



SENSOR & ACTUATOR TECHNOLOGY

Displays & Joysticks & Controllers & Pedals & Levers & Keypads

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WHO WE ARE



- Founded in 1978 by Mr. Ertuğrul Erkoçak.

- Started manufacturing door latches for Iveco Trucks in 1978.

- His experience comes from being chief design engineer in Iveco Truck Company.

- Since 1978 Makersan has been manufacturing mechanical parts (latches, cap locks) for Commercial Vehicle Manufacturers.

- Family company.

- Proved itself as a reliable and innovative company.

- Makersan has started Mechatronic Product Manufacturing in 2009 with electronic pedals to Isuzu.

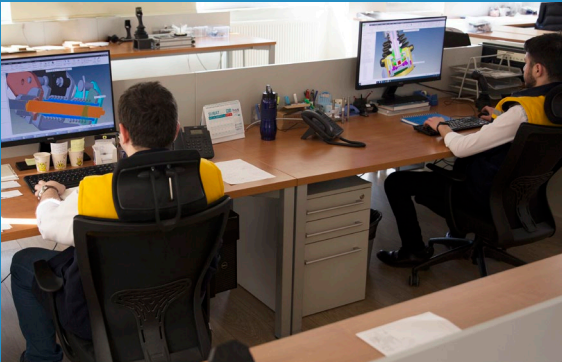
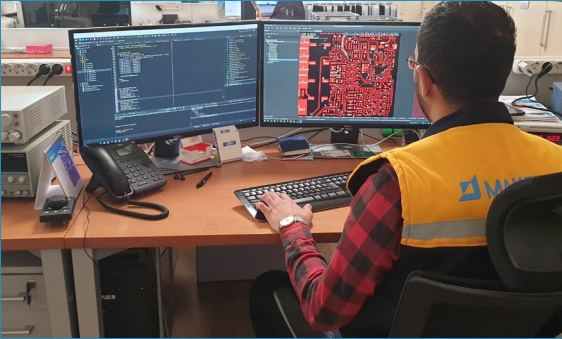


Location



- Gebze is one of the largest industrial zone in Turkey.
- Gebze is close to the International Airport and close International Harbours.
- Gebze is at outskirts of Istanbul in Turkey.

Factory & Human Resources



- 10.000 m2 closed area and 50.000 m2 open area.

- 1.000 m2 administrative area.

- R&D Center In Izmir Teknopark.

- 180 employees.

- 45 white collar employees (20 R&D engineers),
135 blue collar employees.



Experience



Knowhow since 1978. Designing and manufacturing mechanic and electronic parts for automotive companies, such as; Iveco, Isuzu, Mercedes, Mitsubishi, Temsa, BMC, Otokar, Karsan, Irisbus, MAN, Evobus and much more.



New product cycle: Customer Request > Development > Design Model > Functional Prototype > Customer Confirmation > Tool Construction > Prototype > Customer Confirmation > Production

Innovation





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MENU BROCHURE ENTER LOGIN



MAKERSAN MAKINA OTOMOTIV LTD STİ

- Entered for: The Award for Innovation
- Location: Turkey
- Website: www.makersan.com
- Nature of Business: Control and Sensing Technologies
- Sector: Manufacturing
- Number of Employees: 98
- Chief Executive: Ahmet Bülent ERKOÇAK
- Managing Director: Levent ERKOÇAK
- Press/PR: Oktay PEHLIVANOGLU

Experienced design engineers and experienced consultants from university and government research center.

Two European patents and two European patent applications.

Turkish Patent Golden Reward & Turkish TAYSAD Patent bronze reward.

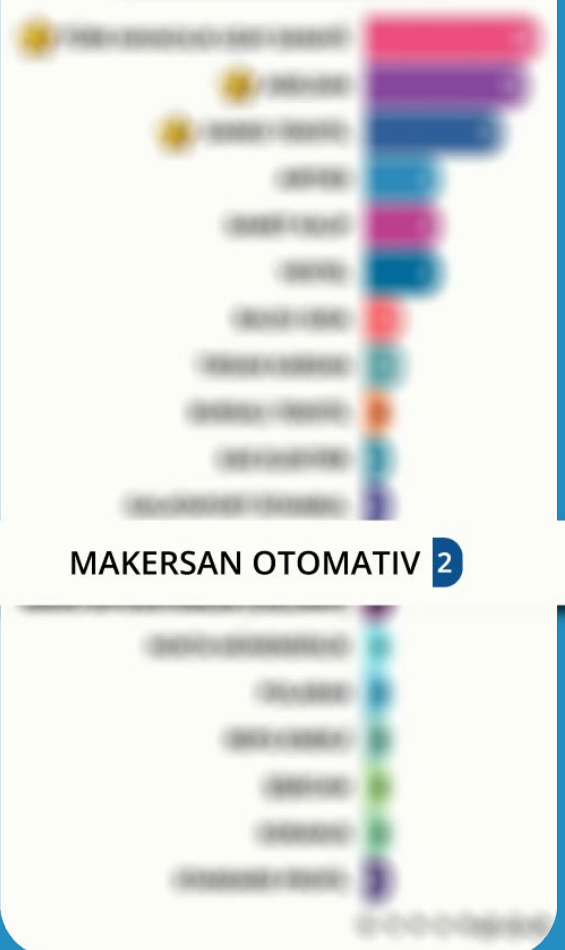
Makersan has been awarded as the most innovative SME by Turkish Ministry Of Economy.

