry is the driving force of industrialization of our country as well as the whole world and it will be the foundation stone of our country's development in the future as well. Turkish Machine Manufacturing Industry continues to strengthen its position in the world machine manufacturing industry. Turkish machinery industry has shown approximately 20 percent of annual growth rate since 1990. The total machine manufactured in Turkey is approximately 15 billion USD and it is 4,3 percent of the total machine manufactured in the European countries. Turkey is in the 6th place among European countries in terms of total machine manufacturing value. Countries which have higher manufacture rates than Turkey are the following respectively: Germany 40 percent (140 billion USD), Italy 19 percent, United Kingdom 9 percent, France 10 percent, Spain 5 percent. The annual increase in the machinery manufacturing industry is expected to be at an average of 12-15 percent in the next 5 years. When we look at 2007, the increase in manufacturing is considered to be 12 percent with an optimist prediction. In 15 EU countries 21,315 companies display activity in machine manufacturing industry; in our country there are 11 thousand machine manufacturers. The sources in the sector state that this number is 20 thousand. However if we make an estimation according to the official figures, the number of companies are almost as much as half of the number of companies in 15 EU countries.

The leading product groups manufactured in the Turkish machine industry are: reactors and boilers; turbines and jet propellers; pumps and compressors; valves; air conditioners and cooling machines; heaters and cookers; roller and foundry machines; food industry machines; agriculture and forestry machines; load lifting, carrying and stowing machines; construction and mining machines; paper and typography machines; washing, drying and ironing machines; textile and ready-to-wear

“ Turkish machine sector export was 9.2 billion USD in 2007 and aims to increase export amount to a level which will be more than 25 billion USD in 2010; Turkish machine sector has been a sector which reached world markets in a quick and effective way and showed successful graphic increasing its export above the general export rate of Turkey. ”

clothes machines; machines to process leather; rubber and plastic; metal and machine tools; engines and spare parts; office equipment; bearings, weapon and ammunition and packaging machines.

### INNOVATION IN TURKISH MACHINES

Most of the companies active in the Machine Manufacturing Industry in Turkey are SME (Small and Medium Sized Enterprise) However their ability to adjust to technological developments quickly, adequate manpower and advanced engineering skills are the elements that increase their chance to compete in international markets. On the other hand, every kind of machine and accessories are produced in high quality and competitive prices in the Turkish Machine Manufacturing Industry. We have high competitive po-

wer especially on machines and complete facilities which are manufactured upon order. Our Machine Manufacturing Industry has the capacity to meet the domestic demand in many sub-sectors with its own production and it attaches great importance to R & D and innovation works.

The exporters in Turkish machine manufacturing sector have important advantages. Domestic input rate is 80-85 percent in the manufacturing process; our companies have turned to international markets parallel to the globalism in the world in the recent years; our country is close to markets which are geographically important. Advantages listed above are just the main ones.

### TURKISH GOVERNMENT GIVES IMPORTANCE TO MACHINE INDUSTRY

The total amount of Turkey's machine

#### FIRST TEN IMPORTER COUNTRIES CONSIDERING ACTIVITY FIELD OF CENTRAL ANATOLIAN MACHINERY AND ACCESSORIES EXPORTERS UNION (2007-2008 YEAR JANUARY-AUGUST PERIOD)

ÜLKE	2007 YEAR		2008 YEAR		Quantity: Kg	Value: ABD \$
	QUANTITY	VALUE	QUANTITY	VALUE	(%)	DIFFERENCE
COUNTRY					QUANTITY	VALUE
GERMANY	55,955,175	363,742,703	66,357,619	459,572,350	19	26
RUSSIA FED.	33,408,870	216,127,359	43,876,009	319,764,453	31	48
USA	18,604,773	199,185,016	27,853,980	283,663,619	50	42
ENGLAND	61,292,990	227,921,800	56,204,083	238,183,980	-8	5
ITALY	33,378,154	137,267,992	42,071,943	212,255,618	26	55
FRANCE	26,362,249	135,000,589	29,336,442	192,153,907	11	42
IRAN	20,166,840	96,686,207	28,629,201	164,109,133	42	70
ROMANIA	24,182,977	134,163,038	23,711,265	160,575,688	-2	20
AZERBAIJAN	16,320,050	78,851,106	18,613,387	134,828,800	14	71
IRAQ	21,758,514	105,015,224	22,738,604	115,000,592	5	10
OTHER	355,611,985	1,836,727,396	400,670,528	2,615,367,426	13	42
TOTAL	667,042,577	3,530,688,430	760,063,061	4,895,475,565	13.9	38.7

Source: All Exporters Unions Records

and accessories export was 1.8 billion USD in 2001, it increased by 5 in 6 years and now reached 9.2 billion dollars. In January-August 2008 period, the total export of Turkish machine industry increased by 32 percent compared to the same period of last year and reached 7.6 billion USD.

The machinery sector has a share of 15 percent in world trade and it has shown important increases in the world wide export. The importance of the machinery sector has been increasing because of its contribution on other

sectors. Today Turkey has export to countries which have advanced technology and which are among the leading countries in the machine trade; in Turkey the machine sector is the most regarded sector in the recent years. The machine manufacturing industry has crucial importance in the Turkish economy. With the increasing export rate which is above the general export increase of Turkey, with high added value which it created and with the high quality manufacturing; the machinery sector is the driving force of industrializati-



#### EXPORT FIGURES OF THE PRODUCT GROUPS OF CENTRAL ANATOLIAN MACHINERY AND ACCESSORIES EXPORTERS UNION

PRODUCT GROUP NAME	JANUARY-AUGUST 2007			JANUARY-AUGUST 2008			(% Değişim)		
	Quantity (Kg)	Value (\$)	\$/KG	Quantity (Kg)	Value (\$)	\$/KG	Quantity	Value	
REACTORS AND CALDRONS	22,251,662	118,221,746	5.3	24,976,859	180,460,373	7.2	12.2	52.6	
TURBINES, TURBOJETS,PARTS AND EQUIPMENT	8,589,253	117,112,283	13.6	6,387,904	151,663,916	23.7	-25.6	29.5	
PUMPS AND COMPRESSORS	45,465,915	345,918,603	7.6	49,584,248	422,134,329	8.5	9.1	22.0	
VALVES	20,125,557	159,846,393	7.9	25,985,664	225,396,221	8.7	29.1	41.0	
INDUSTRIAL AIR CONDITIONS AND COOLING MACHINERY	118,146,032	534,563,386	4.5	116,495,925	624,965,330	5.4	-1.4	16.9	
INDUSTRIAL HEATERS AND OVENS	17,306,474	115,846,176	6.7	17,381,109	144,059,270	8.3	0.4	24.4	
ROLLING MILLS AND MOULDING MACH.MOULD,PARTS AND EQP.	22,640,231	131,027,811	5.8	25,268,802	184,840,947	7.3	11.6	41.1	
FOOD INDUSTRY MACHINERY,PARTS AND EQUIPMENTS	28,962,056	171,800,261	5.9	38,090,299	256,884,590	6.7	31.5	49.5	
AGRICULTURAL AND FORESTRY MAC.	40,983,372	167,749,670	4.1	54,245,955	273,619,042	5.0	32.4	63.1	
LIFTING,CARRYING AND STOWING MACHINERY	19,530,996	95,057,119	4.9	21,787,751	114,596,031	5.3	11.6	20.6	
CONSTRUCTION AND MINING MACHINERY	153,497,140	503,521,446	3.3	185,221,732	734,199,312	4.0	20.7	45.8	
PAPER PROD. AND PRINTING MACHINERY	3,335,413	27,591,660	8.3	3,880,573	41,614,054	10.7	16.3	50.8	
OTHER INDUSTRIAL WASHING,DRYING MACHINERY	838,272	7,356,198	8.8	718,943	10,266,235	14.3	-14.2	39.6	
PACKAGING MACHINERY,PARTS AND EQUIPMENTS	2,002,381	29,913,890	14.9	2,479,223	57,776,657	23.3	23.8	93.1	
TEXTILE AND CONFECTION MACHINERY	25,432,031	148,930,083	5.9	26,620,029	188,828,454	7.1	4.7	26.8	
LEATHER PROC. AND PROD. MACHINERY	1,450,300	5,334,466	3.7	832,339	4,678,009	5.6	-42.6	-12.3	
RUBBER AND PLASTIC PROCESSING MACHINERY	5,737,229	46,872,661	8.2	6,398,885	69,355,607	10.8	11.5	48.0	
MACHINE TOOLS	68,549,824	382,339,872	5.6	80,512,312	531,618,895	6.6	17.5	39.0	
MOTORS	36,044	347,278	9.6	32,332	450,650	13.9	-10.3	29.8	
OFFICE EQUIPMENTS	772,721	7,893,684	10.2	432,413	4,343,694	10.0	-44.0	-45.0	
BALL BEARINGS	6,232,233	52,301,313	8.4	6,901,504	67,120,983	9.7	10.7	28.3	
GUNS AND AMMUNITION FOR DEFENSE INDUSTRY	9,010,558	92,717,564	10.3	9,239,475	207,385,402	22.4	2.5	123.7	
OTHER MAC.,PARTS AND EQUIPMENTS	46,146,884	268,424,866	5.8	56,588,784	399,217,565	7.1	22.6	48.7	
<b>TOTAL</b>	<b>667,042,577</b>	<b>3,530,688,430</b>	<b>5.3</b>	<b>760,063,061</b>	<b>4,895,475,565</b>	<b>6.4</b>	<b>13.9</b>	<b>38.7</b>	

Source: All Exports Unions Data

on in our country. Our machine export trade had always had a tendency in constant increase, and holds 7.8 percent share of the total export of Turkey in 2006; and 8.4 percent in 2007. Turkey is machinery export by 33 percent compared to the previous year and reached 9.2 billion USD; and has been increasing its export rate in the world machine export market and is now in 29th place on last year's world listing. Turkish machine manufacturers have an important level of export to the lea-



ding countries in world. High quality is the reason for being preferred in those markets. Turkish machine companies export approximately to 200 countries, the sector is trying to access to different markets every year. The sector plans the manufacture increase in relation to export rates. The EU countries and the USA are the top of the list of countries in trade with. The import of Turkish machine sector increases, as well as the export. Between 2001-2007 the total import of Turkey in the machinery sector was more than the export and in the last 6 years it increased 4 times and has reached 23.2 billion USD. Reducing of foreign trade deficit is at the top of the issues the machine sector aims to solve.

### THE GOAL OF 2010 IS MACHINERY EXPORT 25 BILLION USD

Total Turkish machinery sector's export in 2007 was 9.2 billion USD and aims to increase to 25 billion USD in 2010. This sector has reached world markets in a quick and effective way, increased export over the general export rate of Turkey and showed successful graphic. In order to make constant increase of export, all authorized bodies and institutions cooperated in harmony and determined strategies, accepted Turkish machine sector as the engine of the industry policy. These show that special



importance has been attached to the Turkish machinery sector. Today, the machinery manufacturing industry reached a stage which brings machines, electronics, software and services together to compose complex manufacturing and process systems that are needed for production, survival and progress of all sectors. With this

position, it is at the centre of all manufacturing industry. For that reason, the development models which will be set for our country are needed to be based on machines and first of all should set a strategy for our machinery sector and then the necessary measures should be taken and the activity should be started immediately.

#### EXPORT FIGURES OF TURKISH MACHINE AND ACCESSORIES SECTOR

	JANUARY-AUGUST 2007		JANUARY-AUGUST 2008		(% Difference	
	Quantity (Kg)	Value(\$)	Quantity (Kg)	Value(\$)	Quantity (Kg)	Value(\$)
REACTORS AND CALDRONS	22,251,662	118,221,746	24,976,859	180,460,373	12.2	52.6
TURBINES,TURBOJETS, TURBOPROPS PARTS AND EQUI.	8,589,253	117,112,283	6,387,904	151,663,916	-25.6	29.5
PUMPS AND COMPRESSORS	45,465,915	345,918,603	49,584,248	422,134,329	9.1	22.0
MOTORS	53,225,587	911,743,249	55,173,631	1,126,154,524	3.7	23.5
VALVES	20,125,557	159,846,393	25,985,664	225,396,221	29.1	41.0
AIR CONDITIONS,COOLERS AND FREEZERS	275,372,612	1,218,398,066	268,590,305	1,411,171,460	-2.5	15.8
HEATERS AND OVENS	19,689,465	130,750,242	21,276,445	169,569,685	8.1	29.7
ROLLING MILLS AND MOUL. MACH,MOULD,PRT AND EQP.	22,640,231	131,027,811	25,268,802	184,840,947	11.6	41.1
FOOD INDUSTRY MAC., PARTS AND EQUIPMENTS	28,962,056	171,800,261	38,090,299	256,884,590	31.5	49.5
AGRICULTURAL AND FORESTRY MACHINERY	40,983,372	167,749,670	54,245,955	273,619,042	32.4	63.1
LIFTING,CARRYING AND STOWING MACHINERY	19,530,996	95,057,119	21,787,751	114,596,031	11.6	20.6
CONSTRUCTION AND MINING MACHINERY PRT AND EQP.	153,497,140	503,521,446	185,221,732	734,199,312	20.7	45.8
PAPER PRODUCTION AND PRINTING MACHINERY	3,335,413	27,591,660	3,880,573	41,614,054	16.3	50.8
OTHER INDUSTRIAL WAS., DRYING MAC,PRTS,EQP.	165,173,382	546,613,846	174,827,856	671,846,039	5.8	22.9
PACKAGING MACHINERY	2,002,381	29,913,890	2,479,223	57,776,657	23.8	93.1
TEXTILE AND CONFECTION MACHINERY	25,432,031	148,930,083	26,620,029	188,828,454	4.7	26.8
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RUBBER AND PLASTIC PROCESSING MACHINERY	5,737,229	46,872,661	6,398,885	69,355,607	11.5	48.0
MACHINE TOOLS	68,549,824	382,339,872	80,512,312	531,618,895	17.5	39.0
OFFICE MACHINES	2,546,381	73,422,216	2,616,447	86,848,892	2.8	18.3
BEARINGS	6,232,233	52,301,313	6,901,504	67,120,983	10.7	28.3
GUNS AND AMMUNITION FOR DEFENSE INDUSTRY	9,010,558	92,717,564	9,239,475	207,385,402	2.5	123.7
OTHER MACHINERY,PARTS AND EQUIPMENTS	55,862,110	316,143,057	64,069,621	455,345,011	14.7	44.0
<b>TOTAL</b>	<b>1,055,665,689</b>	<b>5,793,327,517</b>	<b>1,154,967,860</b>	<b>7,633,108,433</b>	<b>9.4</b>	<b>31.8</b>

PS:You can reach export record numbers on the basis of customs tariff statistics pozition (CTSP) from "Statistics" section of the web site "www.makinebirlik.com"





# From the simplest to the complicated History of Turkish Machine

**DEVELOPMENT STAGE STORIES OF MACHINES ALSO FORMS DEVELOPMENT STORIES OF POPULATIONS. JOURNEY OF THE MACHINES COMMONLY USED IN ANATOLIA LIKE IN EVERY OTHER GEOGRAPHY WAS VERY SLOW BECAUSE OF SOCIAL, CULTURAL, ECONOMICAL AND OTHER REASONS UNTIL THE REPUBLIC PERIOD. THE EFFORT FOR IMPROVEMENT, SUCCESS IN KEEPING UP WITH THE WORLD CREATES A STORY WHICH IS WORTH TO TELL.**

**T**oday most of us use certain machines while we work. Electrical vacuum cleaners, electrical shavers, sewing machines, in other words machines which make our work easier are in every house. The people who use the machines instinctively think that they are very complicated because they don't know the working principles of these machines. But even the most

complicated machine is a device consisted of simple elements aiming certain purposes. Just because of this reason their stories are based upon old times. The word "machine" was used to express simple basic elements in the beginning; but machine elements weren't classified solitarily. Heron from Alexandria (B.C.100) mentioned five basic simple machines: Lever, crane, bobbin, dagger and screw. Heron accepted ge-

ar wheel equivalent to a crane theoretically and didn't accept inclined plane as one of the machine elements. Other writers estimated screw as an applicator of inclined plane rather than accepting it as an element on its own. Stories of certain kinds of complicated mechanisms which consist of these simple machines and their development process lead the way to progress of humankind in a long period of history. Es-



pecially traditional machines which were developed by utilizing water and air in Anatolia, made people's lives easier for centuries like in the rest of the world. Well spinning wheel, Archimedean screw or spiral, pulley, bucket line, gear wheels with scoop, septated gear wheels, water removal mechanisms like Takiyuddin's six cylinder pump, water mills which are the second application areas of traditional machine elements, water clocks which were made by several inventors like El Cezeri, automats for various functions or automats for fun or aesthetic tastes and magic pots developed by Benû Musa brothers were commonly used in Anatolia.

