

The background of the slide is a photograph of two construction workers walking towards the camera on a dirt and gravel path. They are wearing bright yellow-green high-visibility jackets, yellow hard hats, and tool belts. The worker on the left is looking down at something in his hands, while the worker on the right is looking forward. The background shows a construction site with some equipment and a large pile of material. The entire image has a blue color overlay.

Teknokon

MAINTENANCE

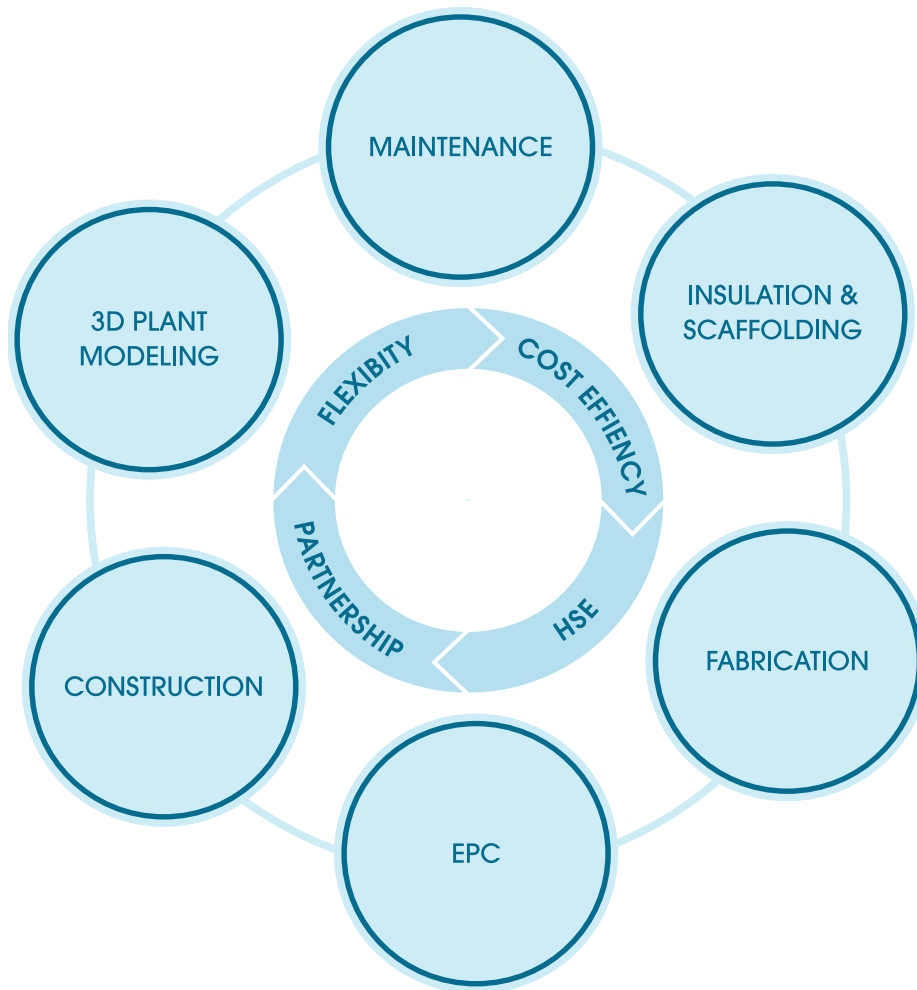
PRESENTATION

Introduction

Teknokon Group in Short

"Right approach for all your industrial needs"

- Teknokon was founded in 1993 in Istanbul / Turkey.
- Full-fledge Engineering, Manufacturing, Construction and Maintenance services for Industrial Plants.
- Successfully completed over 100 industrial construction projects in Turkey, Russia, Turkmenistan, Georgia, Iraq and Cuba, and supplied thousands of equipment worldwide and exported to over 40 countries.
- Teknokon affiliates possess several international certifications including ISO 9001, ISO 14001, OHSAS 18001, ASME-U, ASME-S, AD-2000 Merkblatt HP-0, PED 97/23/EC, DIN EN ISO 3 834-2.
- Manufacturing plant and maintenance workshop is located in Kocaeli/Dilovasi Industrial Zone and it carries out its activities with modern manufacturing equipment in 10.000 m2 closed area.
- Teknokon was ranked as 6th in the list of Turkey's fastest growing companies between 2010 and 2012 and ranked as 63rd between 2012 and 2014.
- Over 1.000 employees in the head office, manufacturing plants and construction sites.



