

AEROSPACE CLUSTER ASSOCIATION

MEMBER PROFILE

2020



AEROSPACE CLUSTER ASSOCIATION - ACA

Dear Partners,

Since its establishment in 2010 as the first Aerospace Cluster in Turkey, Aerospace Cluster Association – ACA has been carrying out a wide range of activities both nationally and internationally in supporting the growth of the Aviation and Space industries. Although its main offices being located in İzmir – Turkey, ACA has several members from different provinces of Turkey, which came together to promote two common goals. These are: “Supporting the growth of qualified technical pool of talent in the sector” and “Supporting its members (mostly SME's) to become competitively integrated in the global supply chain by fostering their innovation capabilities.

Developing Small and Medium Enterprises (SMEs) and supporting them to take place in the Aviation, Space and Defense sectors are among the most important strategic goals of our Association. In this context, we support our members to be a part of the highly competitive global supply chain in the related sectors by supporting their needs certification (AS 9100, NADCAP, etc.) and by providing support to access the sourcing opportunities and OEM's in these sectors as well as helping them to reach local and international funding.

On the other hand, Aerospace Cluster Association (ACA) is one of the first members of the the "European Aerospace Cluster Partnership (EACP)" (<http://www.eacp-aero.eu/>), which now has 42 clusters from 17 countries. EACP, which is an important network, along with its global initiative called Global Aerospace Clusters (GAC) come together in international events and discusses common problems and works to create collaborative partnerships through several EU and other funded projects.

In this respect, ACA has partnered in several projects collaborating with EACP member clusters including "2013 Leonardo da Vinci - Partnerships" project in 2013. In 2016, HipAir was another successful project with EACP clusters and recently SKY 4.0 in an ongoing project for partnering with Spain, Portugal and Poland Clusters and experts to promote soft skills for supporting the needs of Industry 4.0. In addition, an agreement of cooperation with the aerospace cluster in Poland "Aviation Valley" is ongoing.

Among the services we provide to our members, we can also count the international events we have prepared together with our partners like ESBAŞ (Aegean Free Zone). The purpose of these events is to enable our members to meet with national and international OEMs. Lastly, with the support of our Defense Industry Presidency (SSB) our international event called "The Conference on the Development of our National and Domestic Industry in the Defense and Aviation Sector with Global Collaborations" took place on 10-11 October 2019 where representatives from international companies such as Boeing, Airbus, Rolls - Royce and GE were present. Also, purchasing authorities of Turkish Foundation Companies (TSKGV) (like TAI, Havelsan, Roketsan, Aselsan, etc.) also took place and B2B activities were organized with the participation of our members resulted in successful negotiations.

As a new initiative, due to the COVID -19 pandemic which lead to working through virtual networks, ACA will be organizing online virtual events to promote the member activities and fostering the network between the buyers and the Turkish Suppliers.

As of January 2020, ACA has 72 members, of which 42 are sector companies. These companies generally serve in the defense, aviation, space and automotive industries. In addition to our member companies, we also have individual members, which are valuable academicians from important universities, R&D Centers as well as senior experts from the industries we serve.

For Further information please contact ACA Coordinator:

Ms. Bilge Karakulak

E-Mail: bilge@hukd.org.tr

Tel: + 90 530 875 9115



MEMBER PROFILE

ALTEK METAL SAN. ve TİC. A.Ş



ABOUT US

Altek started its activities in 1987, trading aluminum between 1987 and 2007, in 2007, after the first factory installation, aluminum sizing, Aludur and Aludur plus under its own brand began to produce aluminum casting plate. At present, it provides reliable and fast service to its customers in Çerkezköy factory, Ankara, Gebze service centers and İkitelli retail sales point.

AREAS OF EXPERTISE

- ALUMINIUM CUT TO SIZE
- ALUMINIUM CUT TO SHAPE
- ALUMINIUM MACHINING
- MANUFACTURING ALUDUR&ALUDUR PLUS ALUMINIUM PLATES

ENGINEERING CAPABILITIES

- SIZING MACHINES
- DOUBLE COLUMN CNC
- ANNEALING FURNACES
- WATERJETS
- CUT TO LENGTH MACHINE
- CIRCULAR CUTTING
- ROUND BAR&FLAT BAR CUTTING MACHINES

CERTIFICATES

- A&D
- AS9120
- EN9120
- ISO9001
- JISQ9120ISO14001
- ISO18001

CONTACT DETAILS

Contact Name: Meftun HIRACA

Title: Ankara Factory Manager

Executive Board Member

Phone: 0535 461 80 12

Fax: +90 212 336 90 38

e-mail: meftun.hiraca@altek.com.tr

Web: www.altekmetal.com

Address: Adnan Menders Bulvarı No:92
Kahramankazan/ANKARA



MEMBER PROFILE

BODYCOTE İSTAŞ ISIL İŞLEM SAN. VE TİC. A.Ş.



ABOUT US

With more than 180 accredited facilities in 23 countries, **Bodycote** is the world's largest provider of heat treating and specialist thermal processing services. Through classical heat treatment and specialist technologies including Hot Isostatic Pressing (HIP), Bodycote improves the properties of metals and alloys, extending the life of vital components for a wide range of industries; including aerospace, defence, automotive, power generation, oil & gas, construction and agricultural machinery, medical and transportation. Customers in all of these industries have entrusted their products to Bodycote's care for more than 30 years. For more information, please visit www.bodycote.com

In 2006, "BODYCOTE" established joint venture with "İSTAŞ Isıl İşlem" in Turkey which are currently operating in three industrialized regions: **İzmir** (Kemalpaşa OSB), **Bursa** (Nilüfer OSB) and **Gebze** (Dilovası İMES OSB).

Integrated to Bodycote's Policies and complying to Quality System certifications (ISO 9001 and ISO 14001 certifications are Standard for all Plants; and also Gebze has AS9100D Aerospace Quality Management System, Izmir and Bursa have IATF16949 Automotive Quality Management System), Bodycote İstaş provide high quality heat treatment services to customers in CQI-9 standards.

AREAS OF EXPERTISE

"**Bodycote İstaş**" Plants are serving whole range of "Heat Treatment" processes (quality, reliable and on-time) to its customers with hi-tech and high capacity atmosphere controlled Sealed Quench furnaces (hardening / carburizing / carbonitriding / stress relieving / normalizing / annealing / aging), Vacuum furnaces (hardening / brazing / aging / sub-zero), Nitriding furnaces (Corr-i-dur / Gas Nitriding / Nitrocarburizing / Arcor) and Induction hardening machines (Medium / High frequency) at all Plants with competent and experienced employees.

