

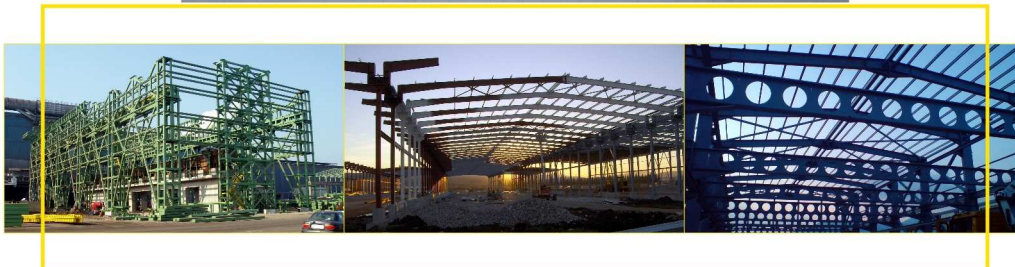


MEK S.A.

Steel structures - Machinery works



Novel Tower - Lanarka Cyprus 2010



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President letter



The constitution of **MEK S.A.** in 2004 was the result of a successful enterprising route of the company MEK Ltd which was activated in the field of steel structures since 1983. This fact proves that the company marks a continually upcoming route and combines personnel with knowledge of the object and evolutionary creation.

The human factor is one of the basic keys to success for the company, as it employs human labor highly educated and specialized, which comes up to **125 persons**. The management of the company comprises of **25 persons**, with remarkable scientific and technical training, whereas in the production department are employed **100 persons** with technical education and longitudinal experience.

In the dynamic of the technical department the company occupies 3 civil engineers, 3 mechanical engineers, 2 architects, 3 welding inspectors, 1 welding engineer and 3 IT engineers.

Substantial for the development of the company is to meet the demands of its customers. , proceeded in the certification and application of European Quality Assurance **ISO 9001**, as well as in purchasing a highly advanced program **STRUCAD** (AceCad Software Ltd), based on 3D designing, automatic modeling and productivity of steel structures drawings. Besides that, Technical Department employs Engineers with excellent knowledge of **AutoCAD** (Autodesk).

MEK S.A. with basic characteristics:

- The excellent organized and equipped line of production.
- The staffing of Designing, Production, Sales and Supply departments with specialized Engineers.
- The experienced and permanent erection workshops.
- The maximal technical support of the customers, during all stages of the work even after its termination.
- The well-informed department of Quality Control.

has managed to ensure the quality of its products and the quality of the services it offers.

Yours faithfully

Athanasios K. LEMONIAS
President



MEK SA Steel Structures - Machinery Works

Company presentation



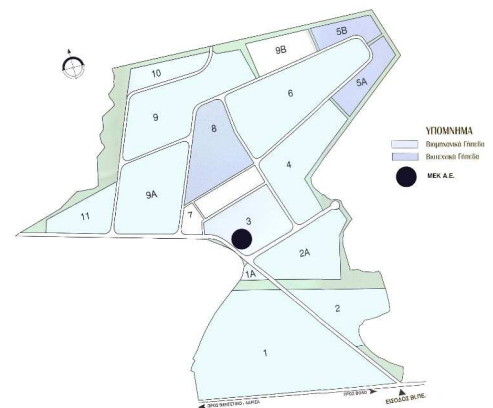
Introduction

MEK S.A. is a company with longitudinal experience in steel structures and machining works, while is absolutely fall in with the demands of contemporary technology. The main object that MEK S.A. deals with is the construction of steel buildings, special industrial equipment and machines, such as:

- Industrial buildings and Offices.
- Steel Warehouses.
- Steel multistory buildings.
- Bridge cranes and portal.
- Special production machines, belt conveyors, screeners.
- Industrial silos, tanks, cyclones, ducts, separators, heat exchangers.
- Steel machine frames, marble treating machinery.
- Ventilators, elevators (stainless), ovens, coating cabins, rotary kilns.
- Constructions for electrostatic filters, bag filters, casings.

