



**UP MAKINE**

**FOR A UNIQUE  
PARTNERSHIP**

# PROFESSIONAL MANUFACTURING & MANAGEMENT

Let's Solve Together

## **ABOUT OUR MISSION IN INDUSTRY**

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UP MAKINE, active in defense industry at United States, Europe and Australia, is a project management company that is highly capable of creating result-oriented solutions based on requests in a wide range of manufacturing projects.

We're a focused and dedicated force, ready to partner and build solutions. We strive to exceed our customers' ever-changing needs. Our military supply chain management is an integrated cross-functional approach to procuring, manufacturing and delivering goods and services for our customers. If you are as eager for this cooperation as we are, please feel free to contact us.

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**WE HELP YOU FOR  
YOUR PRODUCTION**

## WHY CHOOSE US ?

The willingness to make sacrifices and work harder in the name of mutual benefit is one of the things our clients appreciate, and that they say sets us apart. Whether you're looking for specs, data sheets, quality reports and certifications, we pride ourselves on providing a high level of customer service day in and day out.

### Free Quotation & Rapid Prototyping



It is our commitment to quote within 3 days, regardless of production quantity. Submitting a quote is not for a fee, since it is great pleasure for us to work on your project.

### Professional Project Management



We always keep the customer in the loop in every stage of manufacturing and shipping.

### Modern Manufacturing & Best Quality



In addition to using top-quality materials and equipment, we conduct quality control checks at all stages of the manufacturing process. We provide a product report including material, coating and heat treatment certificates and other dimensional and measurement reports.

### Military Standard & Commercial Packaging



Packaging requires attention to detail in contract execution. When working with Up Makine and our experienced team, you receive subject matter expertise in all areas of packaging.

## OUR PLANNING

As Up Makine, we are struggling with very complex military products which have many operations from the procurement of material through the delivery to your warehouse. This pushes us to plan every steps in detail, to make sure your orders are fulfilled most efficiently, without interruptions, delay, or stress.

## FAST & RELIABLE SERVICES

We start working on project when it first reaches us for a quotation. We consider all possible difficulties we may face in every stage, thus we are fully ready when we get the order, and following this procedure enables us to provide reliable lead-times and fast service.