For Aerospace industry applications, we are especially serving "through hardening, aging, solution heat treatment, precipitation hardening, carburizing process in Sealed Quench (oil quench) and Vacuum furnaces (gas quench).

ENGINEERING CAPABILITIES

Our GEBZE Plant is certified with AS9100D and serving to Aerospace and Defence Industry applying some special Heat Treatment specification like AMS2750, AMS2759, AMS-H-6875, STA-100-81-40, TPS382 etc. serving to both Military and Civil Aviation programs (Sikorsky, Agusta Westland, KAI, TAI's GMH/Atak Helicopter and TIHA, Roketsan, Aselsan etc.)

In order to serve for Boeing, Airbus, GE, Safran, Honeywell, ITP/Rolls-Royce etc, NADCAP certification process is started.

CERTIFICATES

- AS9100D
- IATF16949
- ISO9001
- ISO14001



CONTACT DETAILS

Contact Name: Baris Akagunduz

Title: Country Sales Manager

Phone: +90.553.3133605

Fax: +90.232.8770302

e-mail: baris.akagunduz@bodycote.com

Web: www.bodycote.com

Address: Kemalpaşa OSB, No:17/1, Kemalpaşa/İZMİR



MEMBER PROFILE

DIRINLER GRUP



ABOUT US

Dirinler Group is a family establishment and continues its industrial and commercial activities since the year 1952. Within the group, there are three factories for the production of metal processing machineries, machine tools, air compressors and one foundry casting gray and ductile iron products up to 15 tons per piece, one marketing company that performs the sales activities of air compressors and one foreign trade company which organizes the import and export activities of the group of companies. Dirinler Makine Sanayi ve Ticaret A.Ş. manufactures mechanical presses, hydraulic presses and Knuckle Joint presses and Dirinler Sanayi Makinaları Endüstri ve Ticaret A.Ş. produces CNC Machining Centers and CNC Lathes are the first two companies among Dirinler Group. All products manufactured by Dirinler Group are under the guarantee of our companies. ISO 9001 and TÜV CERT Rw certificates which are necessary documentations for the quality standards in the market were obtained by the companies. customer satisfaction is always held on foreground by Dirinler Group. By taking its power from its experience and applying the latest innovations, Dirinler Group pays utmost attention quality matters as a well systemized establishment.

AREAS OF EXPERTISE

Dirinler Makine Sanayi ve Ticaret A.Ş. manufactures C-type eccentric presses between 25 tons and 250 tons capacity, H-type eccentric presses between 160 tons and 1000 tons capacity, C-type hydraulic presses between 63 tons and 160 tons capacity, H-type hydraulic presses between 250 tons and 1000 tons capacity, Knuckle Joint presses between 200 tons and 1000 tons capacity for stamping, blanking, cutting, bending, forming, coining, piercing, shallow and deep drawing, punching, bonding operations mainly for automotive, defence, aviation, electric, electronic, household appliance industries.

Dirinler Sanayi Makinaları Endüstri ve Ticaret A.Ş. manufactures CNC Machining Centers, Double Column CNC Machining Centers, Double Head Horizontal CNC Machining Centers, Gantry type CNC Machining Centers, C-type CNC Vertical Machining Centers, Bridge type CNC Pattern Machining Centers and CNC Lathes for precision machine processing for aviation, defence, automotive, Machinery, construction industry and Tool Processing Industry. Design of Double Head Horizontal CNC Machining Center by the copyright belongs to our company.

ENGINEERING CAPABILITIES

- CNC operations
- CMM
- Engineering; proengineer, cad
- Design and manufacture of special purpose

CERTIFICATIONS & QUALIFICATIONS (FTB)

- EN-ISO 9001:2015
- CE –type examination certificate

CONTACT DETAILS

Contact Name: Burcu BAŞPIŞIRICI

Title: Quality manager

Phone: +90 232 3767200

Fax : +90 232 3767206

e-mail: dirinler@dirinler.com.tr

Web: www.dirinler.com.tr

Address: Dirinler Makine Sanayi ve Ticaret A. Ş. AOSB 10036 Sokak

No: 7 Çiğli 35620 İzmir / TURKEY



MEMBER PROFILE

EGEMET EGE METAL DÖVME SAN. TİC. LTD. ŞTİ.



ABOUT US : Egemet is a company specialized in hot forging, which was established in 1998. It has 3000 m² open, 6000 m² closed area. The production capacity is 11.000 ton per year and the parts from 0,2 kg up to 60 kg can be forged. 35 white collar and 160 blue collar personnel are working for Egemet. We are serving for automotive, industrial vehicle, railway, hand tool, energy sectors. %75-%80 of the production is exported mainly to European countries.

CONTACT DETAILS

Contact Name: Levent Taylan EMİR
Title: Technical Manager
Phone: +90 232 877 01 75
Fax: + 90 232 877 10 50
e-mail: Itemir@egemetforge.com
Web: egemetforge.com.tr
Address: Ankara Asfaltı Taşkahve Mevkii Kemalpaşa
/ İZMİR TURKEY

AREAS OF EXPERTISE There are 4 hammer forging line and 3 mechanical press line on the shop floor. The designs are done by CAD-CAM programmes. Forging dies and the machining operations are done on house. We have 3D measurement device, form tracer, microscope, magnetic particule crack test device, surface roughness measurement device, hardness measurement device, tensile and charpy test device as quality control equipment. Normalizing process is on house. We are also outsourcing all kind of heat treatment and surface coating process.

ENGINEERING CAPABILITIES

- Egemet is design center since 2018
- Catia, Autocad, Solidworks programmes
- Deform simulation programme

CERTIFICATES

- ISO 9001:2015
- IATF 16949:2016
- AD 2000 W8 & W10 &13



MEMBER PROFILE



FOKKER ELMO HAVACILIK SANAYI ve TIC. LTD. ŞTİ.