But the eastern world that met technological needs with traditional machines, lost leadership against technological developments after renaissance and the science revolution in Europe.

## TRANSFER OF TECHNICS IN OTTOMANS

Within this period the Ottoman Empire got its share through their relations which depended on a constant struggle with Europeans their neighbouring-borders throughout history. The Ottoman Empire transferred all the technical development in Europe to close their technology deficit with the Western world and struggled to keep up with the era until present day. The Ottomans who primarily followed Europe in war techniques and firearm technology, also transferred information about topics such as geography, medicine, watch-making and mining.

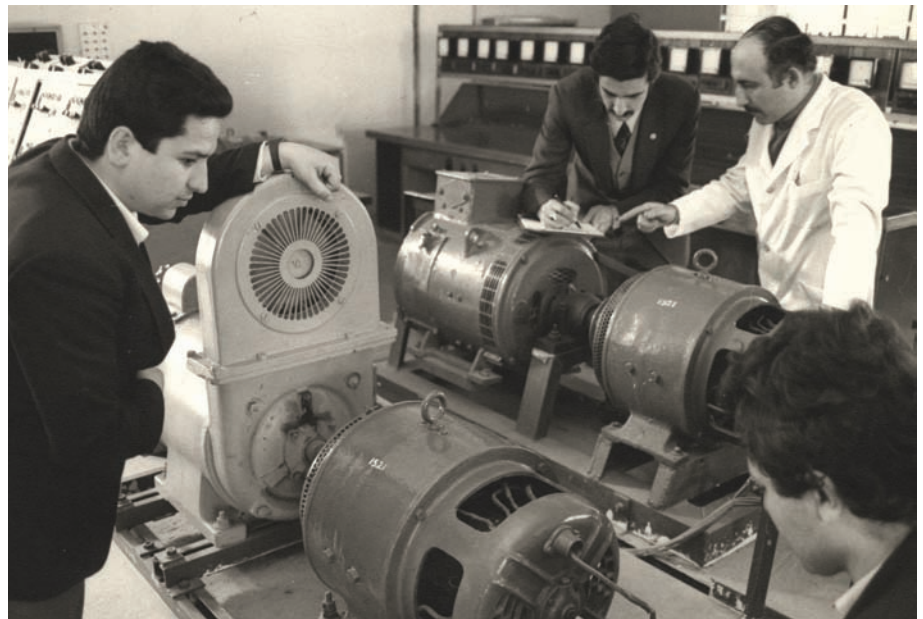
Besides utilizing technical information of the culture and civilization which they belonged, the Ottomans obtained techniques of other civilizations which they didn't have without any restrictions. For example, in the 15th century Leonardo da Vinci mentioned several technical projects to Beyazid II in his letter. New water cabinet for discharging water from ships, in other words a pump project was among these. It has been told that the 17th century Istanbul Azapkapi, pumps have been made from pine tree, the way it was learned from the Europeans and water was drawn

“ In the 15th century Leonardo da Vinci mentioned several technical projects to Beyazid II in his letter. New water cabinet for discharging water from the ships, in other words pump project was among these. ”

from wells with large earthenware jars with these pumps without using buckets. In the year 1717 a French citizen, David who was named Real Davut after he converted to Islam, made a lift and force pump in his country and established a fire brigade working with this new system in Istanbul.

In the beginning of middle age, water pumps which provided power mostly for flour mills were adjusted to several

technological machines such underground water pumping machines, mineral ore processing and pressing machines, mine melting blower operating machines, forge hammer lifting machines, wiring machines and the machines which operate sawmills using beater mortar. This way while on one hand while water power provided the energy supply in coal and iron productions which were the locomotives of the British in-







dustry, on the other it was used in automatic spinning wheels and operating automatic fabric looms in the textile sector. The water wheel which didn't lose its importance until many years after the invention of steam engines, continued to be the most important power supply both in Europe and in North America. In fact, industrial revolution led to many important adjustments and developments in water wheels instead of inactivating them. When it is estimated in terms of point of view, it was understood that common water power

usage and energy technology background were adequate for Ottoman industrialization at the end of the 18th century.

### MILITARY TECHNOLOGY

Second half of the 18th century was also a reform period for the Ottoman Empire as in other European countries that experienced a major breakthrough in industry the Sultan and the administrators made serious efforts in this field. First serious reform effort started in the military field in the first half of 18th

century and a new artillery force (humbaraci) organization was established in 1735. The person in charge of the operation was Humbaraci (Artilleryman) Ahmet Pasha who was of French origins that later converted to Islam and served the Ottoman Empire. This first military organization established similar to the European sample, formed the first core of the Engineering school which opened in 1775 under the administration of Baron de Tott who was also a French officer. In this period, it could be seen that numerous experts and technicians have served the Ottomans and the latest developments, information and technologies in Europe have been learned via these experts.

As in every other field, the major breakthrough in European originated technology and industry has been implemented in the period of Selim III. who was the close follower of his reformist father. Selim III was crowned in 1774 until then during his uncle Addulhamit I's reign, Selim III used the facilities he had as the heir to the throne and studied the current technology educating himself to the reforms he would make when he acceded to the throne. He sent Ishak Bey who was one of his closest man to France via the French Ambassador posted in Istanbul, Gouffier and collected information about the situation of the European countries and military situation, land and marine forces, castles, arsenals and navy yards of France, at the same time he corresponded with King Louis XVI. As a result, when he acceded to the throne, Selim III became a sovereign who had widened his horizon and was determined to make reforms in the empire.

Selim III and his assistants also gave priority to huge military technology investments. Within this purpose, while on one hand efforts for artillery and light firearms have been started in 1793 under the administration of Guion Pompe-Ionne who was the director of the Valance artillery foundry in France, on the other with Baruthane-i Amire in Bakirkoy, they made efforts to rehabilitate local gunpowder factories in Thessalonica, Gallipoli, Baghdat, Cairo, Belgrade and Izmir beginning from 1790.



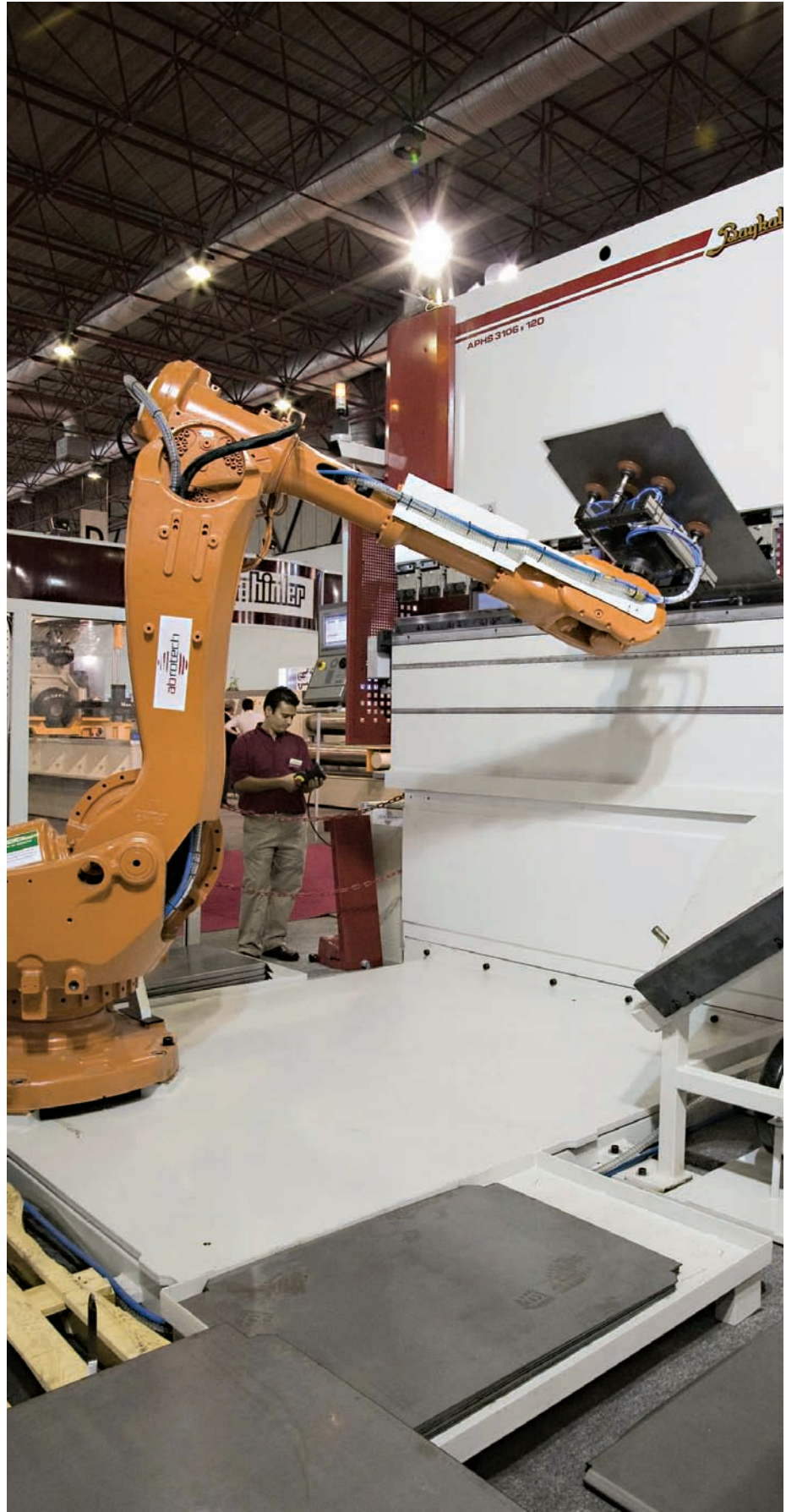


Especially in the beginning of 1794, as a result of successful production accomplished in the big and new gunpowder factory which was built in Azaldi region, north of Kucukcekmece under the administration of an Armenian craftsman named Evakil Efendi, Bakirkoy, Gallipoli, Thessalonica and Izmir facilities were inactivated and from the beginning of 1795 ammunition needs of the Ottoman army and navy could be provided without any problems. The most important characteristics of the Azaldi facility was providing the energy needs of the facility's machine components through water wheels.

While all the other Ottoman gun factories except Haskoy were managed by two French experts Aubert and Cuny until Napoleon Bonaparte's invasion to Egypt between 1795 and 1798, after the invasion the positions were assigned to British and Swedish officers. In this period although the efforts for gun technology have given limited results, important arrangements were accomplished in mining and moulding technologies which were its sub fields. Against hard and slow advancement of land army reforms, navy and Tersane-i Amire reforms resulted much faster. From the beginning of 1793 both reconstruction in Tersane-i Amire and a navy which was built by Jacques Balthazard Le Brun who was a French marine engineer and his two assistants Jean Baptise Benoit and Toussaut Petit rehabilitated Ottoman marine forces in an incredible way.<sup>45</sup> new battleships joined the Ottoman navy until 1804, both marine engineers and naval officers were educated at the highest level in Engineer School in Haskoy.

## TECHNOLOGY THAT COMES FROM THE WEST

First generation modern Ottoman scientists who were educated by European scientists and served as teachers in Engineer Schools afterwards, had an effect in technology transfer from Europe. They were assigned to buy the first steam machines and operate them. Scientists like Huseyin Rifki Tamani and Yahya Naci Efendi who were the first teachers of Muhendishane-i Berr-i Hu-

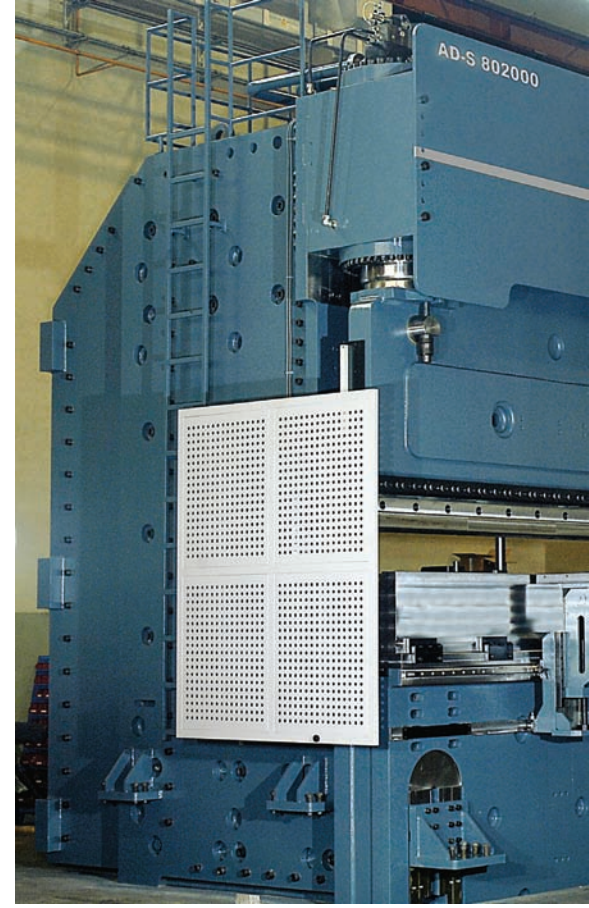




“ First generation modern Ottoman scientists who were educated by European scientists and served as teachers in Engineer Schools afterwards, had an effect in technology transfer from Europe. They were assigned to buy the first steam engines and operate them. These engineers introduced the industrial revolution in the Ottoman Empire for the first time by the end of the 18th century ”

mayun, introduced the industrial revolution in the Ottoman Empire by the end of the 18th century. In the beginning, the Ottoman Empire imported steam machines directly from Europe and started to produce them in Istanbul soon. With the order of the sovereign, the search to find a way to produce every European product in the Ottoman Empire began. Head-teacher Hafiz Ishak Efendi who was the chief of the Muhendishane-i Berr-i Humayun between 1830 and 1836 was one of the most important visionaries introducing modern western sciences to the Ottoman Empire enabling them to be thought in schools. It is known that he has written 7 books consisted of 11 volumes with his diligence and translation skills between the years 1824 and 1836. Mecmu-i Ulûm-i Riyaziye which consisted of 4

volumes, is important in terms of being the first book presenting printed Turkish texts of many science fields such as mathematics, physics, chemistry, astronomy, biology, botany, zoology and mineralogy together. In addition to this, Ishak Efendi has written books in fields of artillery moulding, geodesy tools and military engineering. Although a complete industrial revolution has never been accomplished in Turkey during the Ottoman period big industrial enterprises like Zeytinburnu Iron Factory and Beykoz Leather Factory have been established especially for military needs. Building a steam ship was partially accomplished in the navy yard. In the agriculture field, tools and machines were imported from Europe; agricultural machines invented by several educated farm owners were rarely seen. Among these people was Ra-



uf Pasha involved in agriculture in Bursa invented a threshing machine and used it.