## WE GIVE THE BEST SERVICE FOR YOU



**FREE COST ANALYSIS FOR  
DIFFERENT MANUFACTURING  
METHODS**



**INCREASE YOUR PROFIT & EFFICIENCY**



**DOCUMENTATION AS YOU REQUESTED**



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**FOR MORE  
INFORMATION**

**CONTACT US**

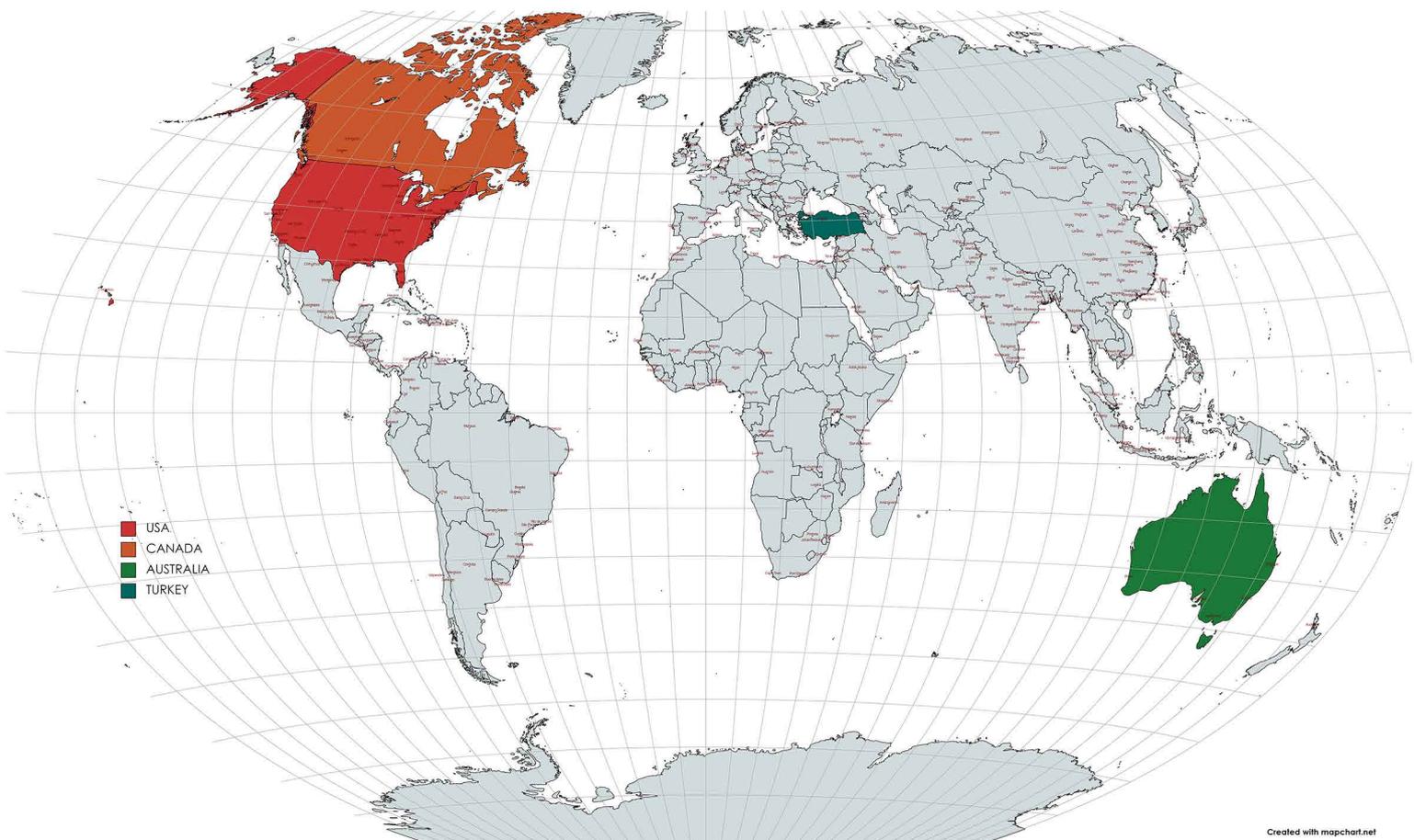
# ABOUT US

Up Makine is a Turkey based engineering and manufacturing company. The company is specialised in designing, manufacturing, and delivering defense, aerospace, automotive and home appliance components, services and solutions to its customers.

Our engineering team come with more than 10 years of experience in collaborating with the military and commercial establishments from different industries. The willingness to make sacrifices, tackling the difficult challenges together and work harder in the name of mutual benefit is one of the things our clients appreciate, and that they say sets us apart. Our industry focus enables us to fully understand your business and the challenges you face. We anticipate emerging issues before they become a problem and we give advice that achieves results. We provide access to the best companies in Turkey that are specialized in their fields with the help and management of our engineering team. Whether you are looking for standards, specifications, data sheets, quality reports and certifications, we pride ourselves on providing a high level of customer service day in and day out.

As Up Makine, we are providing manufacturing and engineering services over countries. All products under the responsibility of our company are thoroughly manufactured and tested according to applicable military standards by independent institutes, and comply with additional European standards such as ISO, DIN etc. We owe our diversity in production to serving for three continents and four countries; USA, Canada, Australia and Turkey.

The company's mission is to grow and expand with strong and unique strategic partnerships all over the world.



# MACHINING CAPABILITIES

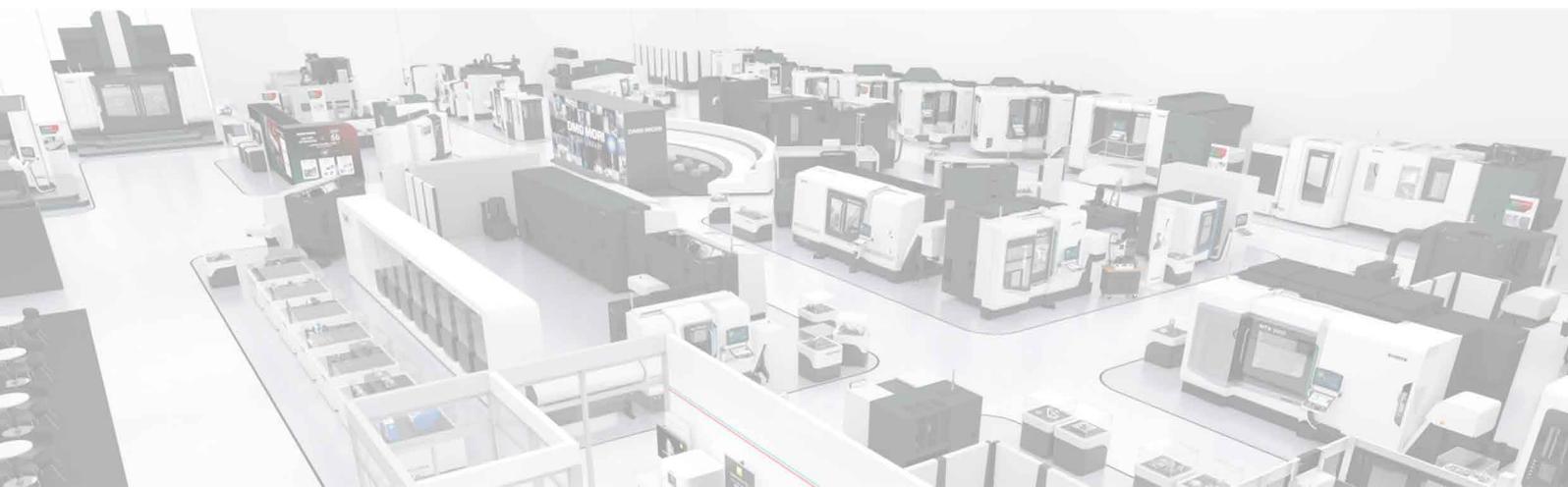
Found with the goal of becoming a dependable business partner to the best manufacturers and end users in the international Defense and Aerospace Industry, Up Makine aims to be a brand known for its high quality manufacturing services and professional logistics and supply-chain solutions.