Makersan has been nominated as National Champion and running for the Award For Innovation.

Innovation

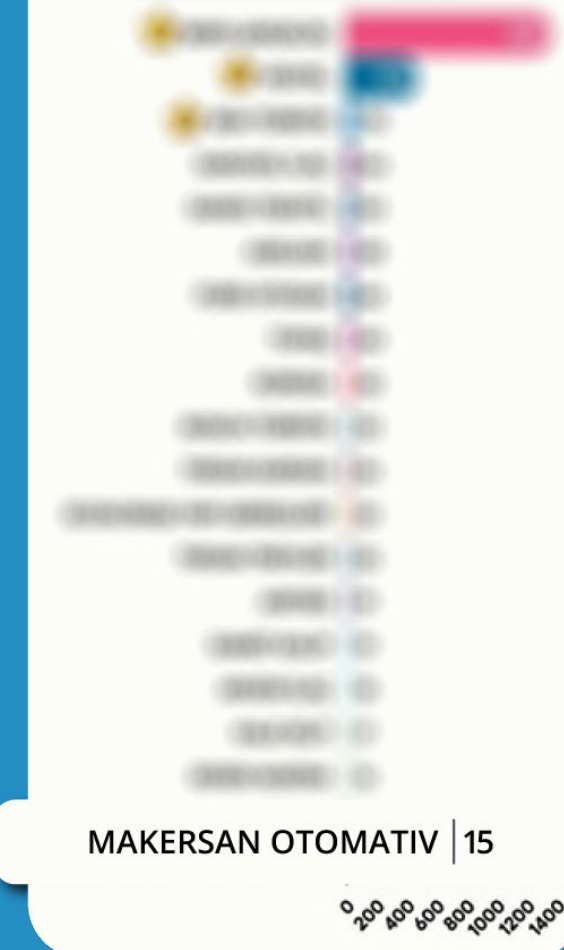


ABD (US) PATENT GRANTS



MAKERSAN OTOMATIV 2

EUROPEAN (EP) PATENT GRANTS



MAKERSAN OTOMATIV | 15

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WE SECURED OUR PLACE AMONG THE
TOP PATENT CHAMPIONS OF 2024.

Among 2024 patent Applicants, Makersan has again
achieved to be ranked along **top 20** European Patent
(EPO) and the United States Patent registrants in
Turkey.