The company owns two factories in the 1st and one in the 2nd Industrial Area of Volos. The table below gives even more information for the factories:

	Land	Covered area	Offices	Bridge Cranes
MEK 01	4.800 m ²	1.500 m ²	210 m ²	3x5t
MEK 02	32.500 m ²	16.500 m ²	1.270 m ²	5x10t-5x6t-6x5t-3x3t
MEK 03	36.500 m ²	13.000 m ²	990 m ²	1x10t-3x5t
Total	73.300 m²	31.000 m²	2.470 m²	



Facilities photos



MEK 01



MEK 02



MEK 03

Production photos

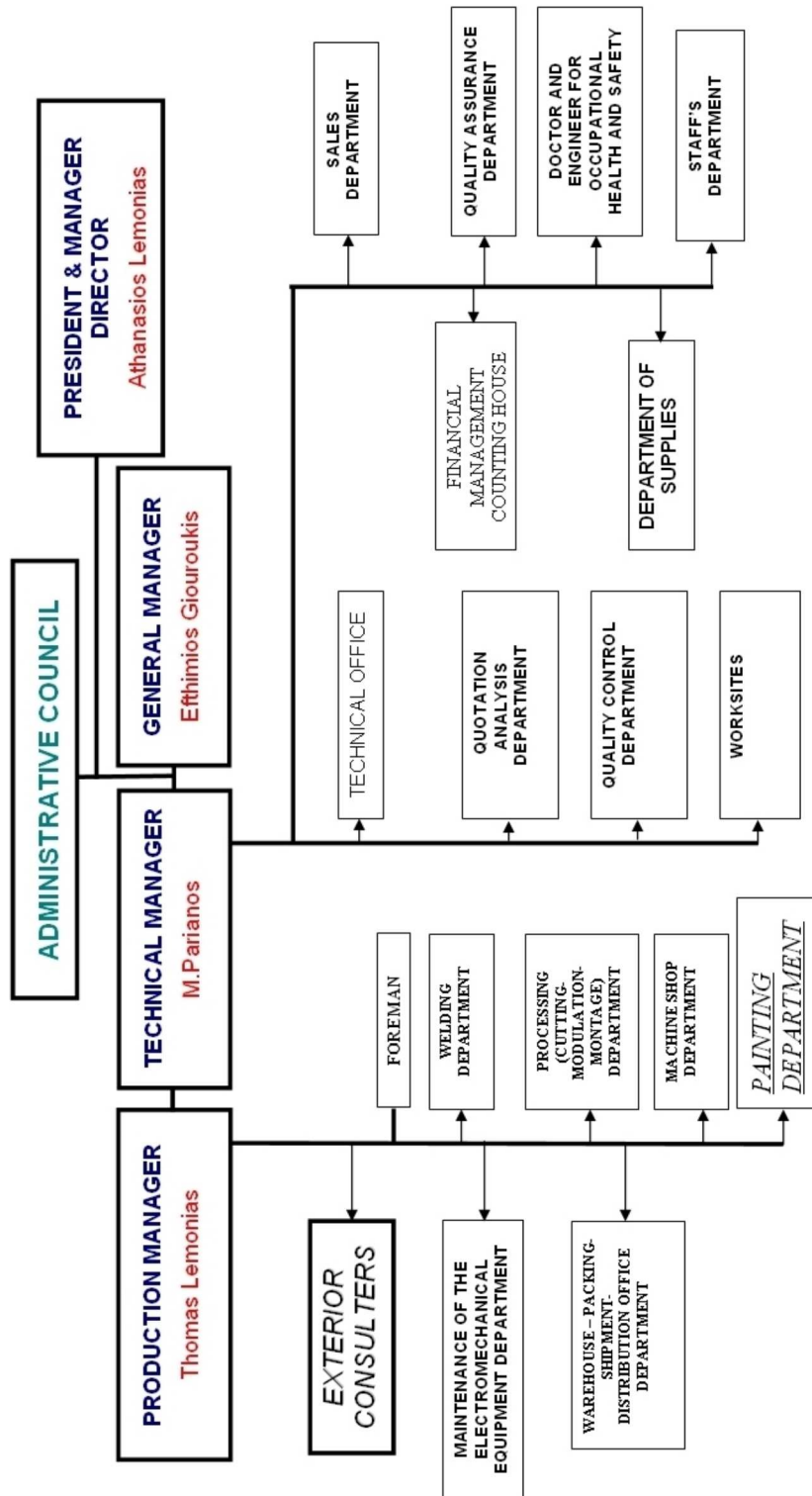


Production area aspect of MEK 02



Production area aspect of MEK 03

Organization chart



Certificates

EUROPEAN QUALITY ASSURANCE - EUROPEAN QUALITY ASSURANCE



CERTIFICATE OF ASSESSMENT

The certification Body
European Quality Assurance Hellas
certifies that

MEK S.A.

with address **A' INDUSTRIAL AREA OF VOLOS, VOLOS GREECE**

has established and applies a Quality Management System which is in conformance with