ABOUT US

Originating from the regional aircraft manufacturer Fokker Aircraft, Fokker Elmo has an inspiring history and heritage. Fokker Aircraft was a renowned Aircraft Manufacturer, which was founded in 1919, and designed and manufactured aircraft until 1996. Today, using this background, experience, capability and know-how Fokker Elmo, a company of Fokker Technologies, has become a world leading company in the design, production and support of Electrical Wiring Interconnection Systems (EWIS), and electrical panels & boxes for the aerospace and defense industry.

Fokker Elmo is a global company with facilities in Turkey, China, India, the Netherlands, United States and Canada. Fokker Elmo Turkey is focusing mainly on Defense & Aerospace applications of wiring systems. Our facility is located in Izmir in the Aegean Free Zone.

AREAS OF EXPERTISE

Design and Manufacturing of Electrical Wiring Interconnection Systems (EWIS), and Electrical Panels & Boxes for the Aerospace and Defense Industry.

ENGINEERING CAPABILITIES

Fokker Elmo can take full responsibility for the design, making optimum use of our in house developed Wiring Design and Manufacturing System (WDMS). This tool, recognized by leading aircraft OEM's, supports the flexibility and configuration control in the Design Phase and when implementing changes it creates a direct (digital) link between the design data and the manufacturing and test control.

DESIGN & MANUFACTURING CAPABILITIES

There are many ways to make use of Fokker Elmo's knowledge and skills. Fokker Elmo can perform full design to customer's requirements, as well as Built to Specification as Built to Print.

Also from the production side, there are different levels. The customer can present Manufacturing Process Requirements and let Fokker Elmo define the specific finishing process (process, tools, tool settings etc.) and let Fokker Elmo perform a process qualification towards the Manufacturing Process Requirements.

On the other hand, in the true word of "built to print" the customer could deliver a form board (in file or hard copy format), and working instruction sheets, so Fokker Elmo only provides production labor.

In all cases, Fokker Elmo will use its unique WDMS tool to ensure configuration, quality and on-time delivery. The power of WDMS is proven by our performance for our customers including Lockheed Martin, Boeing, and Airbus.

Fokker Elmo capabilities and equipment includes Laser Marking, Braiding Equipment, Fully Automated Circuit Testing, Moulding and Assembly of complex Wiring Bundles and Electrical Panels & Boxes. Fokker Elmo Turkey is a fully ITAR proof facility, which enables it to perform on military programs.

CERTIFICATES

- AS9100D
- EASA Part-145
- EASA Part-21G
- FAA 14 CFR Part 145
- TCCA (Canadian Civil Aviation Authority) CAR 573.



CONTACT DETAILS

Contact Name: Adriaan Leyte
Title: Vice President Business Development
Phone: +31 164 617 000
Fax: +31 164 617 700
e-mail: adriaan.leyte@fokker.com
Web: www.fokker.com
Address: Aviolandalaan 33 4631 RP Hoogerheide
The Netherlands



MEMBER PROFILE

FASTENER TECHNOLOGY BAĞLANTI ELEMANLARI SAN.TİC.A.Ş.



FASTENER TECHNOLOGY BESTAS

ABOUT US

Founded in 1993 in the Aegean Free Zone, our company is specialized in manufacturing aerospace fasteners. It was acquired by the French LISI group in 2001. FTB has all necessary production and testing means in house. It holds the quality system and special process certificates as well as customer approvals in the aerospace fasteners industry. It employs 536 workers.

AREAS OF EXPERTISE

Manufacturing aerospace fasteners (standard and special threaded fasteners in the range 3-20mm diameter; inserts and studs, nuts, washers, etc.)

ENGINEERING CAPABILITIES

Automatic and manual forging, heat treatment, CNC and conventional machining, thread rolling, plating, NDT, laboratory and testing,

CERTIFICATES

AS9100 Rev.D

PRI / NADCAP Certificates for Heat Treatment, Chemical Processes, Materials Testing, NDT, EDM

Customer Accreditations for special processes from Airbus, Airbus Helicopters, Safran Group, Rolls Royce, GE Aviation,, Pratt and Whitney, USA,

OSAC Production Organization Approval



CONTACT DETAILS

Contact Name: Serkan KAYAN

Title: General Manager Deputy in charge of Finance and Administration

Phone: 0 232 477 0 400

Fax: 0 232 477 0 499

e-mail: serkan.kayan@lisi-aerospace.com

Web: www.lisi-aerospace.com

Address: Ege Serbest Bölgesi Ayfer Sok. No:21 35410 Gaziemir İZMİR TURKEY



MEMBER PROFILE

KAAN MAKİNA SANAYİ



ABOUT US:

KAAN MAKİNA has specialized in the production of aerospace precision machine parts and the processing of fine-tolerance rotating engine parts of structural and dynamic parts.

We have capability of production and testing of patented products and sub-assembly groups belonging to the customers.

We can develop processes regardless of the number of the parts needed by our customers.

We provide sustainable and common working conditions as the single provider of the customers in most critical parts with suitable costs.

AREAS OF EXPERTISE

KAAN MAKİNA uses modern chip removal technologies in 5-axis milling and turning applications and the highest quality of machine pool that is accepted worldwide.

We perform design and manufacture of all kinds of parts with our specialized high-level engineering team. We can simulate all processes from RFQ to finish part.

With our design capability we can use advanced manufacturing technologies.

ENGINEERING CAPABILITIES

- Advanced production techniques
- Development parts design for manufacturing
- Fixture design & manufacturing
- Working with solid 3D models
- Design and production of the fixture
- CAM programming
- Capability of design of the sub-system and parts
- HyperMILL 2019-2
- Measuring on the CNC with Renishaw Probs
- Tool measurement system

CERTIFICATES

AS9100 & ISO9001 – Bureau Veritas Certification



CONTACT DETAILS

Contact Name: İbrahim SEZEK

Title: General Manager

Phone: +90 232 8734448 (-116)

Fax: +90 232 8734440

e-mail: ibr@hahim.sezek@kaanmakina.com

Web: www.kaanmakina.com

Address: Kaan Havalı Kırıcı Makina Oto Yedek Parça İmalat ve San. Tic. Ltd. Şti.