Below list is from one of our partners that we frequently work with in Turkey. To provide services one step ahead of customer expectations, by meeting the needs on time with high quality rate and competitive prices, is our main goal; therefore we outsource machining process to the best companies in Turkey. Our customers receive the full benefit of our dedicated team's extensive experience and knowledge in the engineering sciences.

DMGMORI	DMU340P	5X	3400x3400x1600	10000	2018
DMGMORI	NMH10000	5X	1550x1600x1230	10000	2017
DMGMORI	NMH10000	5X	1550x1600x1230	8000	2019
DMGMORI	NMH6300	5X	1400x1200x1200	8000	2020
Apec	APEC	5X	4000x2500x1000	15000	2018
DMGMORI	DMU125Mb	5X	1335x1250x900	12000	2019
DMGMORI	DMU125Mb	5X	1335x1250x900	12000	2020
DMGMORI	DMF360FD	5X	3600x1100x900	10000	2017
DMGMORI	DMF360L	5X	3600x1100x900	18000	2017
DMGMORI	DMF360L	5X	3600x1100x900	20000	2018
DMGMORI	NHX6300	4X	1050x900x1030	8000	2019
DMGMORI	NHX6300	4X	1050x900x1030	8000	2020
DMGMORI	NT4200	5X	Ø660x1596	5000/12000	2017
DMGMORI	CTX1250Tc	5X	Ø500x1200	5000/12000	2017
DMGMORI	DMU95Mb	5X	950x850x650	20000	2017
DMGMORI	DMU50	5X	650x420x575	15000	2017
DMGMORI	DMU50	5X	650x420x575	15000	2018
DMGMORI	NLX2500SY	4X	Ø366x705	5000/12000	2017
DMGMORI	ECOMILL70	5X	750x600x520	12000	2017
DMGMORI	ECOMILL50	5X	500x450x400	12000	2017
DMGMORI	ECOMILL800V	5X	800x560x510	12000	2017

HEXAGON	GLOBAL ADV 12.30.10	CMM	3000x1500x1200	2.3 µm	2017
HEXAGON	GLOBAL EVO 09.15.08	CMM	1500x900x800	1.3 µm	2017
HEXAGON	GLOBAL EVO 09.12.08	CMM	1500x900x800	1.3 µm	2018

RATIONAL	VMS-3020H	Video Measuring	20-128X
OLYMPUS	38DL PLUS	Ultrasonic Thickness Gage	0.08-635.0 mm
MITEC	HRS-150	Hardness Measurement Device	HRB and HRC
MITUOYO	SJ-210	Surface Roughness Tester	Ra,Rz, etc.
VERIMET	M4900C	Conductivity Meter	%IACS
VERIMET	M4900C	Conductivity Meter	%IACS



# CASTING

We provide a fully managed service from initial design phase to final production. Our services include for casting projects include CAD modeling, technical drawings, rapid prototyping, machining, heat treatments and also non-destructive testings and all other requested mechanical testing (hardness, tensile and impact testing etc.) and chemical composition analysis of casted material, and dimensional reports with CMM reports with surface roughness results.

Plating, finishing and other secondary operations can be done according to your specifications.