ELOT EN ISO 9001:2000
(Quality Management System)

for the following scope(s):

METALLIC CONSTRUCTIONS



GENERAL MANAGER
CHARALAMBOS GALATSANOS

This Certificate of Conformity Number **1328** first issued on **3rd June 2005**
re-issued on **2nd June 2008** and is valid until **1st June 2011**
and is issued subject to the regulations and within the accredited scope of


European Quality Assurance Hellas
Macedonias 7, 152 33 Chalandri
tel:2106139697, fax:2106132540



CERTIFICATE NOS 193
ELOT EN 45012

The use of accreditation mark indicates accreditation in respect of those activities covered by the accreditation certificate nr. 193

EUROPEAN QUALITY ASSURANCE - EUROPEAN QUALITY ASSURANCE



ΠΙΣΤΟΠΟΙΗΣΙΣ ΠΡΟΪΟΝΤΩΝ & ΔΙΑΔΙΚΑΣΙΩΝ - ΒΙΟΜΗΧΑΝΙΚΟΙ ΕΛΕΓΧΟΙ ΤΥΠΟΥ "Α" - ΕΡΓΑΣΤΗΡΙΑΚΕΣ ΔΟΚΙΜΕΣ - ΕΙΣΕΓΧΟΣ ΑΟΡ - ΕΕ.Υ.Π.Π. - ΚΑΤΕΡΓΑΣΙΕΣ ΜΕΤΑΛΛΩΝ - ΕΦΑΡΜΟΣΜΕΝΗ ΒΙΟΜΗΧΑΝΙΚΗ ΕΡΕΥΝΑ - ΜΕΤΑΡΧΑ ΤΕΧΝΟΛΟΓΙΑΣ

ΕΤΑΙΡΕΙΑ ΒΙΟΜΗΧΑΝΙΚΗΣ ΕΡΕΥΝΑΣ & ΤΕΧΝΟΛΟΓΙΚΗΣ ΑΝΑΤΙΤΗΧΗΣ ΜΕΤΑΛΛΩΝ Α.Ε. / METALLURGICAL INDUSTRIAL RESEARCH & TECHNOLOGICAL DEVELOPMENT CENTRE S.A.

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WELDING PROCEDURE APPROVAL RECORD FORM (WPAR)

WELDING PROCEDURE APPROVAL - TEST CERTIFICATE (EN 288-3 : 1992)

Manufacturer's Welding Procedure Reference No. : **WPS2** Examiner or test body : **MIRTEC S.A.**
Reference No. : **MIR/WPAR/1201-05**

Manufacturer : **MEK SA**

Address : **VOLOS 1st INDUSTRIAL AREA**

Code/Testing Standard : **EN 288-3 : 1992 + A1 :1997**

Date of Welding : **26.08.05**

Extent of Approval :

Welding Process : **135**

Joint Type : - **BUTT WELDS ON PLATE WELDED FROM ONE OR BOTH SIDES WITH AND WITHOUT BACKING AND GOUGING, T BUTT WELDS ON PLATE WELDED FROM ONE OR BOTH SIDES, FILLET WELD ON PLATE AND FILLET WELD IN PIPE**

Parent metall(s) : **GROUP 1 TO GROUP 1** Conditions of tempered : **N.A.**

Metal thickness (mm) : **3 mm ≤ t ≤ 12 mm**

Outside Diameter (mm) : **> 500 mm (Approval given for plates)**

Filler Metal Type : **AWS A5.18 ER 70S-6/DIN 8559 SG2, EN 440G46MG3Si1**

Shielding Gas/Flux : **ARGON 82%-CO, 18% DIN 32526 M21 / EN 439 M21**

Type of Welding Current : **DC (+)**

Welding Positions : **ALL POSITIONS**

Preheat : **AMBIENT**

Post-Weld Heat Treatment and/or ageing : **NONE**

Other information :

Certified that test welds prepared welded and tested satisfactorily in accordance with the requirements of the code testing standard indicated above.