Cumhuriyet Mah. 9075 Sokak No: 5
35735 Kemalpaşa, İZMİR



info@hukd.org.tr | www.hukd.org.tr
AEROSPACE CLUSTER ASSOCIATION

MEMBER PROFILE

Kale Pratt&Whitney



NIST 800-171 Compliance
OHSAS 18001
ISO 14001

ABOUT US

Kale Pratt & Whitney is a partnership between Kale Group and Pratt & Whitney (division of Raytheon Technologies) was founded in 2010. Raytheon Technologies is one of the leading companies in aviation & defence sector. Additionally, Kale Pratt & Whitney is one of the leading aviation companies in Turkey and includes many qualified unique special process applications which is unique within Europe and the Middle East.

AREAS OF EXPERTISE

Our company's manufacturing technology includes new generation multi-axial machine , 5X Laser, Water Jet and Wire Erosion, Hydroform, Hot and Cold Forming, Mechanical presses, Automatic TIG welding machine, Electron Beam Welding Machine, Plasma (HVOF) Spray, etc. It also includes all types of destructive and non-destructive testing methods, vacuum heat treatment furnace and super cleaning processes. With approximately 400 qualified employees, the company has considerable experience in processing materials as titanium, super alloys , stainless steel & aluminum.

ENGINEERING CAPABILITIES

High skill set engineering capability where needed for Advance forming and machining with including product related tooling and gauge designs.

CERTIFICATES

AS-9100
ISO/IEC 27001



CONTACT DETAILS

Contact Name: Akgün Filiz
Title: General Manager
Phone: 0232 2987500
Fax: 0232 2987567
e-mail: akgun.filiz@kalepw.com
Web: www.kalepw.com
Address: Ege Serbest Bölgesi Çamlık Sokak No:11
35410 Gaziemir- İzmir / Turkey

This document does not contain any confidential or export regulated technical data.



MEMBER PROFILE

KUTLUSAN KAFES EKİPMAN VE HAYVANCILIK SAN. VE TİC. A.Ş.



ABOUT US

AREAS OF EXPERTISE

MACHINE DESIGN AND MANUFACTURING,
AUTOMATION AND SOFTWARE,
MOLD DESIGN AND MANUFACTURING,
PROJECT COMMITMENT,
SHEET PROCESSING,
WIRE PROCESSING,
MECHANIC PRODUCTION,
WELDED PRODUCTION,
ELECTRIC PANEL MANUFACTURING,
ELECTRICAL WIRING AND ILLUMINATION,

ENGINEERING CAPABILITIES

- R&D
- Design
- Software

CERTIFICATES

- ISO 9001:2015
- ISO 14001:2015
- OHSAS 18001:2007
- ISO/IEC 27001:2013
- TSE-HYB
- TSEK

CONTACT DETAILS

Contact Name: Teoman ONAT

Title: R&D Manager

Phone: 0530 290 27 79

Fax: 0232 876 10 50

e-mail: teoman.onat@kutlusan.com.tr

Web: www.kutlusan.com.tr

Address: Armutlu Ovası, Akalan Mahallesi,
Bağımsızlık Küme Evler, NO:106 Kemalpaşa / İzmir /
Türkiye



MEMBER PROFILE

MERTEK ENGINEERING MOLD AND SPARE PARTS MANUFACTURING



ABOUT US

With its ongoing experience since the year 1982, Mertek Engineering primarily;
Produces household glassware and glass moulds used by companies producing glass bottles and space parts of the machines they use for this purpose in the Glass Sector,
Manufactures takeoff-landing gears of planes, tools and devices used in their repairment and maintenance and tools and appurtenances used in the maintenance of expired aircraft engines in the Aviation Sector,
And produces spare parts used in the manufacture of vehicles, pipes used in heating and cooling systems and moulds and space parts of the machines producing other parts in the Automotive Sector.

AREAS OF EXPERTISE

- Glassware and glass moulds
- Spare parts of the machines

ENGINEERING CAPABILITIES

- Reverse engineering
- Moulding design

CERTIFICATES



CONTACT DETAILS

Contact Name: Bahadır İcer

Title: Manager

Phone: 05075809113

Fax: 0212 549 93 23

e-mail: bahadir.icer@mertekmuhendislik.com

Web: <http://www.mertekmuhendislik.com/>

Address: İOSB. S.S. Eskoop Sanayi Sitesi C-4 Blok
No:183-181 Başakşehir – İstanbul / TÜRKİYE



MEMBER PROFILE

NORM CIVATA



ABOUT US

Established in 1973, NORM Civata is one of the leading fastener producers around the world. One of the ISO 500 companies, Norm Civata operates in different sectors particularly automotive, with its high production capacity and wide product range.

AREAS OF EXPERTISE

Owing to all-in-house production capability, various types of fasteners including bolts, nuts, screws, pins, studs, bushes and on-demand special fasteners can be designed, tested and mass-produced according to international standards and customer expectations.

ENGINEERING CAPABILITIES

- Product and tool design for cold forging
- Numeric simulations
- Analytical modelling
- Mechanical characterization tests
- Image Processing
- Machine Learning, Artificial Neural Network

CERTIFICATES

- ISO 9002
- QS 9000
- ISO 9001
- ISO TS 16949
- EN 14001
- ISO 18001
- FORD Q1



CONTACT DETAILS

Contact Name: Cenk Kılıçaslan – Burak Toparlı
Title: R&D Manager - Senior R&D Specialist
Phone: +90 232 376 76 10 Dahili/Ext:2169 - 2214
Fax: + 90 (232) 376 7613
E-mail: cenk.kilicaslan@norm-fasteners.com.tr - burak.toparli@norm-fasteners.com.tr
Web: <http://www.normholding.com.tr/>
Address: Atatürk Organize Sanayi Bölgesi 10007 Sok. No: 1/1 P.K 35620 Çiğli / İzmir / EGE / Turkey



MEMBER PROFILE

OZ-CELİK SANAYİ LTD STİ

öz çelik

Öz Çelik San. ve Tic. Ltd. Şti.

ABOUT US

Oz-Celik is a company, established in 1987 by two mechanical engineers, and an economist, serving as machining industry.

Oz-Celik, which creates and produces world-class products according to different demands and needs of its customers with its research and development activities, constantly improves product quality, traceability and trust of its customers by following innovations and technological developments. However, it makes consumers, their customers and offers them the best service.

Primary targets of Oz-Celik, customer satisfaction and product quality. The outputs of each existing process within the organization, are associated with numerical data, and these outputs are regularly controlled by senior management. The company culture and goals are known to the employees and carry out their works with this cultural awareness.