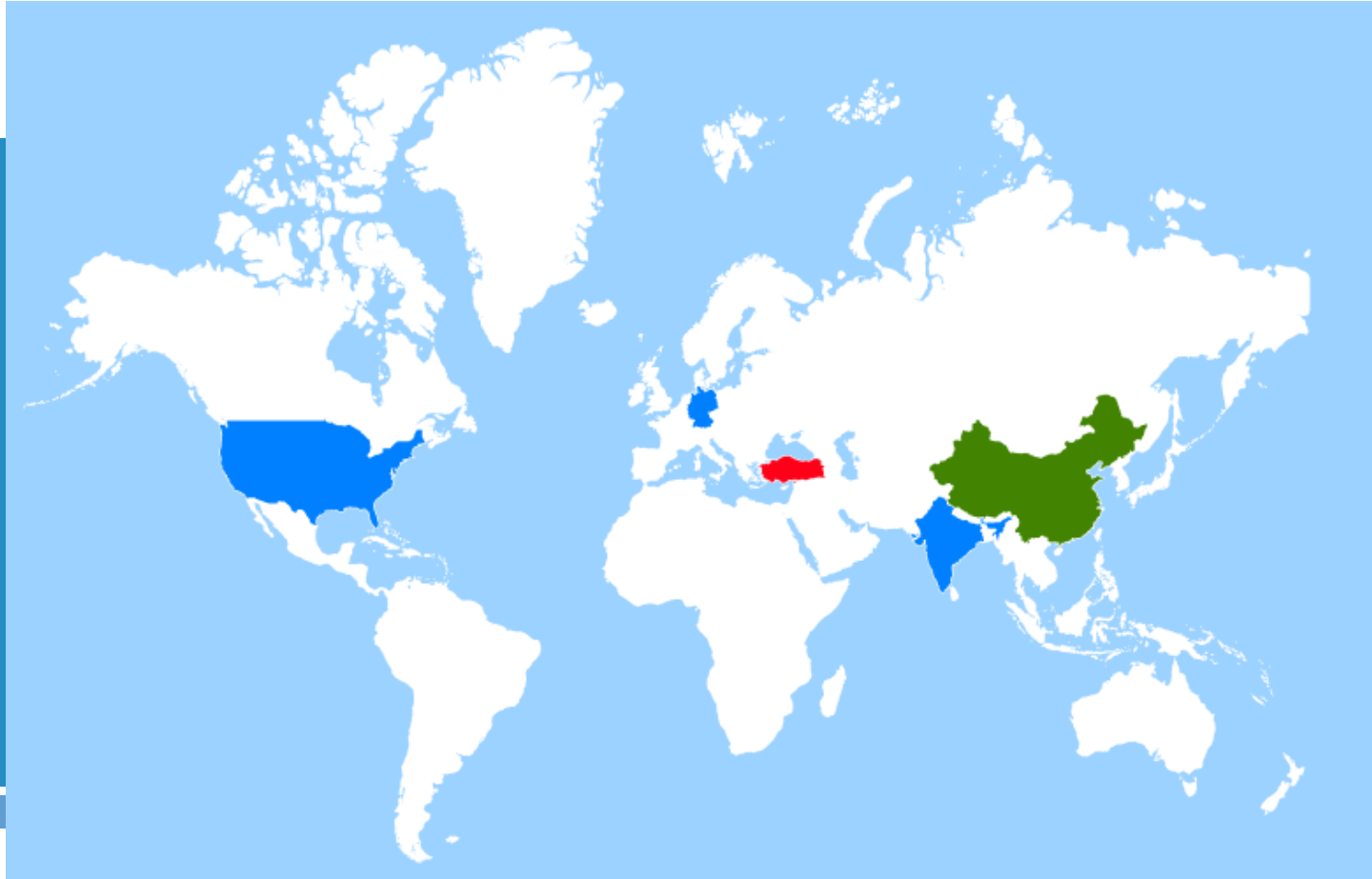
Sales



- Participating global fairs – such as ; AGRITECHNICA, EIMA, CONEXPO, BUSWORLD, BAUMA to increase the customer portfolio.
- Marketing Organization: Makersan Representatives and Sales Offices

Sales

Marketing Organization: Makersan Global Presence



- Makersan Own Facility
- India Subsidiary created in 2017
- German created in 2023
- USA Subsidiary created in 2024
- Subsidiaries planned as expansion strategy



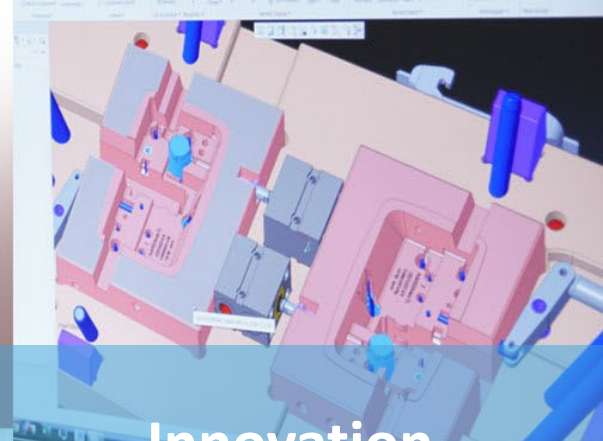
Research & Development

Makersan invests largely in engineering processes of mechanical and electronic components and devices. We proudly thank to our experienced, solution-oriented and enthusiastic engineering staff with our latest technology CAD, CAM and CAE software. Our extensive testing and validation laboratory is an important asset in the pursuit of development and innovations.