Location Date of issue Examiner or test body **MIRTEC S.A.**

Volos **31.10.2005** **A. STAMOU**

Εταιρεία Μέλη: 18. Μαρτίου 78, Αρ. Διαγραφής: 112 43 Αθήνα
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Tel : +30210991614, Fax : +30210388880
E-mail : eodtm@otenet.gr

Κεντρική ΓΑ (Εργοστάσιο) Πύραυλος, 385 50 Ραβάνη
Head office : A' Industrial Area, GR - 385 50 Volos
Tel : +302421900010, Fax : +302421900014
E-mail : mirtec@otenet.gr & eodtm@otenet.gr
web site : http://www.ebetam.gr

Γραφείο Θεσσαλονίκης: Βουργαμένης Πύραυλος, 570 02 Βελβιδίου
Thessaloniki office : Industrial Area, GR - 570 02 Belvidio
Tel : +30551070181, Fax : +305510712117
E-mail : eodtm@otenet.gr

Company equipment

The factory apart from the basic equipment:

- scissor cutter 3m.
- bender 3m.
- buzz saw for profiles.
- cylinder 3m.
- plane 6m x 1.30m.
- lathes up to 6m.
- milling machines.
- radial drills.
- punch cutting machines.
- semi-automatic welding machines.

Is also equipped with state of the art CNC machines like:

- CNC Pantograph oxy-fuel – plasma cutter for iron sheets 3m x 15m up to 200mm width.
- CNC line for cutting (saw), drilling and profile marking up to 1140mm.
- CNC line for cutting (scissors), drilling (punch) and angle profile marking up to IPE 450.
- CNC machine for drilling (punch / drill) and iron sheet marker.

The following pages indicate more elements about the CNC machines.



CNC Pantograph oxy-fuel – plasma cutter

For iron sheets 3m x 15m up to 200mm thick.

Accuracy in cutting and rapidity in the usage of multiple injectors.

Programming by computer and capability of transferring data from and to the machine through LAN network.

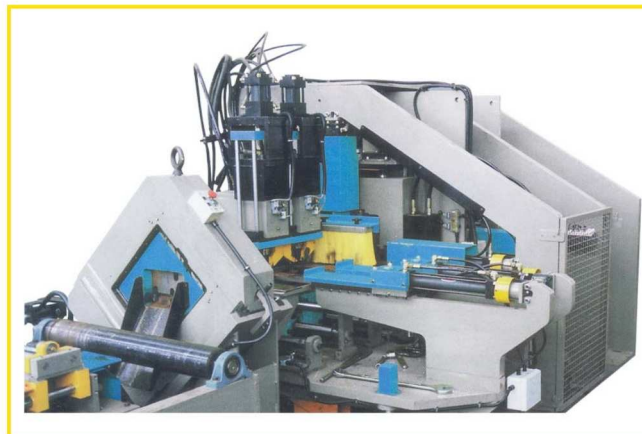


CNC line for cutting (saw) - drilling (drill) and automatic profile marking.

Processing profile up to 1140mm – drilling up to D40 – cutting angle up to $\pm 62^\circ$.

Automatic promotion by using lift for the insertion and extraction of the profile combined with automated railway.

Possibility of fluctuating the speed of the railway and the saw in order to increase productivity.



CNC line for cutting (scissors) - drilling (punch) - angle profile marking

Processing profile up to IPE 450 - drilling up to D32.

Automatic promotion combined with automated railway for inserting and extracting profiles.



CNC machine for drilling (punch / drill) and iron sheet marker
Processing sheets 1500x700 and thickness up to 40mm – drilling up to D40.



CNC machine for drilling (punch / drill)
Processing sheets 1500x700 and thickness up to 40mm – drilling up to D40.

Welding department

The company's characteristic is the continuous research on the working subjects. Due to the great experience on the metallic structures, the company improves continuously all the essential parameters of the most important stage of fabrication.

To achieve that, there is an every year investment on the human sources (welders-technicians) and equipments (welding machines). Today there are several methods developed of main production lines in the factory, such as MIG - MAG semi - auto full automatic fusion welding. Submerged arc welding for composite beams, up to 2000 mm, covering all kinds of main structural steels, carbon steels and stainless steels from S-235J0 to S-690QL and aluminum welding (MIG - method) also available from 1000 to 6000 series (R-5083 and R-6061 included). All methods and welders are qualified according to EN-287-1 and EN-288 specifications.

1. GAS METAL – ARC WELDING

Standard procedures includes joint faces cleaned (particularly for aluminum alloys.) shielding gases purity suitable for welding free of moisture.

For mild and low alloy steels mixed gas is used of which the most communally used, consists of 80% Ar + 20% Co₂ for softer arc, better bead, appearance and less spatters.

For stainless and heat resistant steels argon containing 2% oxygen is normally used. It can be replaced by argon – helium mixtures for thicker base materials. The short arc or spray arc process depends on the project.