### TECHNICAL EDUCATION

Mechanical Engineering education in Turkey started in Mekteb-i Bahriye-i Sahane (Navy School) which formed the basis of the Istanbul Technical University. As a result of rearrangement of the Navy School, education period of







the school was extended to 8 years as 4 years secondary school, 2 years military college and 2 years marine education. The students who finished military college became an engineer and continued their education in the Navy. In military section, besides deck and construction classes which were named as military classes, steam-engine classes were offered beginning from 1866. The students who started military classes that year, graduated as deck, construction and mechanical engineers in 1870. The students who graduated from steam class weren't in fact mechanical engineers; they were ship machine operating engineers. After his graduation, Ahmet Besim Pasha who was one of these mechanical engineers was assigned as assistant of Shanks who was a chief engineer in Tersane-i Amire, and was named chief engineer after Shanks quit in 1873 and continued to work until 1909. Ahmet Besim Pasha designed steam engines in this period and these machines were produced and were put on several ships. Besides Navy School there were few

mechanical and electrical engineers educated in Europe. In the republic period, while students were sent to different countries in Europe to be educated as engineers, schools opened in required engineering fields. Ottomans who struggled hard to close the technological gap between Europe during the industrial reform period with the hope for gaining back their technological leadership, unfortu-

nately never kept up with the speed of technology. Rare little attempts remained as personal attempts before serial production. However, they succeeded well in keeping up with the world technology and faking it unlike many countries. Without a doubt, development of this process is hidden in economical, cultural, political and many other characteristics of the Ottoman Empire.





# The Ancestor of the First Robot is Turkish

**EBU'L İZ EL CEZERI, A GENIUS ENGINEER OF ANATOLIA IS ACCEPTED AS THE PERSON WHO TOOK THE FIRST STEPS OF CYBERNETICS AND COMPUTER AND IS THE PERSON WHO BUILT AND OPERATED THE FIRST ROBOT.**

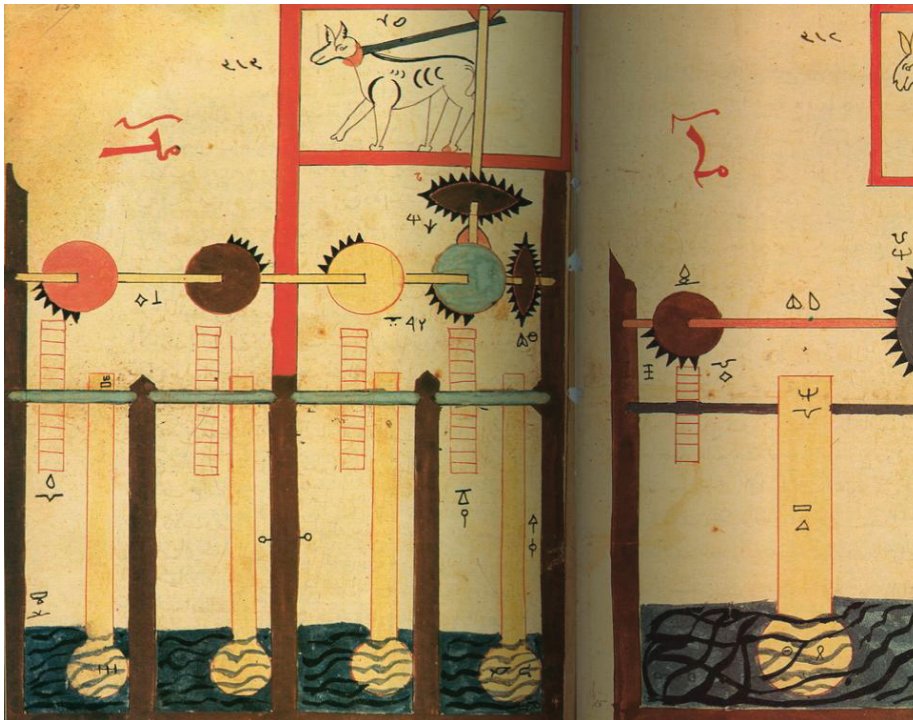
**B**ediüzzaman Ebu'l İz İbni İsmail İbni Rezzaz El Cezeri forms the most brilliant page of the Turkish engine history without a doubt. In an era when Artuqid Turks prevailed Diyarbakir, inventions of El Cezeri who worked as an engineer for the Artuqid Sultan Mahmut bin Kara Aslan for 32 years, gave life to many technical gadgets after centuries.

Water clocks, water robots, automatic thermos and several other technical and mechanical inventions of Cezeri who is believed to have lived between the years 1136 and 1206, have also surprised the people who have seen his inventions at the time. But being a scientist building the basis of the computer system and cybernetic science makes Cezeri unique. Ebu'l İz El Cezeri built machines and automatic gadgets depending on the same system as the English mathematician Charles Babbage, known as the father of computer, 6 centuries before Babbage. In the same way, he made scientific studies on cybernetics and automatic gadgets to work automatically 800 years before neurologist Ross Ashby who is known as the establisher of cybernetic science and built the basis of this science. Ebu'l İz El Cezeri who worked on present cybernetic and robot technologies in terms of world science history, collected his studies in a book named Kitab-ül Cami Beyn'el İlmi and el Ameli'en Nafi fi Sinaati'l Hiyel (A Book For Utilizing Mechanical Movements In Engineering) for the Artuqid Sultan. In this extremely interesting book, Cezeri sho-



wed operation principles and utilization facilities of more than 50 gadgets through his sketches. Although the original book by Cezeri who said "Any technical science which is not practiced would be trapped between right and wrong" could not reach present day, ten copies are kept in different museums of Europe, five copies are kept in the Topkapi Palace and Suleymaniye libraries. The work of art known as Kitab-ül Hiyel consists of 6 chapters. In chapter one

there are 10 figures about making bin-kam (water clock) and finkan (water clock with oil lamp) as saat-i musteviye and saat-i zamaniye, in chapter two there are 10 figures about making different pots and pans, in chapter three there are 10 figures about making ewers and bowls for drawing blood and ablution, in chapter four there are 10 figures about pools and sprinkles and music automats, in chapter five there are 5 figures about pumps which raise the water le-



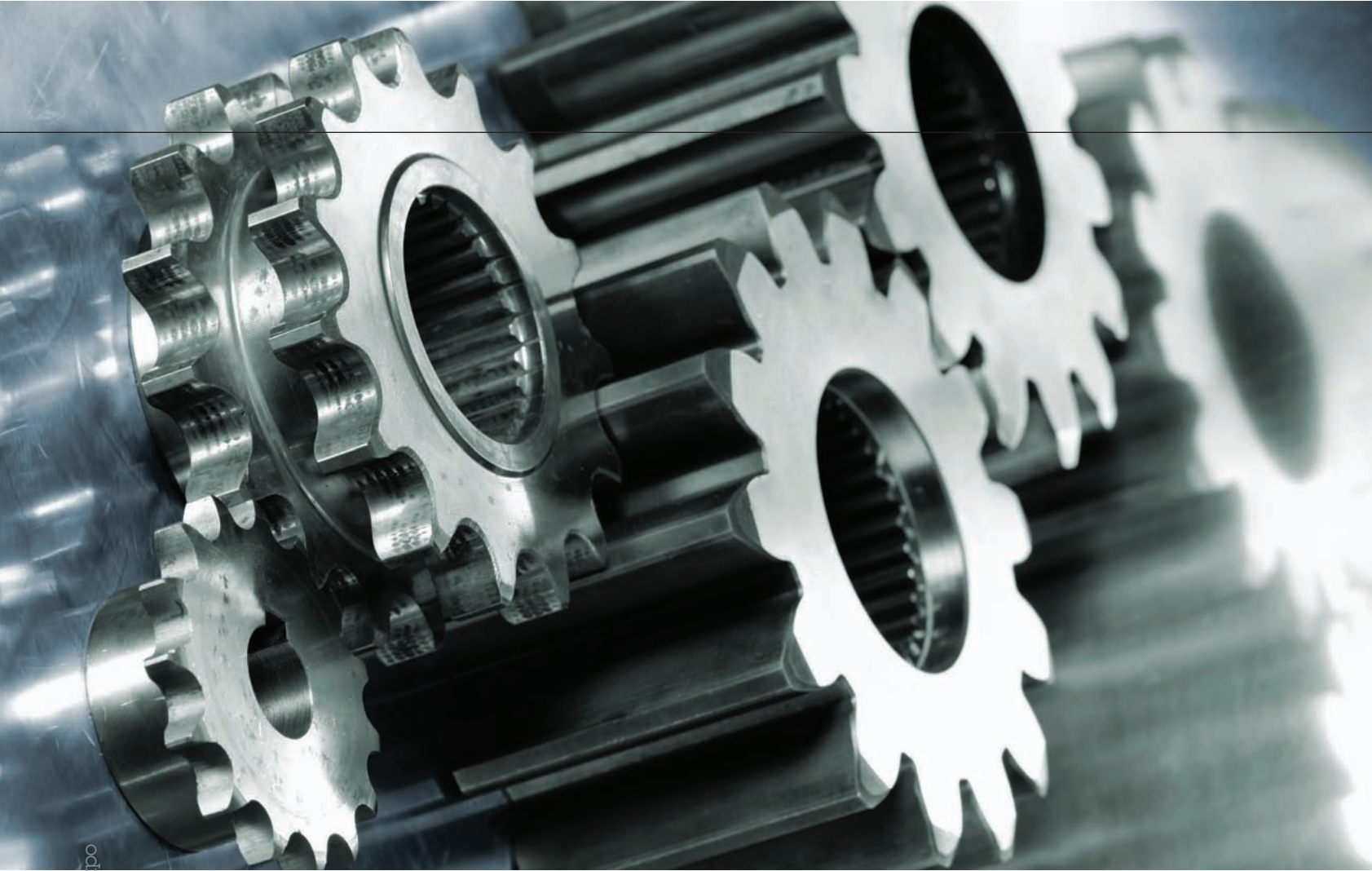
vel of a shallow well or a running river, in chapter six there are 5 figures on making various figures which are not similar to each other. El Cezeri who made gropingly empirical studies rather than theoretic studies used to make paper models of gadgets he would build and made use of geometric rules. Cezeri who used mechanisms working similar to the system of the calculator in a clock he developed many centuries before the first calculator was ever invented, he did not only use automatic systems, at the same time managed to equilibrate systems which work automatically.

One of his most interesting inventions was the automatic butler which decided when to pour water according to the water levels of various reservoirs and when to serve fruit and drink. While Cezeri tended to equilibrate with hydro mechanic effects and movement system in some of his machines, he tried to establish mutual effect system by using gear wheels between water gauges and tackles in some of them. The most important contribution of Cezeri in the automation area after automatic systems was establishing balance which automatic equilibrates and adjustments using pressure effect.

“ Cezeri who used mechanisms working similar to the system of the calculator in a clock he developed many centuries before the first calculator was ever invented, he did not only use automatic systems, at the same time managed to equilibrate systems which work automatically. One of his most interesting inventions was the automatic butler which decided when to pour water according to the water levels of various reservoirs and when to serve fruit and drink ”







# The only address of Turkish machine exporters

**CENTRAL ANATOLIAN MACHINERY AND ACCESSORIES EXPORTERS' UNION HAS BEEN OFFICIALLY IN ACT SINCE 2002 TO GATHER MACHINE MANUFACTURERS TO OPERATE UNDER A SINGLE ROOF AND COORDINATING EVERY KIND OF ACTION AND IT IS THE ONLY EXPORTERS' UNION IN WHICH MACHINERY EXPORTES IN TURKEY ARE REPRESENTED AND IT HAS APPROXIMATELY 9 THOUSAND MEMBERS.**

**M**achinery-manufacturing industry has a special importance in the industrialization process of all countries in the world; in our country as well, with the rapid development of high added value, which it has created, and with its contribution to other sectors, machinery-manufacturing industry has been the driving force of industrialization since the beginning of the last century. As a result of this

interaction, the machinery manufacturing industry has become more successful compared to the other manufacturing industries, and its exports have constantly been above the average of the export increase for Turkish industries overall.

Most of the Turkish machine manufacturers are of SME nature similar to the case in many other countries; this nature creates opportunity to give them a more flexible and quick reply to chan-

ging economical conditions and technological developments.

## **HIGH QUALITY, REASONABLE PRICE**

All kinds of machines and their accessories are manufactured with high quality and competitive prices in the Turkish Machine Manufacturing Industry. The domestic input rate in the manufacturing process is around 90 percent. Since engineering services have a lo-



wer cost compared to many countries, especially the machines and complete facilities which are manufactured upon order increase their competitive power. The density of young, dynamic and educated manpower, the professional work mentality on the delivery of the manufactures in intended amounts, quality, prices and time are among the leading reasons behind the preferences of the international markets for choosing Turkish manufacturers.

The leading product groups which are manufactured in the Turkish machine industry are: reactors and boilers; turbines and jet propellers; pumps and compressors; engines and spare parts; valves; air conditioners and cooling machines; heaters and cookers; roller and foundry machines; food industry and packaging machines; agriculture and forestry machines; load lifting, carrying and stowing machines; construction and mining machines; paper and typography machines; washing, drying and ironing machines; textile and ready-to-wear clothes machines; processing machines for leather; rubber and plastic; metal and machine tools; office equipment; bearings.

## DOMESTIC MANUFACTURE INCREASES

Domestic manufacture has showed a quick increase in the Turkish machine sector and has approached to 18 billion USD value. The manufacture is expected to increase by 12-15 percent rate average annually in the next five years. The sector directed its manufacture increase to export and EU countries and USA are at the top of the list of its exported countries. Machinery and accessories sector increased its export approximately 4 folds in the last ten years and it has been strengthening its position in the world machinery- manufacturing industry with its fast technological development.

Machinery and Accessories sector has a portion of 7.1 rate in the total export of Turkey. The most important export items of our country's machine sector are: air conditioners and cooling machines at foremost and engines and spare



parts and washing, drying and ironing and packaging machines.

## MACHINE EXPORT TO 200 COUNTRIES

Turkish Machinery Manufacture Industry attaches great importance to R & D works and it increased its competitive power in international markets with advanced engineering skills and low cost manufacturing, so it exports to approximately 200 countries.

Germany, United Kingdom, Italy, France, USA and Spain are among the leading countries in the export of the sector; the Russian Federation, Iraq, Romania, Poland, Bulgaria and Iran are the other important markets that we export to. Germany is in the leading position in Turkey's total machine export with 17 percent and Turkey's export to Germany has increased 3 folds in the last five years.

## EXPORTERS UNION OF 9 THOUSAND MEMBERS

The mission of Turkish machine manufacturers is to maintain flexible manufacture with high technology and competitive prices and its vision is reaching world markets in a fast and effective way.

Central Anatolian Machinery and Accessories Exporters' Union (OAIB) has been officially in act since 2002 to gather machine manufacturers to operate under a single roof and coordinating every kind of action and it is the only Exporters' Union where machinery exporters in Turkey are represented and it has around 9 thousand members.