Regardless of shape or size, our on-site resources allow us to produce custom castings for almost any application and material. When you choose to work with Up Makine for your casting needs, we can guarantee durable, resistant to wear and tear, corrosion resistant and of the highest quality products.

We deliver castings that are perfect where weight, strength and casting soundness are of concern, and components that are gas-tight with high range tensile results.

Up Makine is ISO 9001:2015 certified, and also adheres to military standards such as the MIL-I-45208 quality system standard.



- Mild (low carbon) steels
- Aluminum
- Stainless steels
- Copper based alloys
- Low alloy steels
- Rubber
- Cobalt based alloys
- Nickel based super alloys



# FORGING

Up Makine provides its customers a complete array of services, including product design, engineering, metallurgical assistance, quality/tolerance testing, product prototype development, tooling fabrication, heat treatment, milling and pre and post-forging operations.

We are a long-term, defense/military product manufacturing supplier to large Defense/Military OEMs, the US DOD and its Armed Forces. We have an extensive background with forging and fabricating metal products/components used on numerous types of military aircraft, missiles, rockets and other defense-related systems.

Our experience and expertise combined with our skilled engineering team and capabilities allow us for offering precision metal forging and machined military products and/or other defense-related components to the tightest tolerances.

Our dedicated team of front-line technical experts for defense services, backed by our metallurgists and forging experts, work directly with you to uncover ways to reduce long-term costs and improve lead times. We have a proven track record of solving the military's toughest metal challenges. Our industry specialists can help you meet your design challenges, including redesigning cast or fabricated parts to forged parts, and program objectives with clear communications on everything from order status to valid certification and milestone achievements.



# SHEET METAL FABRICATION

Up Makine's sheet metal manufacturing services are comprised of laser cutting, punching, precision bending, welding (REL, TIG, MIG/MAG, spot welding etc.) and also machining, coating and painting options in the following processes for the automotive, military, and marine industry sectors. Each process may employ specialized equipment (e.g., the bending process uses press brakes) and can be combined with other processes to meet more complex design specifications.

With the purpose of being a solution partner to the main defense contractors from all over the world, we have been committed to providing precision sheet metal fabrication services that set the standard for military equipments.

Some of the metals that we regularly use in our sheet metal fabrication operations include:



