





### Durmazlar Makine Manufactures A tram

DURMAZLAR MAKINE, ONE OF THE LEADING MACHINERY MANUFACTURERS IN TURKEY, WHICH MANUFACTURES MACHINERY AT INTERNATIONAL STANDARDS, HAS REALIZED THE MANUFACTURE OF THE FIRST DOMESTIC TRAM IN TURKEY. THE SAMPLE TRAM, THE FIRST DOMESTICALLY-MANUFACTURED ONE, WAS DEMONSTRATED AT A CEREMONY HELD AT BURSA DURMAZLAR MANUFACTURING PLANT, ATTENDED BY NIHAT ERGÜN, THE MINISTER OF SCIENCE, INDUSTRY AND TECHNOLOGY.

s Bursa is the starting point of the Silk Road, the design of the trams was inspired from the silk worm. The trams are planned to operate on the roads of Bursa as of end of 2011. Hüsevin Durmaz, the Chairman of the **Executive Board of Durmazlar** Makine, underlined that it is not only Turkey's project, but also a world project. Durmaz pointed out that the developed and developing countries use subways and trams as their means of public transport and added: "Especially to preserve our valuable world, public transport is the way to keep the damage to the environment at minimum level."

### A RESEARCH-DEVELOPMENT TEAM OF 100 PEOPLE

The sample trams, the manufacture of which are planned

to be completed by the end of the year, will first be operated in the chosen pilot areas. At first glance, it seems that 100 people, about 60 of them from the Research-Development staff, worked in this project, which is thought to reveal Bursa's power and rich experiences. When the staff from the project partners is added, however, this number increases much further. Taha Aydın, the coordinator of the tram project, pointed out that many designs for trams, usually known as "road vehicles," make use of symbols unique to the city concerned and added: "As Bursa is the starting point of the Silk Road, we decided that the silk worm would fit our project and made use of it when designing our tram. This is how our tram differs from its likes." Aydın emphasized that the domestic tram has major technological





superiorities to its likes with respect to the power units, particularly automation and control systems.

#### TECHNICAL FEATURES OF THE TRAM

Manufacturing of the tram is in progress within Durmazlar Makine. The trams are being manufactured so as to have a total passenger capacity of 277 (72 seated, 205 standing passengers); 5 steel cabinet boxes; 4 hinged, flexible type colored glass; and flame-protected, composite covered air conditioners. The weight of a tram is 48 tons when normally loaded and may reach 60 tons when fully loaded. The vehicle has a total of 400 KW motor propelling force and 8,6 % slope climbing capacity. It features a laser-equipped electronic control system with an LCD touch screen. Siemens provides the motor traction system for the trams, which are to be equipped with state of the art technology in safety devices and comfort.



### A FEMALE Manager In Tractor Sector

Zeynep Erkunt Armağan, the only woman working as a factory manager in the Turkish tractor sector, sets an example through her success in a sector dominated by men both in Turkey AND IN the world.

What do you think of the pluses and minuses of being a female manager in a sector dominated by men? I think a manager's sex is not important. If you have the necessary managerial qualities, it does not really matter whether you are male or female. In the end, our job is industry and we are trying to grow our business and sector keeping this in mind. Moreover, we can not ignore the positive effects of a woman manager on trade and the brand. Unlike our male colleagues, we make efforts to manage the business putting a greater emphasis on details and this contributes a lot to the brand and our work. The negative aspect is that, unfortunately, people get surprised when they see a woman manager in the tractor sector. It is hard but not impossible to overcome the prejudices. I see happily that many women get the manager position in various sectors.

How long has Erkunt Traktör been active in this sector? Erkunt Traktör is the youngest company in the sector. It is 7 years old and has a manufacturing experience of 6 years. We founded Erkunt Traktör in 2003 with only domestic capital. Our belief was that Turkey, one of the rare self-sufficient countries with respect to agricultural production, should have its own tractor brand. Following our establishment, it took about 1 year to complete the prototyping process and take the necessary permissions. Then, we introduced the first Erkunt tractor to the farmers in September 2004. Today, in our manufacturing plant in Ankara, which has a manufacturing capacity of 13 thousand tractors per year, we manufacture about 45 different tractor models and also hydraulic lifts both for our own products and other major tractor manufacturers in the world.