Central Anatolian Machinery and Accessories Exporters' Union carried out many projects to strengthen the machinery sector and export. In this scope; Machinery Sector Inventory work was

completed to organise actions in the machinery sector more systematically and to introduce the structure of the sector Common Purchasing Organization (OSO) Project, in which purchasing bargains was done through one centre. OSO Inc. was set and started operation, the infrastructure works for the project giving Certificate of Conformity which would enable to highlight the quality as a visual identity, which was Turkey's aim in the machine sector; for the purpose of undertaking the mission as a brand and promoting the image of "Turkish Machine is High in Quality" in domestic and foreign markets more efficiently, in this scope a Branch was established within the structure of OAIB, Machine Industry Sector Platform was established with the participation of the associations in the sector for the procurement to cooperate in machine sector, feasibility research was done to open a trade centre abroad, various initiatives were made. The activities, which were started to ensure that our manufactures were a brand in the international markets and to create joint initiative opportunities with foreign investors, would enable the machinery manufacture sector to be among the most important sectors which drags the industry of our country with the success it showed both in manufacturing and in the expansion abroad in the coming years.

## COMMUNICATION

### CENTRAL ANATOLIAN MACHINERY AND ACCESSORIES EXPORTERS' UNION

Adres : Mahatma Gandhi Cad. No:103 G.O.P.

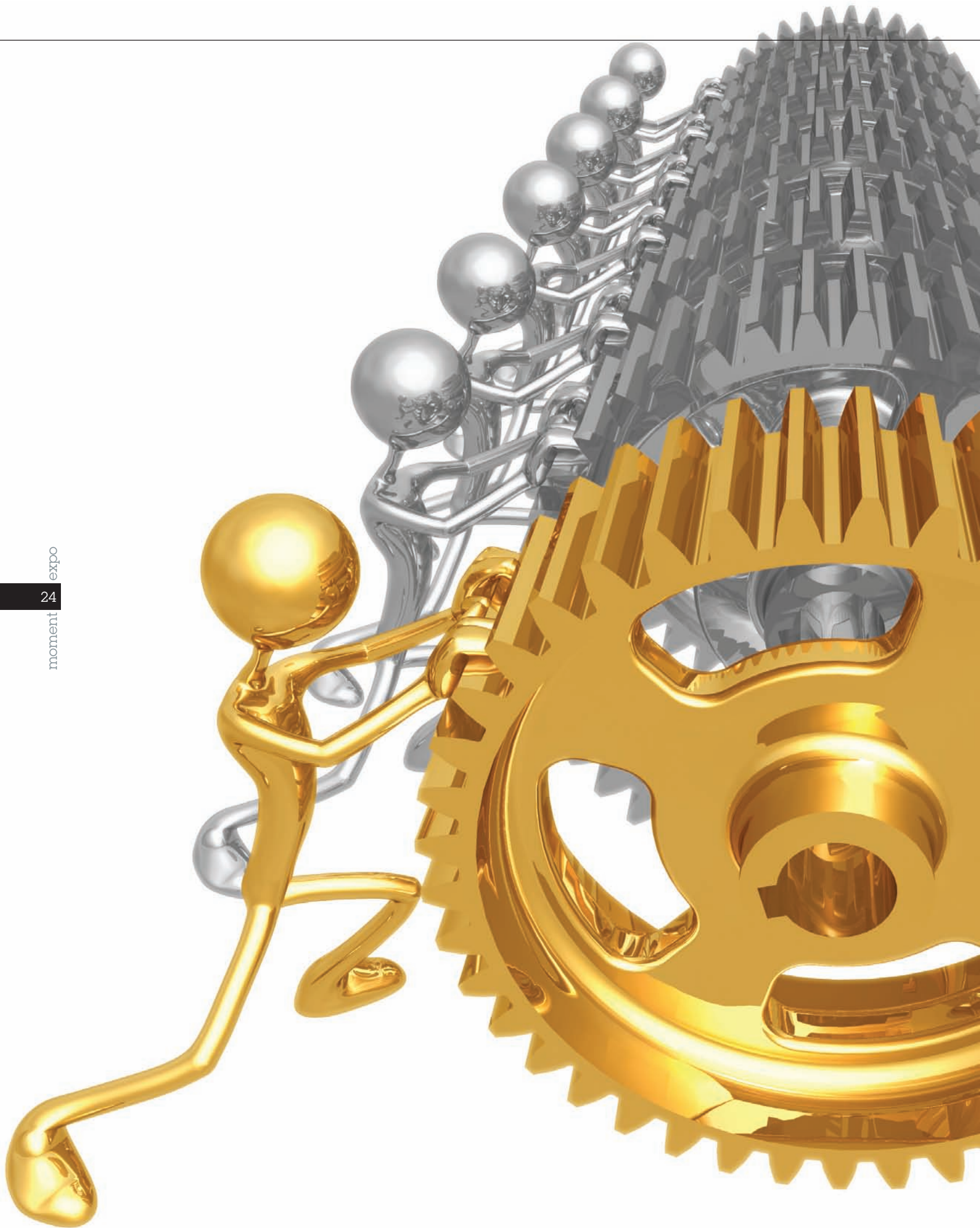
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# The joint power of the Turkish Machinery Industry

**TURKISH MACHINERY INDUSTRY, SLIPPED THROUGH MANY OTHER INDUSTRIES IN TURKEY AND ACHIEVED A FIRST. A BIG JOINT POWER WAS OBTAINED WITH “TURKISH MECHANICAL INDUSTRY PLATFORM” WHICH WAS SET UP BY THE COLLABORATION OF 27 ASSOCIATION, INDUSTRIAL ZONE AND CHAMBERS ENGAGED IN THE SECTOR. TURKISH MACHINERY MANUFACTURERS WILL EASILY ACHIEVE THEIR TARGETS IN THE FUTURE WITH THE STRENGTH THEY OBTAIN FROM TURKISH MECHANICAL INDUSTRY PLATFORM.**

**M**achinery is like the subject of every sentence with the verb “production.” Today the machinery sector is an integral part in every stage of production from agriculture to industry or mining to automotive. Until the recent years, machinery in Turkey was shaped with foreign dependency. However today, figures clearly show that the Turkish machinery sector is a fast growing, ascending sector in the race of export, thanks to the manufacturers spread all around Anatolia. The Turkish machinery sector is a giant power; raising its export numbers to 9 billion dollars in 2007 and 7,6 billion dollars in the first 8 months of 2008 raising its export by 32% compa-

red to the same term of the previous year. The sector is devoted to the development of the Turkish Industry and displays great discipline; adopting the motto ‘great power comes with great responsibility.’ Central Anatolian Machinery and Accessories Exporters Union acts as a dynamo helping the sector progress faster exercising new applications to improve the competitive capacity of the Turkish Machinery sector in the international markets.

#### **THE IMPOSSIBLE ACHIEVED**

The sector achieved the impossible with the Turkish Mechanical Industry which was pioneered by United Central Anatolian Machinery and Spare Parts Exporters. The Machinery Industry Sector



Platform is started by 27 association, industrial zone and chambers that believe no other sector will grow if the machinery sector does not develop. The first step of a unity which was not seen in any other sector in Turkey was started with the Turkish Mechanical Industry Platform.

### DEMAND FOR UNITY FORMED THE BACKGROUND OF THE PLATFORM

The best words to explain the reason behind the foundation of the Turkish Mechanical Industry Platform is of the president of the Platform Executive Board, Kutlu Karevelioglu, who explained the reason behind the Platform as “the idea of the platform is the product of a demand for unity; to think together, to develop solutions together, and to share our knowledge and facilities, to get over the difficulties in solidarity; to achieve power to regulate, effect and shape the sector.”

He also emphasized a grim reality saying that the first association of the machinery sector in Turkey was established in the 1950s whereas the German Federation was established in the 1980s. “Turkey must step up in this race she started behind. The requirement of a platform for the Turkish machinery Sector starts just at this point. This sector can run faster with the help of unity as a result of this platform, in a race it started behind compared with its competitors.”

About the idea behind the foundation of the platform, Kutlu Karavelioglu says “I think the idea occurred in the sector on 21st December 2005 when we held a meeting in Bursa with the participation of 9 associations. It was a very lively dinner. I remember leaving the meeting



thinking, it will happen. But it didn't go as fast as we expected. Meanwhile Central Anatolian Machinery and Accesso-

ries Exporters Union was enlarging, many projects was brought to life one after the other. The good thing was that the sector owned joint projects and friends who came to the administration took hold of the projects carrying them further. The idea of platform stayed vivid that way. The embodiment stage was caught when Central Anatolian Machinery and Accessories Exporters Union join the process and we opened up the Foundation Protocol and Work Principals for signatures on 16 February 2007. 27 association, federation and

“ Turkish Mechanical Industry Platform brings together the Turkish machinery sector as one fist. The Platform works on a joint sector becoming the side sector in several areas. Turkish Mechanical Industry Platform is a very important step for this purpose. ”



sector organization joined in. Some had to make some changes in the statutes; it was a hard process. On the 5 of November 2007 we held our first council of director meeting. Structuring, our web site, office ware and documents were prepared until the second meeting on 12 March 2008.

### **PLATFORM WAS IMPLEMENTED ON 12 MARCH 2008**

If you wish, let's rewind the time back to 12 March 2008. The Machinery In-

dustry Sector Platform was formed by 27 associations, chamber, federation and industrial zones, with the lead of Central Anatolian Machinery and Accessories Exporters Union in order to obtain joint power and make joint decisions. The Platform held its meeting of Expanded Council of Directors with the participation of the Turkish Republic State Minister Kursad Tuzmen, on 12 March 2008 in Ankara. From then on the Turkish Mechanical Industry Sector Platform which represents 80% of the

## **THE VISION AND MISSION OF THE PLATFORM**

### **The Vision of the Platform:**

Improving the life quality and wealth of our society and help in our country's sustainable development; contribute in the technological improvement of the machinery industry sector and help it to become internationally competitive in innovations; to be a leading, contributing and sharing roof organization.

### **The Mission of the Platform:**

Developing policies according to the priorities of our national industry with every part of the machinery manufacturing sector and in collaboration with the related organizations in order to improve the competitive capacity and wealth and also maintain it; contributing to developing the substructure and tools to achieve these; playing the main role in forming solidarity and collaboration culture.

sector, could step up to bring the industry to a leading position in the world with the giant support of unity behind it.

### **DISORGANIZATION ENDED**

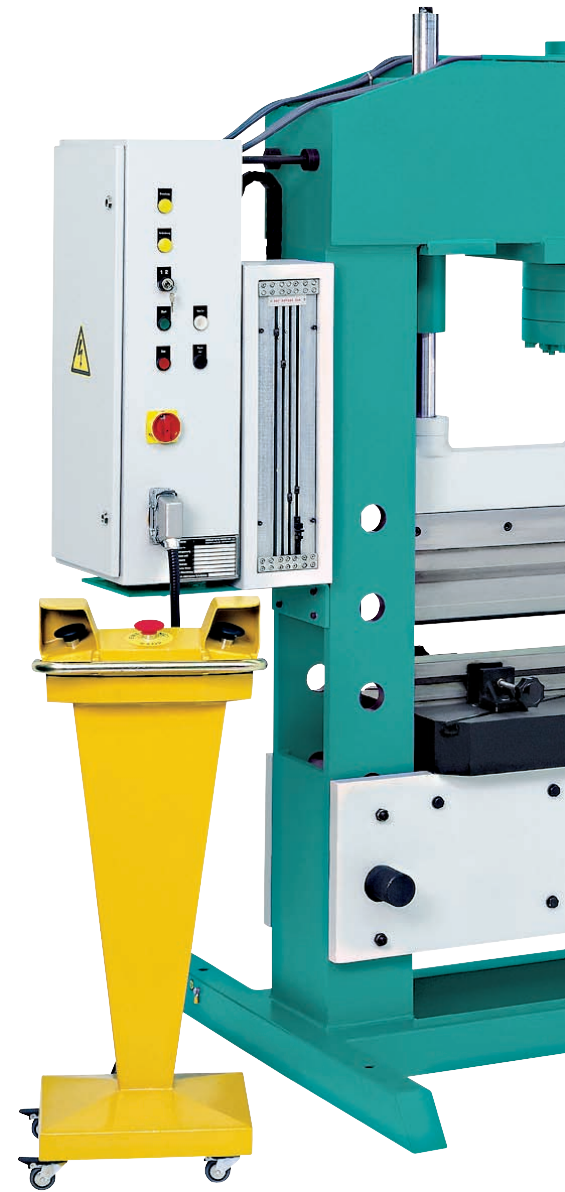
Adnan Dalgakiran the president of the board of directors in the Central Anatolian Machinery and Accessories Exporters Union described the Platform as "a step to make the machinery sector one voice and one power." He summarizes the target of the platform as follows; "Turkey is a country which imports technology and that's how manufacture is done. As long as you import technology, it is not possible to close the gap of the foreign trade deficit. There are two items in the foreign trade deficit. The first is petrol; second is investment and intermediate items. There is no hope of finding petrol, but we have such a sector in hand. Already, one of the biggest reasons behind the growing foreign debt of the Turkish private sector is the import of capital goods, the machinery tools import. Turkey is growing fast. But not producing technology, buying technology. Imports the machinery, manufactures the good with cheap labour. But it all finished now. You will either return to added value products in this sector or you will expand the added value goods sector such as



“ The idea of a Platform is the result of a demand for synergy. Our purpose is to think together, to develop solutions together, to share our facilities, knowledge and get over the difficulties with solidarity; to gain the power to regulate effect and shape the measures and finances. ”

the machinery sector. Machinery has a strategic characteristic making the infrastructure of other sectors. The European Union regards the machinery sector not only as a strategic sector but also as foundation, and says I do my best to protect and improve this sector, and support if it is necessary. In the coming

term the engine of the Turkish economy will be machinery and side sectors. Because without a growth in the machinery sector, there will be no future neither for Turkey or any other industrial sector. However if we can manufacture with appropriate technology, we can produ-



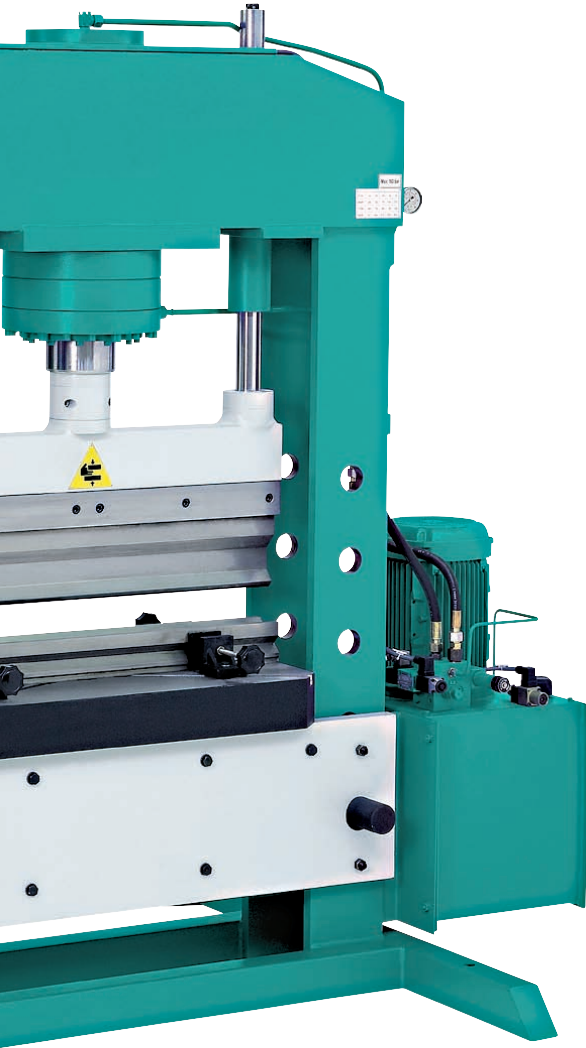
ce the needs of the textile or food producers and all the needs of the industrial branches. The sector has to proceed in this way and we are working to make this sector one fist thanks to the platform. We are working to unite the entire sector and create an industry in several fields. The machinery Sector Platform is a giant step in this way.”