Teknokon Group Companies

TEKNOKON MACHINERY



Design and fabrication
of industrial process
equipment

TEKNOKON INDUSTRY



Undertaking of lump sum
turnkey Industrial construction
projects

TEKNOMONT



EPC services for energy,
environmental and water
projects

TEKNOPUR



Turnkey scaffolding services

TEKNOKON MAINTENANCE



Large spectrum maintenance
services for industrial plants

TKN DESIGN



Design and Engineering
service for industrial plants

Teknokon Maintenance

"We use 25 years of experience for the maintenance of your industrial plants."

Teknokon Maintenance headquarters is located in İstanbul, It renders large spectrum of industrial maintenance services with specialized staff and has the background of Teknokon's experience of 25 years.

By assuring high standards of quality and safety in our services we aim to associate long term partnerships with our clients.

We increase the value of our services by implementing the most trending and innovative maintenance concepts.

How we add value

"We reduce your costs"

Flexibility; flexible cooperation models customized for client's needs.

Abilities; large spectrum of maintenance skills supported with the state of art equipment.

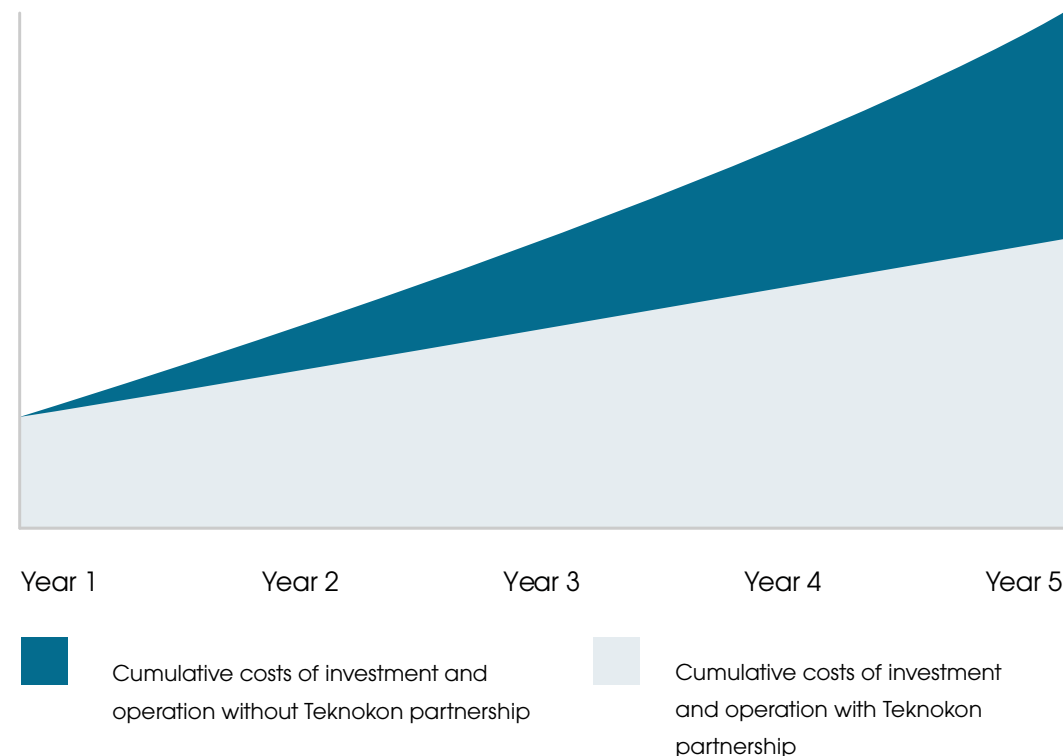
Workforce; we have excessive amount of workforce that helps to optimize your in-house team.