#### What is your market share in the sector and your 2010 turnover?

We are pride of being the only native-design tractor brand in the top 3 among the 25 brands that have active sales in the market as of end of 2010. We ended the year with a market share of 8 percent in Turkey as a whole and 22 percent in our regions and segment. Our turnover amounted to 140 million TL.

#### What is your current situation in export? What countries do you export your products?

We started exporting our products through our brand ArmaTrac in 2007. Today, we export 15 percent of our products. The countries we export to include Bulgaria, Greece, Hungary, Romania, Croatia, Algeria, Poland, TRNC, Iraq, Sudan, Yemen, Tanzania, Angola, Senegal, Mali, The Caribbean, Australia, Malta, Georgia, Guinea, Guinea Bissau, Mauritania and Burkina Faso. As Erkunt Traktör, we aim to export every fourth tractor we manufacture.





## ELEMENTS FASTENING MACHINE PARTS

In this issue, the guest of "MSSP Focus," the interview series we make in cooperation with the Machinery Industry Sector Platform, is the Association of Fastening Elements Industrialists and Businessmen.

astening elements such as screws, bolts and nuts have an important place in every part of daily life and they play an essential role in the machinery sector, too. We talked about the current state of the fastening elements sector in the world and Turkey's position in the world sector with Mustafa Tecdelioqlu, Chairman of the Executive Board of BESIAD (Association of Fastening Elements Industrialists and Businessmen); Ugur Karaduman, General Secretary of the Executive Board, and Gökhan Ulaşan, Member of the Executive Board.

Can you inform us on the historical development of fastening elements in Turkey? Mustafa Tecdelioğlu: Fastening elements have a long history, dating back to B.C. Especially after the beginning of industrialisation in Turkey in the 1970s, the industries of automotive, white appliances, electronic



products and furniture started manufacturing both for the domestic market and the export partners. Fastening elements are one of the most essential side ingredients of industry. If the manufacturing of fastening elements stopped for three days or, let's say, one week, the



whole industry would come to a standstill.

There must be some leading countries in the world in this sector. What is Turkey's position among them? Ugur Karaduman: As for the leadership in the world, we see that developed countries, which have already completed their process of industrialisation, have a dominance. These countries include principally Germany, Italy, France, Spain and also former Eastern Bloc countries that became EU members; Czech Republic, Poland, Hungary and Slovenia. The USA is of course among these countries; however, the biggest manufacturers are China, Japan and Korea. Turkey is the 3rd biggest manufacturer in Europe, coming behind Germany and Italy. As of today, Turkey is a threatening rival to Italy as an ever-developing market.

Does Turkey attract foreign investments in the fastening elements sector? Gökhan Ulaşan: The sector has started to attract foreign investors. There are three companies in our sector as foreign investors. In the marketing sector, 4 other foreign-capital companies are active. There are three manufacturing companies and 4 companies selling foreign products. Foreign companies invest more and more each day and the number of foreign partnerships is on the rise. This situation affects the fastening elements sector positively and develops it.

### İAOSB GIVES FULL Support to the Machinery Sector

İzmir Atatürk Organized Industrial Zone, one of the most important manufacturing, export and employment centers in Turkey, is developing strategies for the companies active in the machinery sector to switch to higher-technology products.

n İzmir Atatürk Organized Industrial Zone (İAOSB), one of the major manufacturing, export and employment centers in Turkey, 550 companies are active, providing employment for a total of 30 thousand people. It is seen that the manufacturing activity in the zone concentrates on textile, ready-made clothing, machinery, automotive supply industry, metal, plastics, chemistry, food, electrical and electronic sectors. The annual turnover of IAOSB is 4,5 billion dollars. Its export amounts to 2,5 billion dollars and its import is around 1 billion dollars.