**“THE PLATFORM WILL SPEED UP THE GROWTH IN THE SECTOR”**

During the interviews we carried with the members of the Turkish Mechanical Industry Platform, the subject, highlighted by all of them was, the biggest con-

**MEMBERS OF TURKISH MECHANICAL INDUSTRY PLATFORM**

NAME OF ASSOCIATION	TELEPHONE	WEB PAGE
Turkish Fluid Power Association	+90 212 222 19 71	www.akder.org.tr
Packaging Machinery Manufacturers Association In Turkey	+90 216 545 49 48	www.ambalaj.org.tr
Anatolian Flour Miller Association	+90 281 04 68-69	www.ausd.org.tr
Anatolian Elevator Conductors Association	+90 312 232 06 40	www.anasder.org.tr
Onboard Equipment Manufacturers Association	+90 212 771 44 88	www.arusder.org.tr
Caupling Industrialists' and Businessman's Association	+90 212 613 79 00	www.besiadturkey.com
Industrial Automation Industrialists' Association	+90 216 469 46 96	www.enosad.org.tr
Construction Equipment Distributors and Manu. Association of Turkey	+90 216 477 70 77	www.imder.org.tr
Imes Industrial Site	+90 216 364 33 47	www.imes.org
Forklift Trucks and Mate. Handling, Storage Equip. Association of Turkey	+90 216 477 70 77	www.isder.org.tr
Turkish Air Conditioning and Refrigeration Manufacturers' Association	+90 216 469 44 96	www.iskid.org.tr
Association of Engineers In Construction Plant and Equipment Industry	+90 312 385 78 94	www.ismakinalari.org
Boiler And Pressure Vessel Manufacturers Union of Turkey	+90 212 222 81 93	www.kbsb.org
Association of Machine Manufacturers	+90 312 468 37 49	www.mib.org.tr
Ostim Industrial Site	+90 312 385 50 90	www.ostim.org.tr
Industrialists' and Businessmen's Association	+90 312 395 73 90	www.kilavuz.biz
Turkish Industry Association	+90 212 425 13 13	www.pagev.org.tr
Health Care Products Manufacturers anan Representatives Association	+90 312 433 77 88	www.sader.org.tr
The Turkish Association of Agricultural Machinery and Equipmant Manf.	+90 312 419 37 94	www.tarmakbir.org
All Elevator Industrialists' and Bussinesmen's Association	+90 216 383 09 22	www.tasiad.org.tr
Textile Machinery and Accessories Manufacturers Association	+90 212 552 76 60	www.temsad.com
TMMOB-Chamber of Mechanical Engineers	+90 312 231 31 59	www.mmo.org.tr
The Union of Caham. and Commodity Exchanges of Turkey (TOBB) Machinery Sectoral Assembly	+90 312 413 83 81	www.tobb.org.tr
Turkish Marble, Natural Stone and Mach. Machinery Producers Association	+90 312 440 83 63	www.tummer.org.tr
Turkish Pump and Valve Manufacturers' Association	+90 312 255 10 73	www.pomsad.org.tr
Federation of Medical Device Manufactures and Suppliers Association	+90 312 468 69 84	www.tumdef.org
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tribution to form this platform and came from the general secretary to Central Anatolian Exporters Unions, Mahmut Akilli. Let's hear what the secret hero of the Machinery Industry Sector Platform, the secretary general Mahmut Akilli has to say. Mahmut Akilli summarizes the purpose of the Platform as follows:

"The Platform was formed to contribute to the Turkish Machinery Manufacture Sector improve with the other side sectors; to form sector policies and applications relating to the machinery sector; to help the sector and the side sectors to develop in the process of integration to the EU; to bring together the sector organizations with wide and democratic participation that will play an important role in the global competition."

Secretary General Mahmut Akilli said the secretariat was visited by associations, federations and industrial zone representatives to exchange views and also to sign the protocol. He said the foundation efforts were completed in July 2007 when 27 associations, chambers, federations and industrial zones signed up the protocol. He expressed his belief in the acceleration to the Turkish Industry that will be brought by the platform as follows; "The participation to works and events by the member organizations under the roof of the Turkish Mechanical Industry and the support they gave and keep giving. We believe the platform will help the growth and development of the Turkish Machinery Sector which is the engine of the Turkish economy with the performance it showed in the recent years.

The improvement of the advantages it has compared to other countries, the advantages such as production process quality, taking place in the international markets and effectiveness in the marketing of Turkish Machinery Sector depends on the removal of obstacles in front of the sector. The, Turkish Mechanical Industry Platform which is the re-



## WHAT PROBLEMS DOES THE PLATFORM TRY TO SOLVE?

- The growth and investment capital problem.
- Informality.
- Technical education system and intermediate staff problem.
- Loan for export, public bids and the problems in used machinery imports.
- The problems in borrowing loans for export.
- R & D sponsorship.
- Increasing support given to professional organizations.
- Piracy and copy rights problem.

sult of joint effort, will play an important role in removing the obstacles. We believe the synergy with the representatives of the associations, federations and other professional organizations that work on the behalf of the General Secretary, Turkish Machinery Manufacturing Industry and its sub-sectors will lead to success. I want to thank all the member organizations on the behalf of the Directors Board of the Central Anatolian Machinery and Accessories Exporters Union and General Secretariat."

## IT IS TIME FOR THE LEAP

The Turkish Machinery Industry Sector which was late to start the race; seems to be carrying on with such acceleration as a result of this new step. The Turkish Mechanical Industry Platform has a mission, vision and has the potential to meet the needs which were thought to be lacked by the sector representatives. The sector representatives will easily reach the targets that were difficult to reach on their own. Turkish machinery seems it will reach the world scale point it deserves.

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# Turkish machines promoted to the world

**PROMOTION AND ADVERTISEMENT EFFORTS PLAY A VITAL ROLE IN SECTOR DEVELOPMENTS IN OUR ERA. TURKISH MACHINERY INDUSTRY KEEPING UP WITH THE PROCESS, ESTABLISHED ITS OWN PROMOTION GROUP FOR NOT TO SLOW DOWN INTERNATIONAL COMPETITION.**

**T**here are several requirements for all sectors such as financial support, government incentives, well prepared feasibility reports to be successful and increase market shares. Moreover, the publicity of the sector has to be made successfully in order to get the most efficient results. There is a global burst in the field of advertisement for the past 30 years. Sometimes advertisement and promotion efforts get ahead of quality of the product in determination of consumer tendency. The Turkish Machinery Industry Sector established its own promotion group in July 2007.

### **PARTICIPATION IN THE 1998 COMPETITION**

The first publicity group has been established with the Hazelnut Promotion Group in 1998. Some of the sectors such as agricultural products, ceramics and leather sector established its own promotion groups and activities started afterwards. In the general assembly meeting of the Central Anatolian Machinery and Accessories Exporters Union in April 2007, it has been decided that promotion group should be established with the approval of the Undersecretariat of the Prime Ministry for Foreign Trade, it has been officially established in July 2007.

It is definitely a fact that development is impossible without producing machines. In the same way, export success would be temporary unless machine export becomes stronger. Foreign trade deficit can decrease in a country only if it is known as machine producer. The promotion of the sector is very important for the achievement. In this sense, Machine Promotion Group could be one of the guarantees of sector development by covering the promotion deficit.

### **TOTAL PUBLICITY OF TARGET SECTOR**

Machine concept contains an extremely wide product range. Hundreds of product varieties are accepted as machines. The majority of products are produced and exported in the machine sector of our country. As a result of being an open economy, competition is violent

both in domestic and foreign market. In this respect, Turkish producers realised that they had to raise production quality and they had to decrease costs as in all other sectors. Clearly the Turkish machinery sector has taken considerable distance in this manner. The primary mission of Machinery Promotion Group is to describe and promote the sector totally. Apart from these, the second mission of the Group is to promote the quality level of the Turkish machinery sector both in domestic and foreign markets. The group also makes marketing activities of Turkish machines in some of the target markets.

### **TURKISH IMAGE WILL GET STRONGER**

Turkish companies which are active in the machine sector already make their own promotion within their budgets. However the aim of the group is to contribute in to the whole of the sector in strengthening the country's image in a way that the companies can not do by alone. In other words, the Machinery Promotion Group aims to describe activities of the companies, within world the standards to a large mass and remove the negative image if there is any. On the other hand, the machine sector has a wide product range as a result of its structure.

The sector does not have the chance to be active in only one product like other promotion groups. There are promotion many product groups and dozens of associations, institutions, ... in the sector. The Machinery Promotion Group primarily tries to determine promotion activities of these associations. As a result of the activities, Group aims to provide facility for Turkish machine producers to sell their products in several markets without encountering resistance.

### **STEPS ARE TAKEN QUICKLY**

When we observe the efforts of the Machinery Promotion Group, we see that this Group has taken distance without slowing down. Machinery Promotion Group held 8 meetings in total since its official establishment in July 2007. The decisions in the meetings are taken

with the agreement of all the group members as a result of long debates. Within this scope, primarily a logo was chosen for the group. Secondly a web page was designed both in Turkish and in English for easier communication. Another important effort is to get the machine sector companies together which are members of the Machine Sector Platform, to support the promotion activities. It has been decided that member companies in international organizations would support promotion activities and in the efforts, domestic market is considered as important as the foreign market. Machinery Promotion Group decided to promote the machinery sector in the domestic market as well. Therefore, it has been decided to hold a Perception Survey for the determination of the road map and a strategy about the promotion in the market. In this respect, a company was chosen to hold the survey and survey goes on with all the speed. The survey is aimed to be finished by the end of October 2008. One of the other decision is to set up a stand and participate in important international fairs.

The Machinery Promotion Group works on a project that would gather foreign companies planning to import machines from Turkey and think to cooperate with Turkish machinery producers. The group aims to organize this project it primarily to the USA. The other plan of the Group is to give advertisements for the promotion of the Turkish machinery sector magazines or newspapers issued in foreign countries assumed to be important by the group and are read especially by machine producers and machine importers.

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**TURQUM**  
TURKISH QUALITY OF MACHINERY

# The Magic Logo TURQUM

**IN MOST OF THE AREAS OF THE INDUSTRY, QUALITY IS AS IMPORTANT AS THE PRICE. FIRMS WHICH ENTER THE COMPETITION WITH QUALITY PRODUCTS, PASS AHEAD OF THEIR COMPETITORS. THE CENTRAL ANATOLIAN MACHINERY AND ACCESSORIES EXPORTERS ARE AWARE OF THIS FACT AND THEREFORE IMPLEMENTED ITS OWN QUALITY STANDARDS; TURQUM.**

**A**s the industrialization in the world proceeds fast, countries are working to enforce their quality images in order to help firms dominate markets better. The general trend in the in-

dustry affects the machinery sector too. When it comes to the machinery sector, it can be seen that quality is more important than other areas. In the sector which plays a direct role in organizing most of the industry and infrastructure

areas, quality comes before price. As such, it is obvious that products proved to be of quality will be better preferred in the market. The Central Anatolian Machinery and Accessories Exporters acted according to this reality and implemented their own quality standards TURQUM. As a result of that work the quality of the Turkish machines that are best fit to carry the TURQUM logo will be registered and at the same time the image of the Turkish machinery will be enforced.

## **NOT ONLY A QUALITY STANDARD BUT PRODUCT GUARANTEE AS WELL**

The machinery sector is special for our country just like it is in the other countries of the world and it is the provider of technology and capital goods for the other side industries and sectors. The machinery sector is an important support for the development of our country's economy when its contribution to production, export and employment is considered. In the recent years the importance of creating a worldwide valid and trustworthy brand in order to provide sustainable growth in the machinery manufacturing industry- with its increasing export, aimed to be the engine sector in the next ten years- has increasing. The increasing competitive conditions in the world, makes using an

advance technology and quality products necessary as well as branding strategies in the international markets. From this point forward, to create a brand specifically for the machinery sector, The Central Anatolian Machinery and Accessories Exporters registered and implemented TURQUM; it is not only a quality standard but a certification process formed with the guidance of international standards. It secures a wide range of product guarantee starting from production to after-sales services.

### TURQUM CERTIFIES QUALITY

TURQUM, a product standards brand, is a logo attached to the products after a certification process to assess its quality according to the standards and technical conditions. The right to use this standard can be obtained by any machinery and spare parts manufacturers and manufacturer-exporters by applying at the The Central Anatolian Machinery and Accessories Exporters and after they fulfil the required pre-requisites and the inspections are completed at the manufacturing location. The standard is not mandatory and can only be used after the products in the application were confirmed to be fit to the standards of the General Secretariat Product Specifications. TURQUM brand will become a logo that will become recognizable and preferred by clients in domestic and foreign markets creating a positive difference with its quality and trustworthy image. The working mechanism of this standard is not only a system that tests and inspects the end product but a objective and systematic approach that foresees the entire production system of the producer to carry a certain proficiency and quality. The products that carry the TURQUM Product Proficiency Standard guarantee an efficient quality level.

### THE PURPOSE IS TO SOLIDIFY THE IMAGE OF QUALITY

The most important purpose of creating the TURQUM brand is to make a standard in order to form the image of a quality Turkish Machine in the target markets and also to coordinate the pub-

“ With the Product Proficiency Certification it is aimed to create a brand that will help the firms in the machine manufacturing industry to form quality strategies and reflect these qualities in order to help them gain the power to compete in the international markets and also to improve the quality levels of our manufacturers and maintain it. ”

licity activities to promote the brand and help establish it. In the ever increasing global competition environment the most important mission of this important work is to pioneer the Turkish Machine manufacturers on this process of branding. There will be publicity activities (exhibition, commercial committees, press conferences) in the target markets in order to provide an internationally recognizable TURQUM brand and advertisements will be released in the sector magazines abroad, a communication will be established between the manufacturer and clients through a WEB site. Calls to the other professional organizations abroad will be held. The preference of the products carrying TURQUM brand will be provided by publicity works, using all the other communication vessels.

With the Product Efficiency Certification it is aimed to form the quality strategies for the enterprises in the machine manufacturing sector to gain the power to compete in the international markets and also to create a brand to reflect that quality. It is also aimed to improve the level of the manufacturers' applications of quality and to secure its sustainability.

### NEUTRALITY IS UNDER GUARANTEE

The application structure of the Product Proficiency Certification is based on the EA-6/01, EA-6/02, ISO Guide 65 documents. General Secretariat (OAİB) adopted a objective policy in the policies, procedure, and instructions in the context of functioning of the certifi-

on and also made it accessible to all parties. The Product Proficiency Certification services are not limited with the member export firms but it is offered to all the firms functioning in the machinery sector.

General Secretariat is performing the Product Proficiency Certification services in an objective manner, without any financial pressure and under the Product Proficiency Specifications that is prepared by experienced Sector Committees which are formed by individual experts in their subject. When forming committees for product proficiency certification different committees, independent from each other executed the system in order to achieve neutrality and trust in the activities such as inspection, assessing, certification decision, and evaluation of complaints and appeals. General Secretariat guaranteed that the committee members in the defined organization scheme will fulfil their tasks under no influence and are restrained of telling anything to third parties under a principle of secrecy.