HSE; zero incident management policy.

A single centre; Teknokon's multi-disciplined structure provides maintenance construction, fabrication, scaffolding services from a single centre.

Experience; we have the experience gained from more than 100 industrial major construction and maintenance projects with the cooperation of international clients worldwide.

Cumulative costs of investment and operation



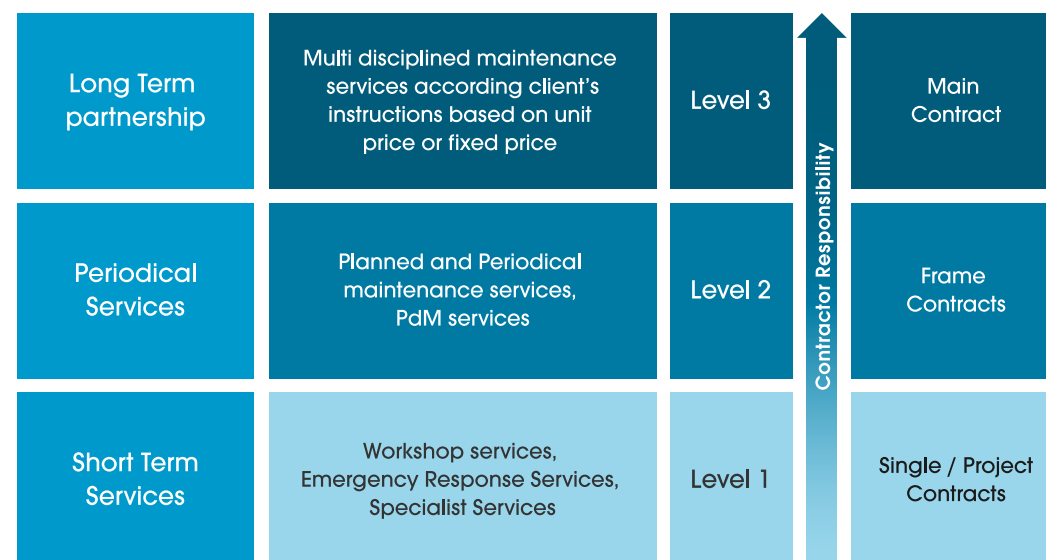
Cooperation Models

"Our cooperation models comply with your strategies"

Short Term Services: workshop maintenance activities, specialist services, emergency services

Periodical Services: On site maintenance services based on pre-determined intervals, planned activities, shutdown and turnaround services.

Long term partnerships: Our teams mobilize in your territory, work together with your teams and share your responsibility. Based on the periodic changes of your needs we regulate our workforce and optimize your costs, international clients worldwide.



Teknokon Maintenance

“Our services are modular and specialized for your needs”

We compile our services under the concept of TSM “TEKNOKON Service Modules” from routine daily maintenance to very complex needs of your plant, we offer wide range of services which consist of different areas of specializations and which are customized upon your requirements.

By adopting the high quality and safety standards to all our services, we also add high value to your management processes.

SERVICES MODULES™			
Maintenance Services		Industrial Services	
Integrated Services	Electro Mechanical Services	Revamp and Capacity Extensions	Insulation & Scaffolding
Maintenance Management	Inspection & Condition Monitoring	Fabrication	
Shut - Down and Turn Around			

Integrated Services

Full Maintenance Services

We take full maintenance responsibility of your industrial plant with a holistic approach. We reflect our great advantage of multi-disciplinary industrial capabilities derived from the years of Teknokon's experience.

All our services are supported with several specialized maintenance concepts and our services add high value to all stages of your maintenance processes.

Shut Down and Turn Around Services

Starting from inspection stage to planning, procurement, manpower and equipment supply stages, we offer to be your reliable partner during your plant's shut-down.