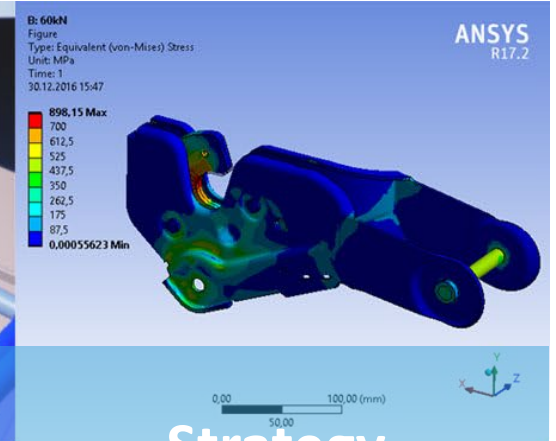
We use our excessive resources and infrastructures for the pursuit of this challenge and to meet challenging customer requirements. Innovations are crowned by patent applications and Makersan has been awarded several times by applying and obtaining most of the patents among other SMEs by National and International Institutions.



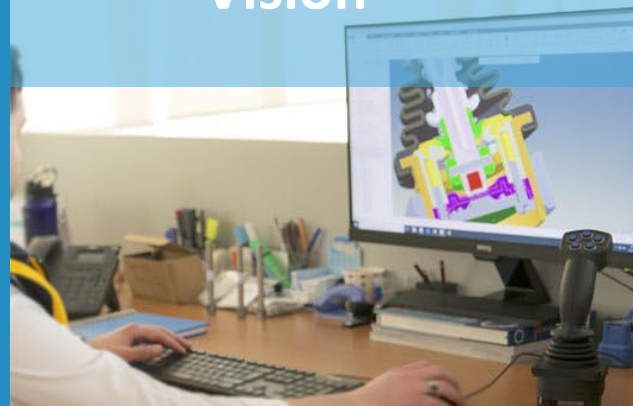
Vision



Innovation



Strategy



Research & Development

Creo Parametric

Creo is a family of Computer-aided design (CAD) apps supporting product design for discrete manufacturers.

Windchill

Windchill is a Product Lifecycle Management (PLM) software.



ANSYS Professional NLS

ANSYS is a software package that lets you digitally model real world phenomena.

Altium Designer

Altium Designer is a PCB and electronic design automation software package for printed circuit boards.

Our certifications:

- ISO 9001: 2015
- IATF 16949: 2016
- ISO 14001: 2015
- ISO 45001: 2018



ISO/TS 16949:2009
REGISTERED
COMPANY



Quality



QC DEPARTMENT

Quality



3D MEASUREMENT MACHINE



NATIONAL FAST DATA COLLECTOR

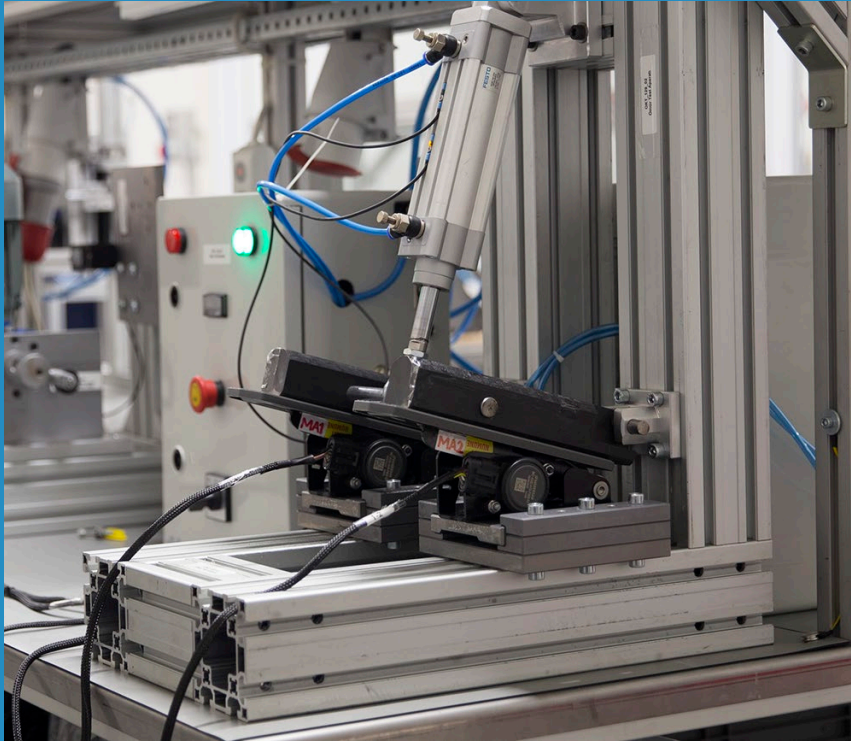


PROFILE PROJECTOR



LASER 3D SCANNING

Test Capabilities



Product Validation & Life Cycle Testing Laboratory

Test Capabilities

- -40 / +150 C temperature cycling
- Humidity %98 Rh
- Climate cabin temperature cycling test -40 / +150 C 600 lt