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**The country in the objectives  
of the Turkish exporters:**

**China**

**CHINA, WORLD'S THIRD MACHINE IMPORTER, RAISED ITS IMPORT TO 124,2 BILLION DOLAR. CHINA, WITH ITS MACHINERY IMPORTS INCREASING EVERY YEAR, IS AN ATTRACTIVE MARKET FOR TURKISH MACHINERY EXPORTERS.**

**C**hina's contribution to global gross domestic product increased rapidly in 2007 and China stated that it became the powerful engine of the world economy. China's economy has started to be more integrated with the world economy, in the last 6 years since joining the World Trade Organization. Data have shown that, in 2007 while tendency in growth in foreign trade of China was being preserved; the foreign capital which entered the country increased steadily, the quality of used foreign capital increased, sectors which are new and based on high technology, the rate of foreign capital in research-development fields, high level manufacture and environmental protection sector fields increased even more.

It was stated that more than 30 thousand Chinese enterprises have joined multinational businesses and those enterprises made investments in more than 160 countries and regions of the world. According to the predictions made from the World Bank, the contribution of the Chinese economy on the gross domestic product of the world is expected to reach 16 percent in 2008. In the "View at World Economy" report of the International Money Fund, it was stressed that China has become the largest driving force of the world economy.

In 2007, the gross domestic product of China has increased 11.4 percent, consequently its economic growth speed has reached 10 percent or more in the consecutive 5 years. The economy of China maintains its development steadily and rapidly despite all the difficulties in the international economy atmosphere and serious natural disasters which happened in the country. The gross domestic product of China is stated to be increased as 10.4 percent in the first half of 2008. It has been seen that while harvest in agriculture has been high once again this year, the structure of industry has raised to a better position; domestic demand and especially demand of consumption's accelerator role of growth has increased; the character and productivity of growth continued to rise.

### THE ECONOMY OF CHINA IS GROWING RAPIDLY

The economy of China has showed a growth of 10.6 percent in the first quarter of 2008 and showed a 10.1 percent growth in the second quarter. The average of the first 6 months in 2008 of the economy of China has 1.8 points compared to the same period of 2007 and it 10.4 percent level. The regress in the economies of the USA and Europe was shown as the negative effect of the basic reason of the decrease in the growth rate of the manufacturing sector. Some businesses had to be closed as a result of the decrease of the export from China to the USA and Europe, however the domestic consumption in China continued to grow, consequently the economy continued its rapid growth.

however the growth rate has slowed down 5.7 points compared to the same period last year. It attracts attention that the import volume of China has increased 30.6 percent and reached 560 billion USD in the same period. In the first half of 2008 foreign trade volume of China is stated to increase 25.7 percent compared to the same period last year and go above 1 trillion 225 billion USD, the trade surplus decreased by 11.8 percent and dropped back to 99 billion USD. In that period, China increased its export to Brazil by 86 percent, to India by 53 percent, to Russia by 32 percent and to the Association of Southeast Asian Nations (ASEAN) by 30 percent exceeding the increase rate of export to developed countries. When the development of Chinese foreign trade in the last 5 years

“Despite the fact that the progress rate of our machinery and accessories export to China has gone beyond the import progress rate in the last few years and this development is considered as positive development; as of 2007, the rate of machinery and accessories export from Turkey to China corresponds to only 2 percent of machinery and accessories import from China in the same year and this fact clearly shows that we need to cover an important distance.”

China is still maintaining its position as the 4th largest economy in the world following the United States of America, Japan and Germany. However the predictions that China would leave Germany behind and be the third largest economy in the world increase. Some experts predict that the economy of China would grow over 10 percent this year and this growth would decrease to 9.5 percent in 2009.

### EXPORT AND IMPORT INCREASES CONSTANTLY

In the first half of 2008 export made by China has reached 666 billion 600 million USD with an increase of 22 percent,

is considered, it is seen that export has constantly increased with a decreasing progress speed especially after 2004, import has continued to grow steadily with a rate which increased after 2004. China was the third biggest exporter of the world in 2006 after Germany and USA with 968.9 billion USD and in 2007 it increased its general export to 1,217,8 billion USD with an increase of 25.7 percent and left USA behind and became in the 2nd position. USA, Hong Kong and Japan were in the leading position among the countries which China made the most export to in 2006 and they maintained their positions in 2007 as well.



China was the 3rd biggest importer in the world in 2006 after USA and Germany with 791.5 billion USD and the general import of China increased 20.8 percent and reached 955.9 billion USD in 2007 and its position in the world rank did not change. Japan, South Korea and Other Asian Countries were most important import partners of China and their ranking remained the same in 2007.

### **MACHINES HAVE IMPORTANT ROLE BOTH IN EXPORT AND IN IMPORT**

When the main items in the export of China in 2007 are considered, it is seen that electrical machines are in the first place and general machinery and accessories are in the second place. The total portion of these two parts in export in 2007 is beyond 43 percent. Iron and steel has been the most increased item as per 2006 with 59 percent increase among the important goods groups. Electrical machines and general machinery and their accessories also have an important portion in the import of China as well as its export in 2007. The total portion of these two parts in import in 2007 has been close to 40 percent. Among the important goods groups, the items which have shown most increase in import as per 2006 were metal ores, cinder and ash with 68 percent increase. As it can be understood from these data, machinery and accessories sector is at the centre of foreign trade of China.

### **2 ND IN WORLDWIDE EXPORT 3 RD IMPORT OF MACHINERY SECTOR**

China has been in the 2nd place among the countries which export machinery and accessories with 186.6 billion USD export in 2006 following Germany and China has increased this value by 22.5 percent and increased it to 228.6 billion USD and maintained its position in 2007.

In the machinery and accessories export of the world in 2007, there has been a 13.8 percent increase in Germany's machinery and accessories export, a 9 percent export increase in machinery



and accessories export of USA, there has been a 22.5 percent increase in the export of the sector in China. On the other hand, it has been monitored that the progress speed rate of China has been decreasing each year.

In 2006 the total export of machinery and accessories in the world was 1.52 trillion USD, it was stated that this number has increased to 1.65 trillion USD in 2007. China has had the proportion of 12.3 percent in the machinery and accessories export in the world in 2006 and it increased this number to 13.8 percent in 2007.

China imported machinery and accessories adding up to 109.1 billion USD in 2006, it increased this value by 13.8 percent in 2007 and raised it to 124.2 billion USD. China has been attracting the attention of exporters maintaining its title of 3rd biggest importer in the world in machinery and accessories after USA and Germany in 2006 and 2007.

### **FOREIGN TRADE VOLUME OF 352.7 BILLION USD IN MACHINERY SECTOR**

When machinery and accessories are considered for last five years, foreign trade volume of China has constantly had foreign trade surplus and reached 352.7 billion USD with 19.3 percent increase in 2007. However it is seen that the increase rate of foreign trade surplus is in a tendency to decrease.

As of chapter 84, the product group of automatic data processing machine units are in the first place in machinery and accessories export of China in 2007 with export value of 112 billion 243 million USD. This product group is followed by the product group of type-writers, calculators, accountings, data pro-

cessing and other machinery and accessories for office use with 32 billion 738 million USD export and product group of printing machines for typography and auxiliary apparatus with 18 billion 725 million USD export. The product group in which the biggest increase has been in 2007 is the product group of printing machines for typography and auxiliary apparatus with 4549.5 percent increase. In 2006 this product group had 402 million USD export, the export value of this product group in 2007 draws attention: 18 billion 725 million USD. In export increase rate, this product group is followed by the product group of dozers, diggers, scrapers, excavators, shovels, loaders, etc. with 82.4 percent increase and the product group of distinctive function machines and devices with 78 percent increase. The only group which had a decrease compared to the previous year was the of typing, calculator, accounting, data processing, other machinery and accessories for office use with 0.9 percent decrease among the product groups which were in the first 20 position in machinery and accessories export of China.

When we consider the machinery and accessories import of China as of the chapter 84, the product group of automatic data processing machine units are in the first place with the amount of 21 billion 229 million USD. This product group is followed by the product group of typing, calculator, accounting, data processing, other machinery and accessories for office with an import amount of 17 billion 477 million USD and the product group of distinctive function machines and devices with an import amount of 13 billion 436 million USD. In the machinery and accessories im-

port of China, the product group in which the biggest increase recorded in 2007 compared to the previous year is the product group of printing machines for typography and auxiliary apparatus which was also the same product group in which the biggest increase in export had been noted. In the import increase rates, this product group is followed by diesel, half diesel engines (piston engines ignited by air compression) with 63.3 percent increase and the product group of accessories and parts which are not in other positions in the chapter 84 with 49.5 percent increase. In machinery and accessories export of China in 2007, as for the chapter 84, the product groups which decreases according to the previous year and which were among the first 20 were the product group of typing, calculator, accounting, data processing, other machinery and accessories for office with 8.7 percent decrease, the group of turbojets, turbo-

propellers and other gas turbines with 4.1 percent decrease and product group of air-vacuum pump, air/gas compressor, fan, aspirator with 1.4 percent decrease.

### 1 BILLION 39 MILLION USD TOTAL EXPORT TO CHINA

In 2006, Turkey exported products of 693 million USD to China and in 2007, Turkey increased this value by 50 percent 1 billion 39 million USD. Turkey's import from China has increased by 36.9 percent in 2007 and reached 13 billion 234 million USD.

Our foreign trade volume was 10 billion 362 million USD in 2006 and it increased by 37.7 percent in 2007 and reached 14 billion 274 million USD. Turkey constantly showed a foreign trade deficit in favour of China and in 2007 continued this situation resulting in 12 billion 195 million USD. In other words, almost 20 percent of the foreign trade de-

ficit of Turkey stemmed from China. The first three chapters in Turkey's export to China in 2007 are metal ores, cinder and ash with export in the amount of 357 million USD, salt, sulphur, soil and stones, plasters and cement with an export volume of 270 million USD and inorganic chemicals, organic, inorganic resultants amount of 80 million USD. Nuclear reactors, boiler; machines and equipment, tools and accessories are in the fourth place in export with the amount of 60 million USD.

The chapters which showed the biggest increase among the items which compose 95 percent of the total export from Turkey to China in 2007 are iron and steel with percent increase, metal ores, cinder and ash with 205.4 percent increase, wool, horse-hair and their lines and textile with 120.08 percent increase.

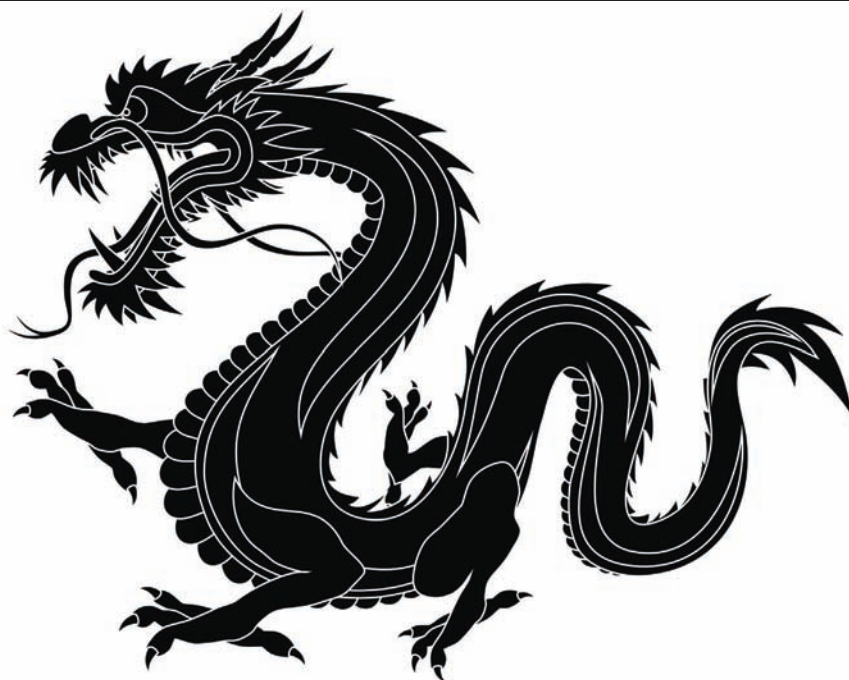
When we consider our import, the

## MAIN ITEMS IN OUR EXPORT TO PEOPLE'S REPUBLIC OF CHINA (AS OF CHAPTER 84, SORTED ACCORDING TO 2007 VALUES-\$)

HS CODE	HS CODE EXPLANATION	2006	2007	Change %
8409	THE ACCESSORIES-PARTS OF INTERNAL COMBUSTION PISTON ENGINES	4.934.748	18.009.107	264,94
8479	DISTINCTIVE FUNCTION MACHINES AND DEVICES	2.168.703	6.400.482	195,13
8425	TACKLE, CRANE (EXCEPT THE CRANES WITH STEPS), CAPSTAN, HAND CRANE, CAR JACKS	6.146.329	6.126.415	-0,32
8450	WASHING MACHINES	2.147.608	4.286.497	99,59
8481	TAPS, SIMILAR APPLI. FOR PİDES, FITTER EQUI.-PRES. REDUCER, INCLUDING THERMO. VALVE	1.288.437	3.497.221	171,43
8403	CENTRAL HEATING BOILERS EXCEPT STEAM GENERATORS	1.441.606	2.588.924	79,59
8480	MOULDING BOXES, TABLETS, MATRIX MODELS FOR METAL FOUNDRY	4.841.577	2.166.826	-55,25
8412	OTHER ENGINES AND MOTORS	772.606	1.743.550	125,67
8445	MACHINES WHICH PREPARE FIBRES AND PRODUCE AND PREPARE YARN	79.187	1.672.811	2.012,48
8426	SHIP CRANES, DERRICK CRANES, CRANES WITH CABLE, MOBILE LIFTING PRAMES	831.728	1.608.468	93,39
8418	REFRIGERATORS, FREEZERS, COOLERS, HEAT PUMPS	141.205	1.372.298	871,85
8451	MACHINES AND EQUIPMENTS FOR WASHING, DRYING, IRONING OF YARNS, FABRICS	539.449	1.316.326	144,01
8414	AIR-VACUUM PUMP, AIR/GAS COMPRESSOR, VENTILATOR, ASPIRATOR	531.680	1.257.842	136,58
8413	PUMPS FOR LIQUIDS, LIQUID ELEVATORS	467.095	1.027.034	119,88
8422	MACHINE, EQUIPMENT FOR DISHWASHING, CLEANING, DRYING, FILLING, BOTTLES ETC.	109.757	848.893	673,43
8415	AIR CONDITIONERS-WITH VENTILATOR, WHICH CAN CHANGE HEAT, HUMIDITY	245.964	818.607	232,82
8471	AUTOMATIC DATA PROCESSING MACHINES, UNITS	900.189	790.652	-12,17
8447	KNITTING MACHINES, MACHINES AND EQUIP. WHICH PRODUCE GUIPURE, TULLE, LACE	1.888.683	538.560	-71,48
8462	FORGING MACHINES, PROCESSING, CUTTING AND BENDING, PRESSES FOR METALS	101.791	499.901	391,11
8431	ACCESSORIES AND PARTS OF HARD WORK MACHINERY AND EQUIPMENT	389.376	366.865	-5,78
	OTHER	4.141.734	3.335.625	-19,46
	TOTAL	34.109.452	60.272.904	76,70

Source: Turkish National Statistics Division





first three chapters which have the biggest portion in Turkey's import from China in 2007 are: electrical machines and equipments, accessories and parts with 3 billion 228 million USD import, nuclear reactors, boilers; machine and equipment, tools, parts with 2 billion 938 million USD import and iron and steel with 487.6 million USD.