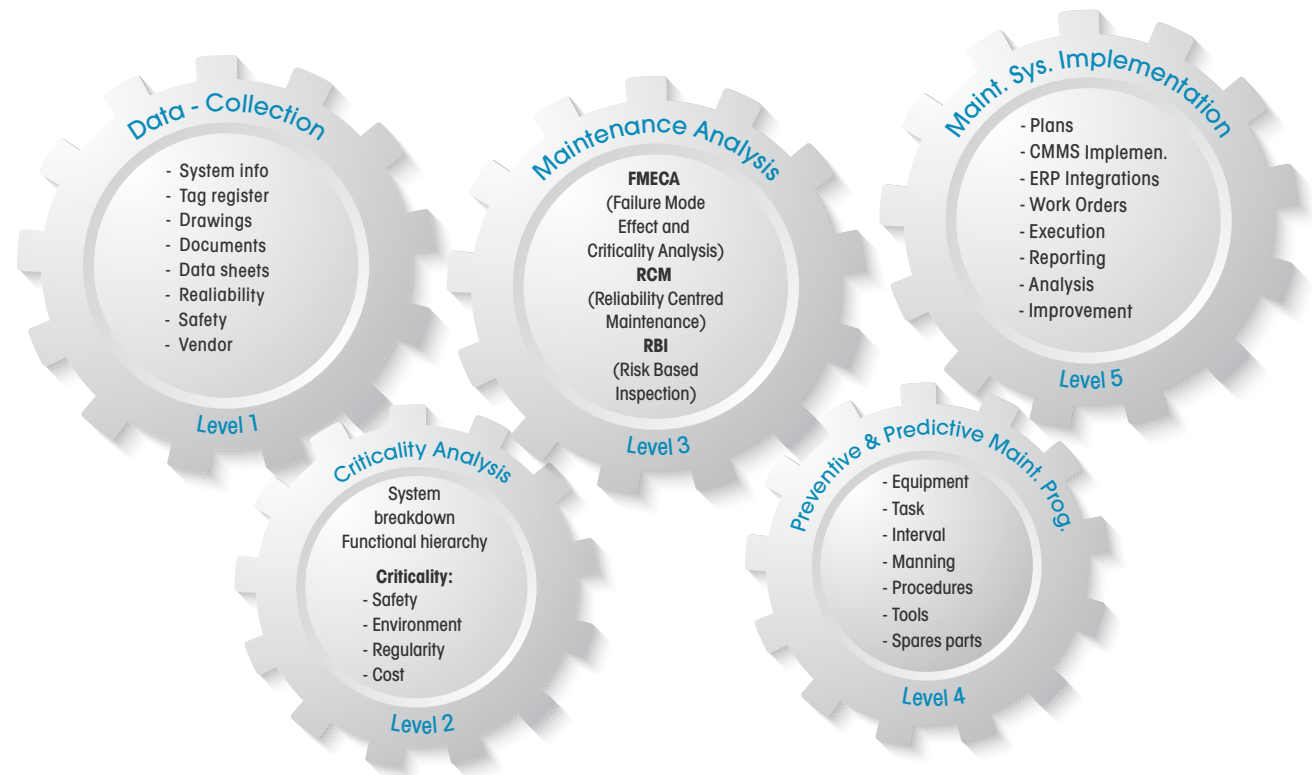
Maintenance Management Services

Establishment of Maintenance Programmes

Asset Management Services

Maintenance Strategy Analysis

- FMECA (Failure Mode Effect and Critacility Analysis)
- RCM (Reliability Centred Maintenance)
- RBI (Risk Based Insception)



Electro - Mechanical Services

Daily and Periodical Maintenance Services

We take the responsibility of the daily and periodic routine maintenance activities of your assets

Special Cleaning Services

We provide services from daily cleaning activities of equipment and systems to your special cleaning requirements such as hydrocarbon removals, water jetting etc.

Valve Maintenance Services on Site and at Our Workshop

We manage full processes of valve maintenance. We provide services starting from the leak inspection, disassembly, repair, spare parts, test, re-certification to assembly for all types and brands of valves.