### THE MACHINERY Sector IS Dominant in the Region

Hilmi Ugurtas, the Chairman of the Executive Board of İzmir Atatürk Organized Industrial Zone, pointed out that the machinery sector accounts for the highest number of businesses when put together with the metal and foundry sectors, which belong to the same value chain. Uğurtaş added: "The machinery manufacturing industry is a sector with high added value, which manufactures technology. At the same time, it is one of the indicators of developedness for coun-



tries." Uğurtaş also underlined that about 150 companies are active in the machinery sector in İAOSB, providing various sectors ranging from food to textile, automotive to aviation with process solutions and technology and thus helping them gain competitive power.

### MACHINE-METAL-CASTING CLUSTER PROJECT BY İAOSB

The Machine, Metal and Casting Cluster Project was launched in 2009 in İAOSB to help solve the common problems of the regional companies on a sectoral basis, decrease the manufacturing costs, increase the competitive power of the companies and spread the culture of cooperation. Uğurtaş mentioned that the project was started in July 2009 as İzmir Development Agency Project and said: "The work went on with research activities such as desk research, talks with partners and the member companies in the cluster and some workshops. Within the scope of the project, about 150 companies active in the machinery, metal and foundry sectors were interviewed one on one and the total competitive power was examined by reviewing the input conditions, demand conditions, related and supportive sectors, company strategies and business environment, related public enterprises and other cooperating enterprises.



# VISITS TO MINISTRIES BY THE EXECUTIVE BOARD

Adnan Dalgakiran, the Chairman of the Executive Board of the Machinery and Accessories Exporters Union, and the members of the Executive Board visited the ministers Nihat Ergün and Ömer Dinçer in their offices and gave them detailed information on the projects planned to be realized in line with the 2023 goals.

hortly after the Prime Minister Tayyip Erdoğan announced the new cabinet, Adnan Dalgakıran, the Chairman of the Executive Board of the Machinery and Accessories Exporters Union; Kutlu Karavelioğlu and Serol Acarkan, Vice Chairmen of the Executive Board; Hasan Büyükdede, Mehmet Sanal Members of the **Executive Board and General** Secretary of Central Anatolian Exporters' Union Özkan Aydın visited the Minister of Science, Industry and Technology, Nihat Ergün and the Minister of Education, Ömer Dincer in their offices and wished them success in their new duties. During these



visits by the Chairman Adnan Dalgakıran and the members of the Executive Board, the general situation of the machinery and accessories sector was discussed. The ministers were informed in detail on the projects planned to be realized in line with the 2023 goals. It was emphasized that support will be needed from the Ministry of Science, Industry and Technology and the Ministry of Education in order to succeed in every effort to be undertaken for the sector, which will help contribute to the economy and development of Turkey.

A RECORD INCREASE IN OUR MACHINERY EXPORT TO CHILE



he Republic of Chile is a South American country stretching 4.300 kilometres from north to south, lying on the west of Argentina, between the Andes and the Pacific Ocean. Its neighbours are Peru to the north, Bolivia to the northeast and Argentina to the east. Its capital is Santiago and the name of the country derives from the word "Chilli" which means "where the land ends" in the Aymara language. The machinery export of Chile increased in 2010 by 21,9 percent compared to 2009

and occurred at the level of 7,1 million dollars. Turkey's export to Chile, on the other hand, increased by 117 percent in 2010 and rose to 81 million dollars. The iron and steel sector ranks first in our export to this country, with a volume of 26 million dollars. In this ranking, the machinery and accessories sector takes the 3rd place. The greatest increase among our top ten items of export to Chile was observed in the "Mineral fuels, Mineral oils and products of their distillation, Waxes" sector. In the volume of foreign trade between our country and Chile, an increase of 393 million dollars was registered in 2010.