The first three chapters which compose 95 percent of the total import of Turkey from China among the items which showed the biggest increase are iron and steel with 153 percent increase, synthetic and artificial discontinuous fibres with 119 percent increase, artificial and synthetic fibres suitable for textile with 114 percent increase.

### OUR MACHINE EXPORT RATE TO CHINA HAS DOUBLED

When chapter 84 is considered, in 2006,

China was in the 38th place in Turkey's export with 34.1 million USD, China passed two folds our total export increase rate of machinery and accessories and it has imported from Turkey machinery and accessories in the amount of 60.3 million USD with 76.7 percent increase in 2007, so ranked up to 35th place. It is seen that the export increase rates of machinery and accessories, we made to China in 2006 and 2007, went beyond the general export increase rate attained for the same country.

On the other hand, our machine export to China is in a low level in terms of value when we compare it with the export to other countries which have a large portion in the world machine export. Our machinery and accessories export in 2007, it is seen that Germany had 17.2 percent, USA had 4.2 percent

and China took 0.69 percent of the whole.

### THE PROGRESS RATE OF OUR MACHINE IMPORT FROM CHINA IS DECREASING

China, which was in the 3rd place in machinery and accessories import of Turkey with 2 billion 318 million USD in 2006, exported machinery and accessories to our country in the amount of 2 billion 938 million USD with 26.8 percent increase in 2007 and maintained its position in the ranking.

The increase rate of machinery and accessories import from China had been over the general import increase rate until 2006; this situation changed in 2007. On the other hand, the increase rate of our machinery and accessories import from China is seen in constant decrease. Our foreign trade volume of machinery and accessories was 2 billion 352 million USD in 2006, it increased by 27.5 percent in 2007 and reached 2 billion 998 million USD. Turkey has been showing a foreign trade deficit constantly in favour of China and continued this process in 2007 and the deficit reached 2 billion 878 million USD. Approximately 24 percent of Turkey-China general foreign trade deficit is composed of the machinery and accessories which took place only in chapter 84.

### WE NEED TO COVER A LOT OF DISTANCE

Despite the fact that the increase rate of our machinery and accessories export to China has gone beyond the import

## FOREIGN TRADE OF MACHINERY AND ACCESSORIES BETWEEN TURKEY AND CHINA (MILLION \$ - CHAPTER84)

		2003	2004	2005	2006	2007
Export	Value \$	10.607.809	16.318.226	22.726.166	34.109.452	60.272.904
	Change (%)	71,4	53,8	39,3	50,1	76,7
Import	Value \$	596.111.310	1.039.183.820	1.650.181.402	2.318.082.949	2.938.280.609
	Change (%)	162,7	74,3	58,8	40,5	26,8
Foreign Trade Deficit	Value \$	-585.503.501	-1.022.865.594	-1.627.455.236	-2.283.973.497	-2.878.007.705
	Change (%)	165,3	74,7	59,1	40,3	26,0
Foreign Trade Volume	Value \$	606.719.119	1.055.502.046	1.672.907.568	2.352.192.401	2.998.553.513
	Change (%)	160,3	74,0	58,5	40,6	27,5

Source: Turkish National Statistics Division

increase rate in the last few years and this development is considered as positive development; as of 2007, the rate of machinery and accessories export from Turkey to China corresponds to only 2 percent of machinery and accessories import from China in the same year and this fact clearly shows that we need to cover an important distance.

As of chapter 84, the product group which is in the first place in our machinery and accessories export to China in 2007 is the accessories-parts of internal combustion piston engines with 18 million USD export. This product group is followed by distinctive function machines and devices with 6,4 million USD export and the product group of tackle, crane (except the cranes with steps), capstan, hand crane, car jacks with 6 million export.

The product group, in which the biggest increase has been seen compared to the previous year among the items which compose 95 percent of machinery and accessories export from Turkey to China in 2007, is machines which prepare fibres and produce and prepare thread with 2012.48 percent increase. The product group of refrigerators, freezers, coolers, heat pumps is in second place with 871.85 percent and the machines and equipments for washing, cleaning, filling and etc. is in third place with 673.43 percent increase.

The product groups, which show a decrease compared to the previous year among the items which compose 95 percent of machinery and accessories export from Turkey to China in 2007, are the following: the product group of weaving looms, machines and equipment which produce guipure, tulle, lace, string bag decrease by 71.48 percent; the product group of moulds for metal foundry decrease by 55.25 percent, the product group of automatic data processing machines units decrease by 12.17 percent and the product group of tackle, crane (except the cranes with steps), capstan, hand crane, car jacks decrease by 0.32 percent.

As of chapter 84, when our machinery and accessories import from China in 2007 is considered; it is seen that the product group which has the biggest

portion is the product group of automatic data processing machines with 1 billion 43 million USD. This product group is followed by the product group of typing, calculator, accounting, data processing, other machinery and accessories for office use with import of 219 million USD and the product group of printing machines for typography and auxiliary apparatus with import of 215 million USD.

The first three positions, which showed the biggest increase in the machinery and accessories import from China in 2007 among the items which compose 95 percent of the total machinery and accessories import, are: steam generators, boilers which produce hot water with 34.628 percent increase, gas genes, gas generators which operate with water and their accessories and parts with 9.868 percent increase and typing, calculator, accounting, data processing, other machinery and accessories for office increase by 7.485 percent.

### WE NEED TO WITHDRAW DOMESTIC MARKET AND RELIEVE MANUFACTURERS

The foreign trade of Turkish Machinery

Industry Sector with China does not bring positive results.

The fact that the products, which are in poorer quality when they are compared with cheap and local manufacture that come from China, control the domestic market and this fact cause our trade in the sector to have a positive balance in favour of China. In this scope, the positive value which is created in our country goes out and local manufacturer distresses and that put pressure on the sector.

At the same time, cheap Chinese products cause our representatives in the sector to lose customers in the West as well. Although the progress speed of the export of the sector is above the progress speed of import; this shows positive signals; it is still valid that our country needs to cover a lot of distance in general. China is still one of the biggest importers in the sector and this is an important datum in our plans based on this country. China needs machines which are high in quality and durable and if these machines are invested in, it seems possible that we will increase our export to China and balance our foreign trade in the coming term.

### MAIN CHAPTERS IN TURKEY'S EXPORT TO PEOPLE'S REPUBLIC OF CHINA (AS OF 2007 IN ORDER OF VALUE - \$)

	GTİP	GTİP EXPLANATION	2006	2007	CHANGE (%)
1	26	METAL ORES, CINDER AND ASHES	117.028.817	356.990.456	205,04
2	25	SALT, SUL., SOIL AND STONES, PLAS. AND CEMENT	187.833.309	270.660.234	44,10
3	28	İNORGANİK KİMYASALLAR, ORGANİK, İNORGANİK SONUÇLARI	87.234.939	80.142.173	-8,13
4	84	NÜCLEER REACTÖR, BOILER; MACHINE AND EQUIPMENTS, THEIR TOOLS AND PARTS	34.109.452	60.272.904	76,70
5	74	COPPER AND COPPER GOODS	48.539.522	28.922.064	-40,42
6	72	IRON AND STEEL	4.515.897	27.565.569	510,41
7	55	SYNTHETIC AND ARTIFICAL DISCONTINUOUS FIBRES	28.589.001	27.479.418	-3,88
8	87	MOTOR-VEHICLES FOR LAND, TRACTOR, BICYCLE, MOTORCYCLE AND OTHERS	45.551.043	23.326.949	-48,79
9	51	WOOL, HAIR, HORSE-HAIR AND THEIR LINES AND TEX.	7.846.719	17.268.913	120,08
10	32	SUMMATION, PAINT, LUTE, MASTICS USED IN TANNING AND DYEING	12.830.210	15.972.219	24,49
		OTHERS	118.958.605	130.922.183	10,06
		TOTAL	693.037.514	1.039.523.082	50,00

Source: Turkish National Statistics Division





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The first production of Durmazlar was a manual sheet cutting machine. Nowadays Durmazlar is proudly offering a wide range of products in sheet metal working industry.

Durmazlar with its annually 6000 machine production capacity in its 150.000 square meter area, is the biggest sheet metal working machine producer company worldwide.

Durmazlar is offering its products with the brand name DURMA. Main technologies offered in Durmazlar are as follows

- > Laser cutting technology
- > Punch and forming technology

- > Plasma cutting technology
- > Bending technology
- > Cutting technology
- > Combined shearing technology
- > Programming systems
- > Automation technology

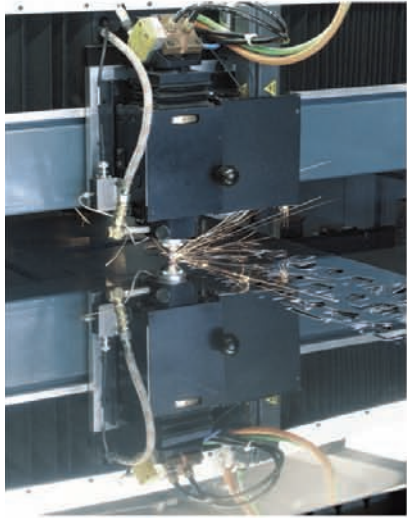
Durmazlar is working and continuously investing for its employee and production in order to achieve better success, better technology and better environment with its 1000 employee.. The company is aiming to be effective on its customer's future improvements and to share big ideas by offering the latest technologies under the most competitive circumstances and forecasting their future requirements.

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Perfect details... Kusursuz detaylar...



Mükemmel sonuçlar... Magnificent results...

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Since its foundation, Butech is an important machine manufacturer for the scrap sector and the recycling industry with the innovations that it puts in all processes from design to market. Serving also in the establishment of turn-key facilities in the recycling industry with its strong R&D culture and staff, Butech provides its customers long-lasting, high-capacity, and user-friendly machines.

Mr. Namik Kemal Memis, General Manager of Butech, whom we interviewed with at the facility located at Nilüfer Organized Industry Area, gave information on company's operations.

Stating that Butech Machinery came into prominence with its knowledge and experience coming from the automotive industry as a company manufacturing machinery and equipments needed particularly by the automotive sector, Mr. Memis said that Butech Machinery, which was originally founded as an engineering company in 1997 to carry out

designing, started manufacturing in 2000.

Noting that the company, which carries out designing and manufacturing of special machine tools and steel plate processing machines, began to serve its customers also in the field of manufacturing of recycling machinery, Mr. Memis said the following on the product diversity and usage areas of the products:

"Our company which carries out its current production operations also as an engineering company has begun to manufacture junk bailing compressors and plastics cutters this year in line with developing conditions and demands. Junk and steel plate bailing compressors of the company's own design were brought into use as fast machines with high performance requiring little maintenance. These machines can be either manufactured in line with customer demands or preferred as standard models. Compressors manufactured as heavy types are designed as to adopt any kinds of working environment. Our products are manufactured taking into account needs

and working conditions of companies in the junk sector and the recycling industry in addition to those in the white goods sector. Butech serves its customers also in the establishment of turn-key facilities in the recycling industry. We are in the service of our customers operating in the junk recycling industry with our products such as onboard and fixed scrap cutters, junk automobile bailing presses, chip briquetting presses, plastics shredders, multipurpose conveyors and belt systems. Stressing out that the values of Butech, which presents service of and manufactures reliable and productive machines of unusually high quality, are constituted of innovation and value-oriented management, General Manager Mr. Memis said the following: "Innovation means newness making difference. We have been putting forward innovations in all processes from design to marketing since the foundation of our company. We have been fulfilling suggestions and demands of our customers regarding products in all stages of manufacturing. As a result, the outcrop is long-lasting, high-capacity and user-friendly machines."

Drawing attention to that machine investment is a serious business, Mr. Memis spoke as follows: "Project quality, technological developments in applications, workmanship at global standards, production quality and financial solutions all play a vital role in our customers' preferences.

Butech Machinery, by blending its production technology with its engineering experiences, manufactures highly efficient and user-friendly machines in line with its customers' demands.

Here, in any part of the world, the joint demand of recycling machine users is 'trust'. Butech will keep presenting its customers reliable products. The rising capacity need is covered in a planned manner. Besides increasing product diversity, our company holds design and production activities in fields in which our country is dependant on foreign countries. We will keep developing new projects in the field of recycling machines. Competing in the international market, Butech will be showing many efforts to increase its share in these markets."

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# A businessman who produced air-planes in 1936

**NURI DEMIRAĞ AN IMPORTANT NAME FOR THE ENTREPRENEURSHIP HISTORY OF TURKEY WITH THE COMPLETELY LOCAL PRODUCTION OF AIR-PLANES IN 1936, HAD A STORMY BUSINESS LIFE SIMILAR TO THE PLANES HE PRODUCED. DEMIRAĞ BECAME HIS TIME'S RICHEST BUSINESSMAN ALTHOUGH HE STARTED WITH A HUMBLE CAPITAL. A JOURNEY THAT INVOLVES RAILWAYS, GIGANTIC BRIDGES AND EVEN THE SKY SOMETIMES WITH SUCCESS SOMETIMES WITH DISAPPOINTMENT.**

**N**uri Demirağ an important name in the entrepreneurship history of Turkey, was born in Divriği, Sivas in 1886 to one of the rooted families of Divriği. The son of Mühürdarzade Ömer Bey Nuri completed his high school education successfully later on working as a teacher in his school for some time. In 1906 he passed the employment test of Ziraat Bank and worked as a clerk in Kangal and Koçkiri branches.

In 1908 with the declaration of Constitutional Monarchy government offices re-structuring began under the audit of the Treasury. In a time when it was difficult to find well-trained employees those trained by Ziraat Bank were among the most preferred. This is how Mühürdarzade Nuri Bey moved to Istanbul in 1911 to work for the Treasury Department. He was given the most difficult missions due to his honest and hard-working nature, he was being sent to audit and re-structure offices with problematic management. Nuri Bey continues his education all the while during these missions. He attended



the recently opened School of Finance and the Darülfünun School of Words to improve his French. In 1918 Nuri Bey was assigned to a position in the Treasury Audit Group and he had a long career ahead of him. Unfortunately the defeat of the Ottoman Empire in World War 1 brought an end to his career as a government officer. The attitude of the

minority groups was added to the sorrow of the defeat, he did not want to serve the government that just sat and watched the current events. Following a street struggle in Tatavla where a few minority group members assaulted him and dropped his fez; he went to his office and handed his resignation immediately.



## NURİ BEY BEGINS TRADE

Nuri Bey resigned from government service in 1919 and was in need of a job to earn a living. That was when he decided to go into rolling paper business. He could afford to do the trade with the limited capital he had at hand. The cigarette rolling paper monopoly was under the control of minorities. He made a fast decision and decided to convert his 56 yellow coins to banknotes and invested 250 lira in rolling paper and began the trade. The rolling paper brand Mehmet Nuri named "Türk Zaferi" (Turkish Victory) was an attempt that promised hope to the people and also proved to be profitable business. While busy with his business Nuri Bey also supported the National Resistance and was the Besiktas Branch Chair for the Müdafaa-i Hukuk Cemiyeti (Defending Law Association.) When the National Resistance ended with victory Nuri Bey's wealth had reached 84 thousand Liras as a result of his first entrepreneurship.