Most of the employees are graduates of Industrial Vocational High School and Vocational High School, engineers work as department managers. All employees are provided with in-vocational training in line with their training programs, starting from the day they start work.

Oz-Celik serves mainly automotive, aerospace, defense, gas-electric water heaters and medical industry companies.

Since 2007, it has been exporting directly to Germany, France, Belgium, Netherlands and other European countries.

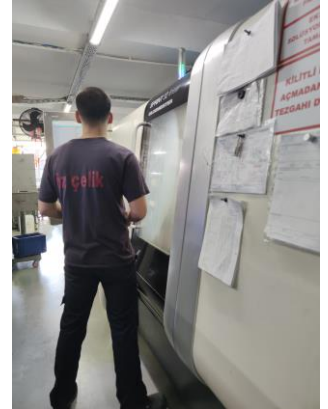
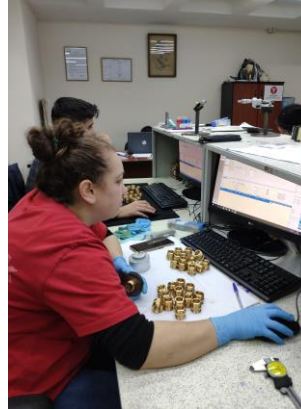
ENGINEERING CAPABILITIES

With the 8-axis CNC machines of GILDEMEISTER SPRINT series they work from the bar, they also carry out their productions in the range of Ø40-100 mm for low quantities.

With the knowledge and experience gained from the Quality Management System established in 1995, Oz-Celik has equipped quality laboratories consisting of Coordinate Measuring Machine (CMM), measuring microscope, camera measuring microscope, surface roughness device, hardness measuring device and other measuring devices and experienced quality personnel. It ensures the reliability of the parts and produces at low PPMs.

CERTIFICATES

- AS9100:2018
- IATF 16949:2016
- ISO 9001:2015
- EYDEP ES-101 B CLASS



CONTACT DETAILS

Contact Name: M. Melih AKKUZU

Title: Genel Müdür

Phone: 0212 549 57 41 (3 Hat)

Fax: 0212 549 57 44

e-mail: m.m.akkuzu@oz-celik.com.tr

Web: www.oz-celik.com.tr

Adress: İkitelli OSB Metal-İs Sanayi Sitesi 16.Blok
No:25 34306 Basaksehir - Istanbul/TURKEY



MEMBER PROFILE

INDUSTRY AND LIMITED COMPANY "ÖZKAYA MAKİNA "



ABOUT US Founded in 1976, Özkaya Makina takes as principle sharing knowledge and experience in automotive, aviation and industrial area and producing with new solutions.

With its expert staff located in two bases; İkitelli (600 square meters) and Gölcük (150 square meters) our staple productions are,

Apparatus, fixtures, spare parts, service equipment, special projects control fixtures for the use of Automotive Sector,

Control fixtures , measurement ,transport apparatus, and special projects for aerospace Filters are also our main production areas feature /sizes on demand and in field of industry.

Our mission is to improve and develop our competence in aerospace and defense industry in accordance with talents.



AREAS OF EXPERTISE

Our company,acts on the requests of our customers and partners for custom design and process, manufactured and sells its patented products.

ENGINEERING CAPABILITIES

Design
CNC proglamination CAM applications

CERTIFICATES

- ISO 9001-2015
- Turkish Technic Certificate Approval

CONTACT DETAILS

Contact Name:Mustafa Özkan

Title:

Phone: 0212 486 25 97

Fax: 0212 486 25 98

e-mail: mustafa@ozkayamakine.com

Web: www.ozkayamakine.com

Address: İkitelli Organize Sanayi Bölgesi Tormak sanayi sitesi Z Blok N:45 Başakşehir-İstanbul



MEMBER PROFILE

PFW HAVACILIK SANAYI VE DIS TIC. LTD. STI. (PFW HS)



ABOUT US

PFW HS operates with 500 employees on 32,000 m² and is a major partner on many commercial airplane programs. The company offers a wide range of manufacturing capabilities. PFW HS provides its complex aerostructures and tubes & ducts on a turnkey basis and is a center of excellence within the PFW Group, a global network of specialized manufacturing plants.

2 major customers are Airbus and Boeing.

The company's capabilities allow it to progressively move up the value chain assuming a greater work scope for its partners. This often includes the delivery of complete products, installed and ready to join with the adjacent system elements.

Consequently, for each individual project we're able to create a cost-effective, logistically optimized solution. We have developed the social and cultural competence required to act as a true system integrator for the international environment. Through added value by utilizing Lean Management concepts, customers benefit by shortened lead times, consistent quality, and lower costs.

MAIN CAPABILITIES AND AREAS OF EXPERTISE

Structures

PFW HS' Structural Production capabilities are key strengths that are brought to the table. Based on our in-depth experience we have placed our focus on the continuous improvement of manufacturing technologies and Structural Production. Entering business in 2003, the company started its production with Additional Fuel Tanks of Airbus' A320 family passenger aircrafts. Since that time, PFW HS has enlarged its product range continuously, now including the Floor/Pressure Bulkhead, Belly Fairing and Ram

Air Turbine Frame of Airbus' A320 family aircrafts, the Inner Board Flap of A321, A400M Cargo Holding Structure and Additional Center Tank.

Key processes include: Drilling, Reaming, Sealing, Riveting, Heat Treatment, Chromate Coating and Painting.

Tube Systems

The continued investment in our skill base, capital equipment and process improvement enables PFW HS to manufacture a wide and complex variation of Tube Systems. In 2006, the company started its deliveries to Airbus and Boeing. Including A380, PFW HS has worked on every commercial program of Airbus and the 787 Dreamliner program of Boeing. Through a planned and controlled process, 6,000 different parts are handled and delivered with high on-time delivery performance.

Main operations are: Cutting, Bending, Laser Measurement, Alkaline & Organic Cleaning, Swaging, Orbital TIG Welding, Radiography, Pressure Testing and Marking.

CERTIFICATES

AS/ISO EN 9100, EASA Part 21G, Nadcap Approvals for Welding and Non-Destructive Testing, and Customer Approvals.