At the iftar dinner given by the Machinery and Accessories Exporters Union for press members, Adnan Dalgakiran stated that the machinery and electronic sectors will together lead the transformation period in Turkey and emphasized that these sectors will form the leading force and the competitive power of the Turkish industry.

he Machinery and Accessories Exporters Union organized an iftar dinner for press members on August 18, Thursday. Adnan Dalgakıran, the Chairman of the Machinery and Accessories Exporters Union, and members of the union attended the dinner held at Çırağan Palace. Adnan Dalgakıran informed the press members on the development of the machinery sector in Turkey and underlined the importance of the increase in machinery export. Dalgakıran also added that solving the problem of current account deficit in Turkey is only possible through the development of the machinery sector.

### THE MACHINERY SECTOR WILL CLOSE THE CURRENT ACCOUNT DEFICIT

Adnan Dalgakıran emphasized that the Turkish machinery sector will have exported machinery worth a total of about 12 billion dollars by the end of this year despite all the difficulties it faced, and said: "Considering that the global crisis has ended, you can foresee what a great leap this sector is about to take. We have a vehicle that was able to drive only at 30 km/h in the past due to problems. We can say this vehicle has reached a speed of 70 km/h for now, but in the future, it can rise to 150-200 km/h. We have prepared strategies to achieve this goal."

### "OUR MANUFACTURING Quality is higher than China"

Dalgakıran pointed out that 51 percent of the total world production takes place in the Far East and this region is a huge market, and said: "Machinery requires stepping in a difficult and comprehensive field of manufacturing. Turkey's manufacturing quality is higher than China. Without the current customs procedures, we could compete in prices, too. If we could make the tax practices similar to those in the Far East today, the Turkish machinery sector would see an incredible boom." As for the American market, Dalgakıran said that Turkey faces great difficulties entering into this market, too.