Test Capabilities



Water Spraying Cabin
According to IP69K



Dust Ingres Testing Cabin

Test Capabilities



Salt spray cabin for corrosion tests



UV test cabin for discoloration and degradation tests

Test Capabilities



Endurance Testing



Temperature Shock Cabin

Test Capabilities

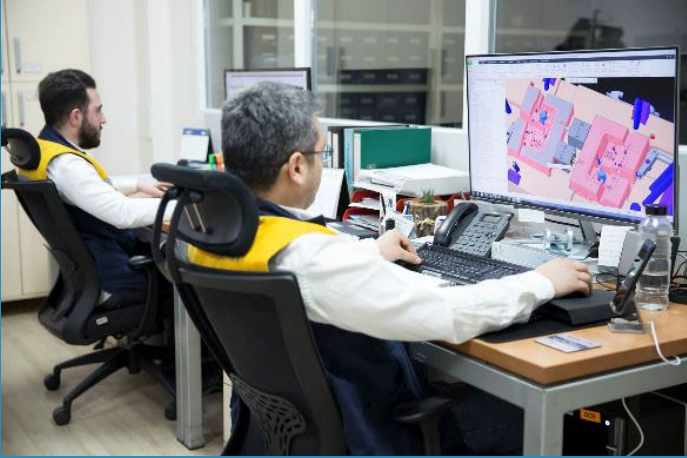
- Vibration & G-Force Test
- Sinusoidal, Random, Shock test functions
- Up to 300kgf testing capability



Test Capabilities / EMC



Molding Workshop



Plastic Injection Molds,
Metal Forming and
Cutting Tools

Plastic Injection Workshop



Pressing Workshop



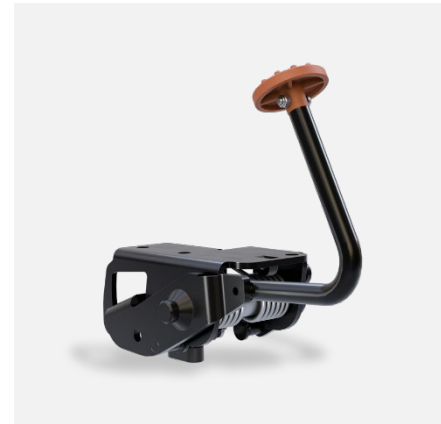
Welding Robots



Electronic SMD Workshop



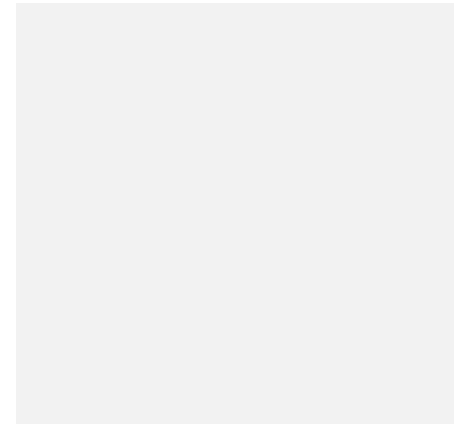
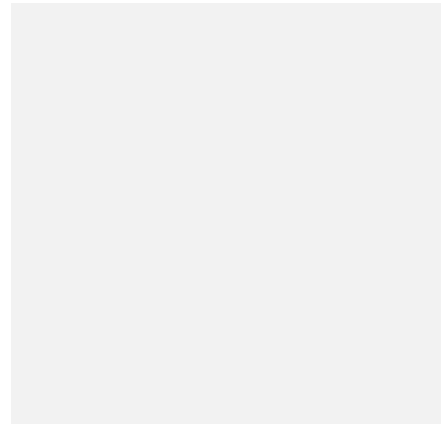
Electronic Pedals



Electronic Throttle Levers



Joysticks



Keypads & Joystick Keypads



Displays



4.3 inch



7 inch



10 inch



12 inch



Wide Screen



Non-Contact Buttons



Controllers



CAN Operator
Panel For Hitch
Control



Sensors



Temperature Sensors



Position Sensors



Load Pin



6 IMU Inclination &
Acceleration Sensor
with Gyro



Remote Keyless Entry



AUTOMOTIVE SECTOR REFERENCES



IVECO

ISUZU



Otokar



CONSTRUCTION MACHINE MANUFACTURER REFERENCES



HIDROMEK®



Mecalac



MANITOU

MST



TRACTOR MANUFACTURER REFERENCES



Thank you!