CONTACT DETAILS

Contact Name: Mr. Tevfik Gunhan

Title: Managing Director

Phone: +90 232 252 15 55

Fax: +90 232 252 04 47

e-mail: tevfik.gunhan@tr.pfw.aero

Web: www.tr.pfw.aero

Address: Bahar Sok. 12, Ege Serbest Bolgesi, 35410 Gaziemir / Izmir, Turkey



MEMBER PROFILE

REPKON Machine and Tool Industry and Trade Inc.

REPKON

ABOUT US

REPKON is a provider of turn-key complete production plants for the metal forming sector as well as a designer, manufacturer and supplier of key metal forming machines for the global market, with a well established reputation for outstanding performance of Aviation & Aerospace and Defence Industry.

AREAS OF EXPERTISE

Recognized worldwide for its proprietary design and manufacturing know how, REPKON has been selling sheet metal forming equipment to producers across the globe since 1978. REPKON is a diligent supplier of custom-made solutions strictly focused on customer requirements with over four decades of track record for challenging conventional methods to come up with ingenious superior results with Flowforming Machine, Rotational Cold Forging Machine for Barrel Production, Shear forming Machine, Hot Spinning Machine, Press and Tooling Production.

ENGINEERING CAPABILITIES

- Design
- Manufacturing
- R & D
- Mass production

CERTIFICATES

- ISO 9001:2005
- CE
- ATEX



CONTACT DETAILS

Contact Name: UĞUR CEM GÜRPINAR

Title: Business Development Responsible

Phone: +90 (216) 739 59 06

Fax: +90 (216) 739 59 14

e-mail: repkon@repkon.com.tr

Web: www.repkon.com.tr

Address: Balibey Mahallesi, Fabrika Sokak No: 1,
34980 Şile, İstanbul, TÜRKİYE



MEMBER PROFILE

SARIGOZOGLU

HIDROLİK MAKİNA VE KALIP SANAYİ VE TİC. A.Ş.



ABOUT US

SARIGOZOGLU A.Ş. was established in 1957 by İsmail Sarigozolu in İzmir, TURKEY. SARIGOZOGLU A.Ş. serves to the leading OEMs' of the automotive industry such as Ford, Tofas, Mercedes, Renault, BMW, Audi, Bentley, Volkswagen, Jaguar, Porsche with its knowledge, experience and technological power.

SARIGOZOGLU A.Ş. continues to grow and develop constantly with its investments in Manisa (1976), Aksaray (1999) and Bursa (2009). Currently **SARIGOZOGLU A.Ş.** is working in sheet metal forming and tooling in 3 different locations with 4 plants and 1015 employees since three generations.

SARIGOZOGLU A.Ş. carries out car parts and toolings' all production stages such as design, method, simulation, cad-cam, 2D-3D processes, assembly, under-press training, sample printing, measurement, reporting and is one of the advanced suppliers of the automotive industry with its this turnkey working style.

Even though **SARIGOZOGLU A.Ş.** produces mainly for automotive industry, but also produces white goods parts, especially inner and outer combi parts to Bosch in Turkey, France, Germany and UK for years.

AREAS OF EXPERTISE

Interior and Exterior Metal Car Parts and Tooling Production (roof panel, side panel, chassis, fender, engine hood, deck lid, battery case, underbed cabinet etc.)

ENGINEERING CAPABILITIES

- Design
- Product Development
- Production with Automation (Press/Welding/Assembly)



CERTIFICATES

- ISO 9001
- ISO 14001
- ISO/TS 16949
- Q1

CONTACT DETAILS

Contact Name : Levent SARIGOZOGLU
Title : Vice Chairman
Phone : +90 236 233 7050
Fax : +90 236 233 7047
E-mail : info@sarigozogu.com.tr
Web : www.sarigozogu.com.tr
Address : Organize Sanayi Bölgesi 2.Kısım
Mustafa Kemal Bulv. No:7 45030 Yunusemre/MANISA



MEMBER PROFILE

STM SAVUNMA TEKNOLOJİLERİ VE MÜH. TİC. A.Ş



ABOUT US

STM Savuma Teknolojileri ve Mühendislik Ticaret A.Ş. also known as STM, was established in 1991 to render project management, engineering, and consultancy services to the Presidency of Defence Industries (SSB) and the Turkish Armed Forces (TSK) in areas where high technology is involved. Since then, STM has carried out such duties successfully while introducing various critical technologies to our country. STM has also been a leader in bringing domestic contribution rate in the Turkish Defence Industry up to its current level by bringing on board qualified expert personnel that is much needed for the procurement of high technology defence systems and the transfer of such technologies. STM has combined its work in various defence industry projects focusing on different software and platforms with its engineering know-how and the experience it has acquired over the years; this has led to the development of various projects and products in addition to its consulting activities. The technical know-how and experience acquired within the scope of consulting services have supported our departments that are working on other projects while the corporate experience fed by the operations in such fields has contributed considerably to our consultancy services

AREAS OF EXPERTISE

Military Maritime, Autonomous Systems, Cyber Security and Big Data, Satellite and Space, Command Control, Civil and Military Aviation.

ENGINEERING CAPABILITIES

- Design and Engineering Activities
- Project MANAGEMENT
- R&D Activities
- Platform / System Integration
- Material / Device / System Supply
- Infrastructure, Bench, Facility Works
- System Maintenance / Repair Activities
- Supply Model Determination and Feasibility Studies
- Integrated Logistics Support Activities
- Factory (FAT), Port Acceptance Experiences (HAT) and Marine Experiences (SAT) Support
- Industrialization Activities
- Consulting Activities

CERTIFICATES

- EASA IR 21
- CS 23,25,29,E
- FAR 23,25,29,33
- MIL-HDBK-516
- SAE / ARP 4761,4754A
- MIL- STD-882
- DO-178B, DO-254, DO-160
- MIL-STD-810

CONTACT DETAILS

Contact Name: **Alp Eren BASER**

Title: **Corporate Communications Specialist**

Phone: **00 90 533 086 1013**

Fax: **0090 312 266 35 51**

e-mail: aeren.baser@stm.com.tr

Web: www.stm.com.tr

Address: **Mustafa Kemal Mahallesi 2151.Cadde**

No:3/A 06530. Çankaya - ANKARA



MEMBER PROFILE

TERBAY MAKİNA A.Ş.



ABOUT US

Terbay Makina A.S. was established in 1954 in Izmir, Turkey. Currently we are serving Heavy Road Machinery, Maintenance Machinery, Tractor and Commercial Vehicle industries as OEM by supplying welded, machined and painted steel parts for serial orders. We export 90% of our production to Europe.