EXPORT FIGURES IN RESPECT TO	THE ACTIVITY FIELD OF THE MACHINERY AND ACCESSORIES				Source: All Exporters Union Database			
	JANUARY 01 - AUGUST 31, 2010			JANUARY 01 - AUGUST 31		, 2011 (%) CHANG		ANGE
PRODUCT GROUP	QUANTITY (Kg)	VALUE (\$)	\$/kg	QUANTITY (Kg)	VALUE (\$)	\$/kg	QUANTITY	VALUE
REACTORS AND BOILERS	19,886,102	140,270,800	28,587,688	223,254,546	43.8	59.2	49.4	67.2
TURBINES ,TURBOJETS, TURBO PROPELLERS	7,771,581	135,587,778	6,636,095	125,860,511	-14.6	-7.2	-10.1	-7.5
PUMPS AND COMPRESSORS	41,331,197	329,340,211	47,923,082	414,925,790	15.9	26.0	16.9	22.0
VALVES	20,450,866	174,136,285	24,046,203	226,279,147	17.6	29.9	17.3	25.6
INDUSTRIAL AIR CONDITIONERS AND COOLING MACHINES	240,829,379	1,097,350,116	263,637,633	1,350,021,122	9.5	23.0	43.8	62.0
INDUSTRIAL HEATERS AND COOKERS	18,423,928	133,076,731	16,973,993	150,110,186	-7.9	12.8	-0.1	5.2
ROLLER AND FOUNDRY MACHINES, MOULDS	21,904,236	135,568,873	29,809,016	217,888,497	36.1	60.7	34.2	45.7
FOOD INDUSTRY MACHINES, ACCESSORIES AND SPARE PARTS	32,753,805	205,066,694	40,998,778	269,701,075	25.2	31.5	26.1	33.7
AGRICULTURE AND FORESTRY MACHINES	51,452,557	231,942,441	45,362,099	209,991,588	-11.8	-9.5	-13.5	-12.8
LOAD LIFTING, CARRYING AND STOWING MACHINES	16,462,640	80,699,693	21,585,050	111,016,129	31.1	37.6	47.7	46.8
CONSTRUCTION AND MINING MACHINES	111,521,449	412,579,024	147,855,386	603,395,324	32.6	46.2	43.3	56.6
PAPER MANUFACTURING AND TYPOGRAPHY MACHINES	4,743,903	30,635,072	4,638,679	37,173,897	-2.2	21.3	-9.6	0.5
OTHER INDUSTRIAL WASHING AND DRYING MACHINES	169,511,220	547,718,291	167,884,391	591,699,033	-1.0	8.0	-20.1	-54.6
TEXTILE AND CLOTHING MACHINES AND ACCESSORIES	30,657,440	144,858,940	28,886,860	167,017,832	-5.8	15.3	-1.5	15.0
LEATHER PROCESSING AND MANUFACTURING MACHINES AND ACCESSORIES	1,037,898	5,016,679	956,788	5,168,137	-7.8	3.0	-0.2	4.6
GUM, PLASTIC, RUBBER PROCESSING MACHINES	4,200,320	40,796,301	5,320,677	57,968,314	26.7	42.1	28.1	34.5
MACHINE TOOLS	47,362,705	292,484,813	53,645,849	374,701,912	13.3	28.1	20.3	31.2
OTHER MACHINES, ACCESSORIES AND SPARE PARTS	53,099,495	329,321,889	61,883,881	448,898,702	16.5	36.3	20.1	38.7
ENGINES, ACCESSORIES AND SPARE PARTS	47,518,901	830,461,052	57,951,338	996,149,381	22.0	20.0	-7.2	193.8
OFFICE MACHINES	1,753,724	73,574,374	2,854,659	76,123,212	62.8	3.5	12.5	-12.9
BEARINGS	4,856,208	49,162,580	6,598,629	73,444,814	35.9	49.4	44.2	51.1
WEAPONS AND AMMUNITION FOR THE DEFENSE INDUSTRY	8,014,838	171,930,680	5,074,053	200,921,859	-36.7	16.9	-29.4	-5.1
PACKAGING MACHINES, ACCESSORIES AND SPARE PARTS	2,359,177	61,121,393	3,129,652	70,441,775	32.7	15.2	32.2	-1.3
TOPLAM	957,903,566	5,652,700,711	1,072,240,478	7,002,152,781	11.9	23.9	25.0	31.6

### TOP TEN EXPORT PARTNERS IN RESPECT TO THE ACTIVITY FIELD OF THE MACHINERY AND EXPORTERS UNION (2010-2011, PERIODS BETWEEN JANUARY 1 - MAY 31)

	2010		20	11	(%) CHANGE		
COUNTRY	QUANTITY (\$)	VALUE (Kg)	QUANTITY (\$)	VALUE (Kg)	QUANTITY	VALUE	
GERMANY	45,725,215	298,946,054	71,859,600	569,531,506	57.2	90.5	
IRAN	42,337,245	221,463,517	47,844,839	317,642,154	13.0	43.4	
ENGLAND	17,952,476	119,725,641	29,981,101	233,332,471	67.0	94.9	
RUSSIA	36,818,559	156,086,821	52,384,584	231,649,388	42.3	48.4	
IRAQ	20,033,160	216,245,029	17,271,864	211,809,059	-13.8	-2.1	
USA	36,891,070	199,235,163	37,946,579	204,709,710	2.9	2.7	
ITALY	23,912,479	130,747,489	30,608,063	192,212,853	28.0	47.0	
FRANCE	21,125,412	120,177,003	30,058,385	181,832,738	42.3	51.3	
AZERBAIJAN	14,878,449	103,387,612	18,879,843	150,566,133	26.9	45.6	
SAUDI ARABIA	12,110,838	74,871,362	16,964,488	128,535,868	40.1	71.7	
OTHER	324,415,222	1,909,933,493	366,670,292	2,307,922,372	13.0	20.8	
T OTAL	596,200,126	3,550,819,184	720,469,637	4,729,744,253	20.8	33.2	

Source: All Exporter Unions Database