Aluminum

Brass

Bronze

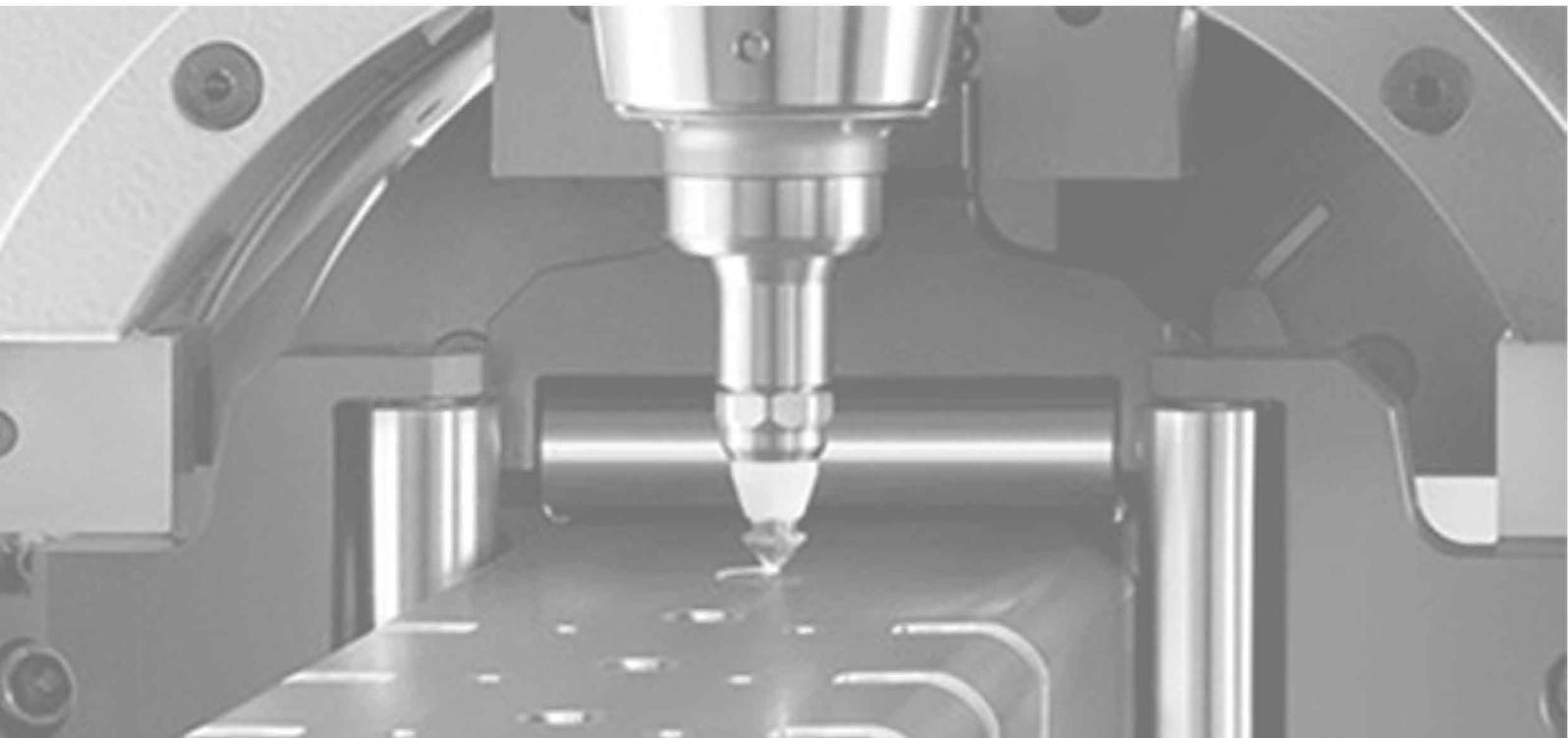
Copper

Nickel

Stainless steel (303, 304, 316, 15-5, and 17-4)

Steel and steel alloys

Titanium



# PLASTIC INJECTION MOLDING

Up Makine works with client to design and engineer products for military, automotive and home-appliance projects, developing the most effective production process for plastic parts with highest cost efficiency. We provide excellent quality products to the plastic injection molding industry, and offering a wide range of services from low volume molding to over molding and pad printing. We are the brand you can trust for your plastic injection molding services.

We offer injection molding, insert molding, over molding, and micro molding services to produce plastic components that best suit varying applications of the industry. Our competence in micro molding allows us to produce a wide range of precise micro-featured plastic parts.

Up Makine utilizes the best molding practices and communicate with you to provide satisfying results. Continuous interaction that we will create with your company enables us to produce the most complex products with on-time deliveries, resulting a solid double-sided beneficial business relationship.



# HEAT TREATMENT

Up Makine works closely with all branches of the U.S. Military and their suppliers. We offer a variety of cleaning services before and after heat treatment to ensure you receive your parts back in the best possible condition.

Up Makine is positioned to provide fast turn arounds, top-notch quality, and a strong partnership for Defense contractors, manufacturers, and meets the toughest thermal processing needs for a wide variety of industries.

-Vacuum Hardening

-Vacuum Tempering

-Vacuum Stress Relief

-Normalization

-Gas Nitriding

-Vacuum Softening

-Oxidation

-Quench & Temper

-Aging

-Aluminum Hardening

-Sand Blasting

-Tempering

-Isothermic Annealing

-Stress Relief

-Carbon Suction

-Softening

-Surface Hardening with Induction

-Tool Steel Hardening



# PAINTING & COATING

Coatings for military vehicles and equipment must provide an extremely high level of protection. Up Makeine offers a range of pre-treatment and liquid paint systems to meet the most demanding technical challenges and comply with UK Ministry of Defence and US Military standards. Identification and composition (EDX elemental chemical microanalysis, IR-Ft Spectrometry), viscosity (Krebs-Stormer), density, coating thickness (Gravimetric methods, non-destructive methods in magnetic and non-magnetic substrates, microscopy), colorimetry, brightness, hardness, adherence, scratch resistance, chemical resistance, permeabilities (liquid water, water vapor, CO<sub>2</sub>), wet scrub resistance (washability), opacity and mechanical damage tests are the list of our paint and coating verification tests as per your requests.

We offer competitive pricing as well as flexible and accommodating lead times for coating and painting applications.

- Chemical Conversion Coating
- Anodizing
- Cadmium Plating
- Zinc Plating
- Electroless Nickel Plating
- Phosphate Coating
- Black Oxide Coating
- Silver Plating
- Stainless Steel Passivation
- Zinc-Nickel Plating
- Wet Painting
- Powder Coating
- Solid Film Lubrication
- Thermoplastic Coating
- Ceramic Based Coating
- Laser Marking



# OUR PRODUCTS