## WEAVED WITH IRON NETS (DEMİRAĞ)...

When the Republic was declared Nuri Bey wanted to be a part of the re-building of the young republic. The Government in Ankara wanted to break the foreign monopoly in railway construction and keep the money in the country so the tender which was awarded to the French company Reji Jeneral was cancelled and the Samsun-Sivas railway was decided to be re-assigned on Turkish Contractors. Nuri Bey, gave



the lowest offer for the tender bid and was awarded the tender. When other tender bids followed the first he asked his brother Engineer Naci Bey to resign from government service and through the company they established together they built 1250 kilometres of railways not including the bridges and tunnels. He built some of the first industrial facilities for the Republic such as Karabük Iron Steel Factory, Izmit Paper Factory, Sivas Cement Factory and Bursa Merinos Wool Factory. For every project completed Nuri Bey built a water fountain, the 50 water fountains are still in use in different parts of the country. Following the 1934 "Surname Law" Mustafa Kemal stated it was appropriate for Nuri Bey to be given the surname "Demirağ" as he weaved most parts of Turkey with iron webs (Demirağ.) In 1936 Nuri Demirağ was the richest businessman in Turkey with a wealth of 11 million lira.

## FUTURE IS IN THE SKY

In the first years of the Republic cities would hold charity campaigns and collect money for the Armed Forces and buy a plane to be given to the Military. These planes were named after the city that donated it to the Army. Another option was to go to the rich families in the country. Vehbi Koç gave 5 thousand Lira, Abdurrahman Naci Bey another rich businessman of the time gave the Military 120 thousand lira. Nuri Demirağ's door was also knocked on to as the richest businessman in the county. However Nuri Bey's answer was very unique:

"What are you talking about" If you ask something for this nation you need to ask the best. If a nation cannot exist without air-planes, then we should not expect to have these crucial elements from other people's grace. I volunteer to build the factory for these air-planes." Nuri Demirağ asked for a 10 year programme to be made in 1936. The first step was to build the big yellow building next to the Navy Museum in Besiktas by the Pier of Barbaros as the basic study headquarters. He bought the Elmas Pasa Farm in Yesilkoy to use as run-way. The R&D studies of the planes would be made in Besiktas and the trial flights would be made in Yesilkoy and the location of production would be Divriği, Sivas.

## THE PROBLEM WITH TAA

Selahattin Alan one of the first air-plane engineers of Turkey and Nuri Demirağ shook hands and began production in Beşiktaş. The Turkish Aeronautical As-







sociation (TAA) ordered 10 training planes and 65 gliders. Selahattin Alan who designed the planes and gliders was so enthusiastic that he could hardly keep still when he heard of the completion of the first plane, and took it out for a test-flight immediately. Selahattin Alan completed the test-flight successfully. However the authorities of the Turkish Aeronautical Association wanted the test-flights to be made once again in Eskişehir.

Although Alan was a brilliant engineer his flight training was not so great, while he was landing at the İnönü Camp in Eskişehir he fell into the ditch by the runway and lost his life. This was a turning point for Nuri Demirağ because the TAA cancelled their order claiming that 'Conditions were not right.' Then began a law suit between Nuri Demirağ and TAA that lasted for years. The Ankara Trade Court decided that TAA was right and verdict was in their favour. Demirağ, wrote to President İnönü and other government officers to ask for the mistake to be fixed but no-one heard his voice.

### AIR-PLANE EXPORT 70 YEARS AGO

When Nuri Demirağ could not sell the TAA his planes he began to look for foreign market options and succeeded in this effort. He sold planes to Spain, Iran, Iraq and Syria. The TAA did not like the planes produced by Demirağ however decided to buy the French Henrio planes but their production had been cancelled.

While exporting his own production planes Demirağ used the planes he made at the "Sky-School" and Air-way company he established. The Sky-School trained new pilots in Yeşilköy and he started a middle-school for aviation in Divriği. Demirağ took on all the expenses of students in his schools, even President İnönü's sons went to the "Sky-School" in Yeşilköy for some time. The "Sky-School" had a 150 student capacity dormitory and only registered University students or graduates and trained them in topics other than just piloting a plane with deeper information on flight and planes and trained pilots.



### DAM IN KEBAN, BRIDGE AT THE BOSPORUS

Although foreign markets showed great interest to his planes Nuri Demirağ closed down his factory due to the difficulties of exporting and Yeşilköy was expropriated. Demirağ began his construction business once again and in 1942 came up with the idea of constructing a dam on the Keban. Another important project he came up with was a bridge on the Bosphorus. Demirağ shook hands with the group that built the famous Golden Gate Bridge in San Francisco in 1931. The bridge would be between Ahırkapı-Salacak with 8 legs on land and 10 in the sea with a length of 2.560 metres and 701 metres additional chain-parts, the bridge project was completed. The bridge which would have a railway route as well would be completed in 3.5 years and cost 11 million Liras. The projects were relayed to Ataturk in 1933 through Salih Bozok a name close to Atatürk, who liked the projects very much and relayed the projects to the government. However the relations between Minister of Development Ali Çetinkaya and Nuri Demirağ had always been tense. Prime Minister İnönü was also not very keen on Nuri Bey's projects. Hence Istanbul lost the opportunity to build a bridge 40 years before it actually did.

Nuri Demirağ had got sick of the injustice he had to encounter for so long and realised that he could only fight politicians through politics and so decided to get involved in politics. In July, 1945 established the first opposition party in Turkey and called it the National Development Party. He offered grilled lamb to his guests at gatherings, therefore political groups and the press made fun of him, calling his party the 'lamb party.' Demirağ could not catch the success he expected at the elections with his National Development Party. In 1954 he campaigned together with the Democratic Party as Sivas independent MP and was elected.

When he was unhappy of the acts within the Party and the Parliament he made the first heavy criticism against them and in 1957 passed away due to his Diabetic condition.



## SOME OF THE MAJOR FAIRS IN TURKEY

FAIR TITLE	DATE	VENUE	MAIN SECTORS	CONTACT	ORGANIZER
ISTANBUL PACKAGING FAIR International Packaging Industry Fair	23-26 October 2008	İstanbul, Turkey	Raw materials and machinery for the packaging materials production	www.tuyap.com.tr	TÜYAP Tüm Fuarçılık Yapım A.Ş.
Bursa Metal Processing Technology Fair	30 October-2 November 2008	Bursa, Turkey	Metal processing machinery, welding, cutting and drilling technologies, related equipment, hand tools, hydraulics and pneumatics	www.tuyap.com.tr	TÜYAP BURSA Fuarçılık A.Ş.
IPACK International Packaging and Food Processing Systems Exhibit	5-8 November 2008	İstanbul, Turkey	Food processing machinery, processors of producing and packing, bottle rinsing and box filling systems, systems of four-side-adhesives, thermoform systems. Box packing, container, parceling, labeling, enveloping, special packing, bread packing, and vacuum wrapping machinery. Corrugated boxes, PVC cylinder / square boxes, glass boxes, plastic moulds, lids / taps, packing film sheets and machinery, shrink wrap and stretch materials, wrappers, plastic / steel rings, bags, printing machinery, automatic date-print systems, quality control, digital measuring, conveying	www.itf-ipack.com www.itf-gida.com	İTF İSTANBUL FUARCILIK A.Ş.
WOOD PROCESSING MACHINERY International Wood Processing Machines, Cutting Tools, Hand Tools Fair	15-19 November 2008	İstanbul, Turkey	Wood working machinery, moulding machines, sanding and assembling machinery and plant incl. coating, rehydrators, humidify machines, impregnating preservation plant, bleaching and staining plant, cooling plant, auxiliary machinery and equipment, portable machines and processing units, multi-stage machines, special-purpose machine groups, all kinds of panels, furniture machines, presses, glass processing machines, vacuum cleaners, cutting tools, mechanical electrical hand tools, pneumatic nail, planing gun, wood cutting machines, pneumatic and hydraulic equipment, colour sprayers, publications	www.tuyap.com.tr	TÜYAP Tüm Fuarçılık Yapım A.Ş.
PLAST EURASIA ISTANBUL International Istanbul Plastic Industries Fair	27-30 Kasım 2008	İstanbul, Turkey	Plastics machinery and materials, mold, plastic products, raw materials, plastic packaging technology, rubber technology and products	www.tuyap.com.tr	TÜYAP Tüm Fuarçılık Yapım A.Ş.
ISTANBUL FOOD-TECH Istanbul Food Technologies Fair	28-31 Ocak 2009	İstanbul, Turkey	Groups: meat technology, milk and dairy technology, bread and bakery technology, beverage technology, food safety, hygiene and quality control technology	www.tuyap.com.tr	TÜYAP Tüm Fuarçılık Yapım A.Ş.
WIN - World of Industry International Trade Fair for the Manufacturing Industry - Machinery, Welding, Surface Treatment, Materials Handling	5-8 February 2009	İstanbul, Turkey	Machinery manufacturing industry, machine component, metal and non-metal working machines, compressors, welding and cutting machines, surface treatment technologies, materials handling and logistics	www.tuyap.com.tr info@hf-turkey.com	Hannover Messe Bileşim Fuarçılık AŞ
TATEF International Metalworking Technologies Fair KALIP AVRASYA (MOULD EURASIA)	31 March-5 April 2009	İstanbul, Turkey	Machine tools / CAD / CAM systems, software metalcutting machines, industrial safety systems, hand power tools, metalforming machines, manufacturing and process automation, measuring and testing systems, sheet metal and wire working machines, welding, cutting, hardening, heating equipment, mechanical, hydraulic, electrical and electronic accessories for metalworking	www.itf-exhibitions.com info@itf-exhibitions.com	İTF İSTANBUL FUARCILIK A.Ş.
Bursa Mould Technologies and Side Industry Fair	7-10 Mayıs 2009	Bursa, Turkey	Mould Technologies, Side Industry and Mould Machinery	www.mouldeurasia.com/	TÜYAP BURSA Fuarçılık A.Ş.
ITM International Textile Machinery Exhibition	6-10 June 2009	İstanbul, Turkey	Textile Machinery	www.tuyap.com.tr	TÜYAP Tüm Fuarçılık Yapım A.Ş.
SODEX Antalya International Sanitary, Heating, Ventilation and Air Conditioning Exhibition and Bathroom Equipment	5-8 November 2009	Antalya, Turkey	Sanitary, Heating, Ventilation and Air Conditioning Exhibition and Bathroom Equipment	info@anfas.com.tr	Hannover Messe SODEX Bileşim Fuar. AŞ
TIME International Production Technologies Exhibition	19-22 November 2009	İstanbul, Turkey	Automation, auxiliary technology, CAD / CAM systems and software, cutting oils, chemicals and maintenance equipment, compressors, design electrical motors and reducers, machine tools, industrial safety systems, hand power tools, manufacturing and testing systems, welding, hardening, heating equipment, hydraulics and pneumatics, electrical and electronic accessories for metalworking	www.itf-exhibitions.com www.itf-time.com	İTF İSTANBUL FUARCILIK A.Ş.
ANKOMAK International Building Technologies, Construction Machinery, Building and Building Elements Exhibition	April, 2010	İstanbul, Turkey	Building Technologies, Construction Machinery, Building and Building Elements	info@ite-turkey.com	İTE Group E ULUS. FUAR TAN HİZM A.Ş.
ISK-SODEX International Trade Fair for Sanitary, Heating, Ventilation and Air Conditioning	May, 2010	İstanbul, Turkey	Heating systems and equipment, refrigeration systems and components, ventilation and air conditioning systems and equipment, installations systems and components, insulation materials	www.wtcistanbul.net	Hannover Messe Bileşim Fuarçılık AŞ



## THE CONTACT

Central Anatolian Machinery and  
Accessories Exporters' Union  
0312 447 27 40  
www.makinebirlik.com

TURQUM  
0312 447 27 40  
www.turqum.com

Turkish Mechanical Industry Platform  
www.makinesektorplatform.org

Construction Equipment Distributors  
and Manufacturers Association of  
Turkey  
0216 447 70 77  
www.imder.org.tr

Association of Engineers In  
Construction Plant and Equipment  
Industry  
www.ismakinalari.org

Association of Machine  
Manufacturers  
0312 468 37 49  
www.mib.org.tr

The Turkish Association of  
Agricultural Machinery and  
Equipment Manufacturers  
0312 419 37 94  
www.tarmakbir.org

Turkish Marble, Natural Stone and  
Machinery Machinery Producers  
Association  
0312 440 83 63  
www.tummer.org.tr

## ASSOCIATIONS

Turkish Fluid Power Association  
0212 222 19 71  
www.akder.org.tr

Packaging Machinery Manufacturers  
Association In Turkey  
0216 545 49 48  
www.amabalaj.org.tr

Anatolian Flour Miller Association  
0312 281 04 68-69  
www.ausd.org.tr

Anatolian Elevator Manufacturers  
Association  
0312 354 15 02  
www.anasder.org.tr

Onboard Equipment Manufacturers  
Association  
0212 771 44 88  
www.arusder.org.tr

Caupling Industrialists' and  
Businessman's Association  
0212 613 79 00  
www.besiadturkey.com

Industrial Automation Industrialists'  
Association  
0216 469 46 96  
www.enosad.org.tr

Forklift Trucks and Material  
Handling, Storage Equipments  
Association of Turkey  
0216 477 70 77  
www.isder.org.tr

Turkish Air Conditioning and  
Refrigeration Manufacturers'  
Association  
0216 469 44 96  
www.iskid.org.tr

Ostim Industrial Zone  
0312 385 50 90  
www.ostim.org.tr

Pioneering Industry and  
Businessmen Association  
0312 395 73 90  
www.kilavuz.biz

Turkish Plastics Industry Association  
0212 425 13 13  
www.pagev.org.tr

Health Care Products Manufacturers  
anan Representatives Association  
0312 433 77 88  
www.sader.org.tr

All Elevator Industrialists' and  
Businessmen's Association  
0216 383 09 22  
www.tasiad.org.tr

Textile Machinery and Accessories  
Manufacturers Association  
0212 552 76 60  
www.temsad.com

Turkish Pump and Valve  
Manufacturers' Association  
0312 255 10 73  
www.pomsad.org.tr

Federation of Medical Device  
Manufactures and Suppliers  
Association  
0312 468 69 84  
www.tumdef.org

## OFFICIAL ORGANIZATIONS

Republic of Turkey Ministry of  
Finance  
0312 425 78 16  
www.maliye.gov.tr

Republic of Turkey Ministry of  
Industry and Trade  
0312 231 95 46  
www.sanayi.gov.tr

Republic of Turkey Under Secretariat  
of the Prime Ministry for Foreign  
Trade  
0312 204 75 00  
www.dtm.gov.tr

Republic of Turkey Under Secretariat  
of Customs  
0312 306 80 00  
www.gumruk.gov.tr

Republic of Turkey Prime Ministry  
State Planning Organization  
0312 294 50 00  
www.dpt.gov.tr

Republic of Turkey Under secretariat  
of the Prime Ministry for Foreign  
Trade  
0312 417 22 23  
www.igeme.org.tr

Turkish Chamber of Mechanical  
Engineers  
0312 231 31 59  
www.mmo.org.tr

Turkish Mechanical Sector Council  
Headquarters  
0312 413 83 81  
www.tobb.org.tr

Turkish Foreign Economy Relations  
Board  
0212 339 50 00  
www.deik.org.tr

Turkish International Cooperation  
and Development Agency  
0312 508 10 00  
www.tika.gov.tr

Turkish Statistical Institute  
0312 410 04 10  
www.tuik.gov.tr

Under-secretariat of Treasury  
0312 204 60 00  
www.treasury.gov.tr

The Scientific and Technical research  
Council of Turkey  
0312 468 53 00  
www.tubitak.gov.tr