By mobilizing our containerized valve workshop on your site, we accelerate the works during your shutdowns and provide reliable valve repair services with on site valve testing capabilities. We also provide valve repair services in our workshop.

Electro - Mechanical Services

Rotatory Equipment Services

We offer wide range of seamless solutions for your rotatory equipment. Our services involve heavy duty turbines, turbo compressors, pumps and several type of rotatory equipment. We provide knowledge-based services supported with the state of art equipment.

- Routine periodical maintenance of rotatory equipment
- Vibration analysis
- Oil analysis
- Precise alignment work
- On-site rotor balancing services
- E-motor services

Calibration Services

We mobilize our laboratory on your plant and precisely calibrate so many equipment in a short time.

E&I

We carry out the periodic and emergency maintenance of switchyards, transformers, DCS & UPS systems.

Predictive Maintenance Services

Thermal Inspection

We carry out thermal inspections for your critical assets (Rotatory Equipment, heat exchangers, valves, electrical panels and etc.). We determine the critical thermal values and keep thermal records via periodical inspections. Trending thermal readings tell us much more than eyes can see thus we are able to avoid equipment failures/labour losses.

Vibration Analysis

Vibration analysis is the most important and sophisticated method for observing the condition of rotatory equipment.

We collect the main characteristics of your equipment and perform periodic vibration inspections. We report and keep your data in our CMMS system, after having periodical inspections and following the trends of equipment behaviours, we are able to detect various problems such as;

- Misalignment
- Balance problems
- Looseness
- Insufficient lubrication
- E-motor faults
- Bearing fault

Our specialists also provide rotatory equipment on site services to fix any kind of problems that we detect through our inspections.



Predictive Maintenance Services

Ultrasonic Condition Monitoring

Ultrasonic condition monitoring is one of the trending and cost effective method in predictive maintenance. Our UT specialists are able to detect various system problems and quantify them via our ultrasonic technology.

Our ultrasonic services covers;

- Pneumatic system leakage detection
- Valve leakage detection
- Steam traps defects
- Rotatory equipment defects
- Electrical systems problems
- Heat exchanger coils inspection

PMI (Positive Material Identification) Analysis

Many of the failures arise due to wrong material selection or wrong material usage. Correct root analysis is the crucial part of corrective maintenance.

PMI is the most effective and the fastest method for analysing the chemical composition of materials. Our specialists conduct PMI inspection services on site.

A large, circular industrial structure, possibly a tunnel or a large vessel, with workers inside. The workers are wearing blue protective suits and white hard hats. One worker in the foreground is wearing a high-visibility yellow vest. They appear to be working on the interior structure, which has a complex, ribbed design. The lighting is bright, and the overall scene is industrial and technical.

Other Industrial Services

Rewamp, Capacity Extensions, Revision and Erection Projects

We provide lump sum turn key construction and EPC services. Our services cover;

- Detail engineering,
- Procurement,
- Construction Works
- Mechanical construction
- E&I
- Commissioning

Process Equipment Design & Fabrication

Teknokon carries out design and fabrication transactions of various type of process equipment. Some of our manufactured goods are;

- Pressure Vessels
- Storage Tanks, Silos
- Reactors
- Heat exchangers
- Various process equipment
- Modular skids
- Piping Spools

ISP Services

We provide insulation, scaffolding and painting services. Teknokon has excessive amount of scaffolding materials and provides turn key rental services including scaffolding mounting works.

Clients





Teknokon

MAINTENANCE

HEADQUARTER

Kurş Kule İş Merkezi Cevizli Mah. Cevizli D-100 Güney
Yan Yol Cad. No:2 Kat: 25-26 34865 Kartal - İstanbul
T: +90 216 384 04 28
F: +90 262 751 13 75

www.teknokonservis.com

DILOVASI PLANT

Makine İhtisas Org. San. Bölgesi, Demirciler Mah.
5.Cad. No:21 41455 Dilovası / Kocaeli - Turkey
T: +90 262 751 13 73
F: +90 262 751 13 75