AREAS OF EXPERTISE

Production of sheet steel & profile parts for Heavy Duty Road & Maintenance Machinery, Commercial Vehicles, Agricultural Vehicles and Defence Industries. Close to 400 different parts are produced for Heavy Duty Road & Maintenance Machinery. Close to 2000 different parts are produced for Commercial Vehicles (for bus, minibuss, truck&vans). Close to 100 different parts are produced for Agricultural Vehicles. Close to 50 different parts are produced for Defence Industry. These productions are done as O.E.M for a given and approved production program.

ENGINEERING CAPABILITIES

- Laser and oxygen-plasma cutting
- Bending
- Stamping
- Machining
- Welding with jigs and fixtures

- Shot blasting
- Surface cleaning and painting (electrostatic powder coating and wet spray painting)

CERTIFICATES

- IATF 16949
- ISO 9001
- ISO 14001
- OHSAS 18001
- DIN EN ISO 3834-2
- EN ISO 9606-1

EN 1090-2 EXC 3

CONTACT DETAILS

Contact Name: Burak Erkızan

Title: Project and Proposal Engineer

Phone: 00 – 90(232) 4782525

Fax: 00 – 90(232) 4782526

e-mail: analiz@terbay.com.tr

Web: <http://makina.terbay.com.tr/>

Address: Ankara Caddesi No: 321 – 35042 Bornova - İzmir



MEMBER PROFILE

TİMSAN A.Ş.



ABOUT US

Timsan Tractor which is the sole and single manufacturer of Diesel/Electric Powered Baggage, Cargo, Aircraft Tow and Push Tractors and Helicopter Carrier Platforms in Turkey, was established in Izmir Ataturk Organized Industrial Zone in 2010.

As per the new trend in the ground support operations for clean airports concept, Timsan Tractor has intensified its resources to develop Battery Driven Electric Powered Equipment with its expert team of 20 Employees in 2.000 m² Area.

Timsan Tractor has manufactured 130 aircraft and baggage tow/push tractors which were delivered to the Civil and Military Customers All Over The World, in a 10-Year Period (till 2020) starting from its establishment date.

Timsan Exports 60% of its turnover. Timsan tractor's products are used in 13 countries including Tunisia, Algeria, Cyprus, Iraq, Tanzania, Philippines, Sri Lanka, Azerbaijan, Kazakhstan, Italy, Romania, Saudi Arabia and Pakistan.



AREAS OF EXPERTISE

Timsan Tractor specializes in the production of diesel and electric propelled luggage, cargo, aircraft towing vehicles and helicopter carrier equipment.

ENGINEERING CAPABILITIES

Timsan Tractor prioritizes aesthetic, quality and most of all safety rules dictated by national/international standards on its products.

As per the current interest is highly focused on reducing the carbon emission, Timsan Tractor is giving high priority to develop electric driven vehicles for clean environment and working hard to include such items in all categories of its product line.

To create added value to our national economy, Timsan Tractor is manufacturing the most of the items previously procured through import in its activation area and delivering successfully to domestic and international customers. With this special capability, Timsan Tractor has achieved a well-known name in International market.

CERTIFICATES

- ISO 9001:2015
- Certificate Of Domestic Goods



TIMSAN

CONTACT DETAILS

Contact Name: Celil ÇOLAK

Title: Factory Director/ Mechanical engineer

Phone: +90 232 376 84 13

Fax: -

e-mail: timsan@timsantr.com

Web: <http://timsantraktor.com/>

Address: Timsan Traktör Üretim Montaj
Sanayi ve Ticaret A.Ş. 10007 sok. NO:22
A.O.S.B, Çiğli, İzmir, Türkiye





MEMBER PROFILE



TUFAN
demirçelik a.ş.

Tufan Demir Celik

ABOUT US

Tufan Demir Celik is a supplier of metal fabricated components, subassemblies and welded assemblies. We offer our products and services to a highly diversified multinational customer base, leading prestigious projects and produce industrial equipments.

Ever since its foundation, our company provided high quality steel materials and metal fabrication services to its customers and takes part in shaping our environment and our future.



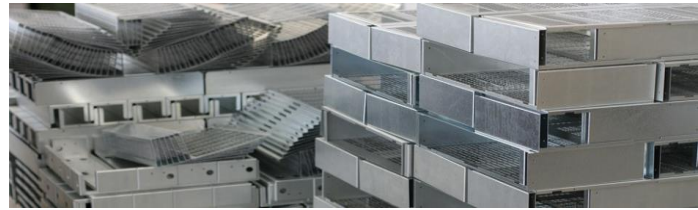
AREAS OF EXPERTISE

Laser cutting, plasma cutting, bending, welding, welded assemblies, machining, surface treatments



ENGINEERING CAPABILITIES

Drawing adaptation



CERTIFICATES

ISO 9001, OHSAS 18001, currently working on IATF 16949 and AS 9001

CONTACT DETAILS

Contact Name: Sinan Danacioglu

Title: Exports Coordinator

Phone: +90 530 151 7616

Fax: +90 212 549 5705

e-mail: sinandnc@tufandemircelik.com

Web: <https://tufaniron.com/>

Address: Cerkeşli OSB, IMES OSB Sitesi IMES 10.
Cadde No:1 Dilovasi – Kocaeli 41455



MEMBER PROFILE

ÜNSPED GÜMRÜK MÜŞAVİRLİĞİ VE LOJİSTİK HİZMETLER A.Ş.



UNSPED CUSTOMS CLEARANCE & SERVICES CO.



ABOUT US

UGM was established in 1981 as a customs brokerage and consultancy company. Having a workforce of 1350 employees in 54 offices, UGM serves as a sustainable and ethical solution partner. Since 2015 UGM is being audited yearly by a well-known licensed rating company and our corporate governance rating was 9,17 for 2018. UGM giving priority to the development of technological infrastructure and innovations, provides consultancy in legislation, law, incentives, release of guarantees and standardization.

CONTACT DETAILS

Contact Name: Gokhan GOK
Title: Regional Sales Manager
Phone: +90 212 410 99 99
Fax :
e-mail: gokhangok@ugm.com.tr
Web: www.ugm.com.tr
Address: Mahmutbey Mahallesi 2655. Sokak
No:3 Bağcılar / İstanbul / TÜRKİYE

BASIC ABILITIES and EXPERTISE AREAS

We support our business partners in areas including customs activity which are; import, export, government stimulation program, standardization, collateral management, brokerage and regulations support, legal services, and courier services.

Our company even has experience concerning the import of spare parts in the aviation sector, for this reason our company is working with a special team focused on the aviation, space and national defense industry. We provide customs services to well known branch members.

CERTIFICATIONS & QUALIFICATIONS

- Environment Management System Registration Certificate ISO 14001:2004
- Quality Management System ISO 9001:2008
- Occupational health and safety management system OHSAS 18001:2007
- Business Continuity Management System ISO 22301: 2012
- Anti- Bribery Management System ISO 37001 :2016
- Information Security Management System ISO 27001:2013
- Customer Satisfaction Management System ISO 10002 :2014
- Ar-Ge Central Document
- Authorized Economic Operator Certificate (AEO)
- Turkey's 500 largest service exporter certificate of achievement
- 2018 World Fair Play Certificate



MEMBER PROFILE

VOLKAN İTFAİYE ARAÇLARI SAN. TİC. A.Ş.



ABOUT US

Volkan İtfaie is a company that designs and manufactures fire trucks and fire-fighting related products for specific needs.

AREAS OF EXPERTISE

- CAD-CAM supported production techniques,
- Model making and moulding,
- Design improving with various analyzing softwares,
- Prototyping and design-check capabilities,
- Pump test unit which complies with the norms of EN1028-2,
- Complex framework settlement and welding,
- Composite manufacturing,
- Integrated paint and coating facility.

ENGINEERING CAPABILITIES

Operating a R&D Center with 35 engineers. Being able to design through methods of CAE. Which includes finite element analysis (FEA), computational fluid Dynamics (CFD), multibody dynamics (MBD), durability and optimization. It is included with computer-aided design (CAD) and computer-aided manufacturing (CAM). Highly effective on Electronics design, production and test capabilities.

CERTIFICATES

- R&D Center Certificate (TR)
- ISO 9001:2015
- ISO 450001
- ISO 14001-2015
- ISO 10002:2014
- ISO EN 3834-2
- ISO 28000:2007

- TS EN 1846-1, -2, -3
- TS EN 1028+A1
- EN 14043
- EN 1777
- Agreement concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles,
- Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal

Recognition of Approvals Granted on the Basis of these United Nations Regulations.



CONTACT DETAILS

Contact Name: İbrahim GÖKSEL
Title: Director, R&D Center
Phone: +90 (232) 853 96 86
Fax: +90 (232) 853 97 71
Mobile : +90 531 772 78 02
e-mail: ibr@volkan.com.tr
Web: volkan.com.tr
Address: 29 Ekim Mah. 9230/1 Sokak No: 3/1
Torbalı – İzmir/Turkey



MEMBER PROFILE

VOLT TECHNOLOGY DEVELOPMENT AND ENGINEERING INC.



ABOUT US

Volt Defense offers its innovative products to the global market in defense industry and aviation fields by combining its unique design and advanced technology capabilities with high production power. Electric motors and drivers provide power transmission systems, weapon and ammunition subsystems, and continuous development and sustainability in electromechanical drive systems from R&D to integrated logistics support process. It improves its integration and design experiences in line with the principle of 'localization' and supports Platform and System manufacturers in line with their needs.

AREAS OF EXPERTISE

With its experienced staff and high-tech benches in its facilities established in a 45.000 square meter closed area; Machining, Coil Winding, Mounting, Lamination, Metal Injection, Plastic Injection Mold Manufacturing, Cabling, Wire Erosion and Painting processes.

Design Volt Defense, making high-tech electrical, electronic, mechanical designs and analytical models; it also has prototype and mass production capabilities.

And also; setting up an automatic production line; design and production of test systems; machine, mold, apparatus design and production projects.

ENGINEERING CAPABILITIES

- ELECTRIC MOTORS AND POWER SYSTEMS
- ELECTROMECHANICAL ACTIONS AND TORQUE MOTORS
- MOTION CONTROL SYSTEMS AND DRIVERS

CERTIFICATES

- ISO 9001:2015
- ISO 14001:2015
- OHSAS 18001:2007
- ISO 10002:2014



CONTACT DETAILS

Contact Name: Ulaş TUTAN

Title: deputy General Manager

Phone: +0 533 665 70 70

Fax: +90 232 877 10 59

e-mail: ulas.tutan@voltsavunma.com.tr

Web: https://www.voltsavunma.com.tr/

Address: Kemalpaşa OSB Mah. 31.Sk. No:8

Kemalpaşa 35735 – İzmir – Türkiye

[illegible]

Aerospace Cluster Association - Member Companies List
Akımsan
Altek Metal
Andar Elektromekanik Sistemler
Berdan Cıvata
Bodycote
DADE
Dirinler Makine San. Tic. A.Ş.
Egemet
ESBAŞ
Fokker Elmo Havacılık Ltd. Şti.
FTB - Lisi Aerospace
Galtek Kimya
Havelsan
Hitit Trans
Kaan Makina
Kale Havacılık Sanayi A.Ş.
Kale Pratt & Whitney
Kutlusan Kafes
Lazer İzmir Metal Kesim ve İşleme Tekn. San. Tic.Ltd. Şti
Mertek Mühendislik Kalıp ve Yedek Parça San. Tic. Ltd. Şti.
Norm Cıvata
Özçelik San.Tic.Ltd.Şti.
Özgül Makine
Özkaya Makine
PFW Havacılık Sanayi ve Dış Tic. Ltd. Şti.
Repkon Makina ve Kalıp San. ve Tic. A.S.
Sarıgözoğlu
Sentes-BIR A.S.
Sistaş A.Ş.
Solmaz Gümrük Müşavirliği
STD- ECEM Otomotiv
STM A.Ş.
Strateji Kalıp
Teknika Plast Teknik Kalıp Plastik San Tic A.Ş.
Teknogate
TERBAY Makine
TİMSAN Traktör
Tufan Demirçelik
Ünsped
Volkan İtfaiye
Volt Teknoloji Gel. Müh
Yeşiller Makine



www.hukd.org.tr

MEMBER OF



EACP
EUROPEAN AEROSPACE
CLUSTER INITIATIVE