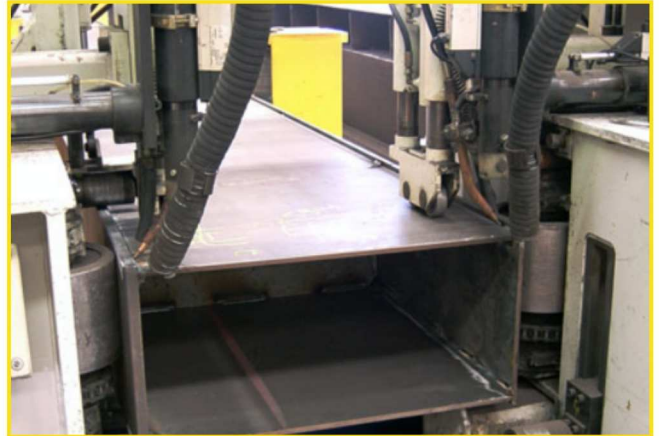
There are 20 (twenty) MIG + MAG welding machines up to 500 Amps 60% cycle and 4 (four) synergic electronic. The thickness range it varies from 2mm up to 70 mm or more.

2. SUBMERGED ARC - WELDING

MEK SA specialized in the field of weld steel beams. A full automatic beam welding device and modern CNC cutting machine combines, several advantages for great range projects e.g. business and industrial building construction: STADIUM- RAILWAY BRIDGES- LONG SPAN FLOOR and ROOF framing system etc.

The shape, the size and the quality of the beams can be chosen according to the use. This allows us to manufacture a working and economical final product that corresponds to each individual requirement of the client, according to the designer specifications.

Submerged arc welding line



Our product range includes:

1. Symmetrical H beams
2. Non symmetrical H beams
3. Box beams
4. Tapered beams
5. Curved beams
6. Multiple cross-sections
7. Castellated beams

Beam's specification:

- **Depth:** 200mm to 2000mm
- **Web thickness:** 5mm to 30mm
- **Fange thickness:** 8mm to 65mm



Quality control



MEK SA has established standard procedures for all products concerning the quality control of the welds.

General all the welds are visually controlled 100% for every project. A 20% of them are tested for defects internally (magnetic particles and ultrasonically tested) and 30% are tested for surface defects, except for butt-welds, which are tested 100% with U.T. methods.

All the quality control staff is qualified level II in the N.D.T. methods according to SNT-TC-IA

Activities



A. Metallic buildings:

The Company undertakes complete execution of metallic constructions from static solutions to design and construction and also erection with coating under superb custody at the details of the appearance. The company holds good reputation because of the complicated and accurate demanding constructions.



B. Bridge cranes:

Bridge cranes contain part of the basic equipment of industrial buildings. Our company is supplied lifting mechanisms from reliable worldwide firms and undertakes the metallic construction, mechanic works and electrical installation in order to provide a complete working machine. Bridge cranes made after 2001 carry the CE standard that complies with the European safety regulations.



C. Special Industrial Constructions and Machinery:

MEK SA undertakes specialized production constructions like silos, rubber rollways, lifts, cement units, furnaces, boats etc. Due to the high quality, several companies assign to MEK SA construction of metallic construction at a steady rate of work.



MEK SA Steel Structures - Machinery Works

Company constructions



Constructions reference list

Customers	Place	Unit	Year	Description
Tame SA	Volos	8.000 m ²	2001	Multi-floor building BIOMAR
m-tec	Germany	200 pcs	2001	Silos
Protem SA	Preveza	150 t	2002	Concrete manufacturing unit
Metaltrop SA	Athens	650 t	2002	Metalic constructions
Eviesk SA	Cyprus	2.000 m ²	2002	Multi-floor building
Vidomet SA	Aliveri	3.000 m ²	2003	Steel frame building
Eviesk SA	Volos	10.000 m ²	2003	Steel frame building AGET
Embedos SA	Grevena	500 t	2003	Metalic constructions
Embedos SA	Mandra	3.000 m ²	2003	Steel frame building
OLV SA	Volos	5.000 m ²	2003	Steel frame warehouse
Actor SA	Athens	150 t	2003	Metalic constructions
Actor SA	Athens	160 t	2004	Metalic constructions OAKA
Mohlos SA	Athens	10.000 m ²	2004	Multi-floor building (Olympics)
Agrotiki SA	Megara	12.000 m ²	2004	Industrial buildings
Metka SA	Athens	200 t	2004	Metalic constructions
Actor SA	Sindos	10.000 m ²	2005	Steel frame warehouse
Metka SA	Ptolemaida	1.000 t	2005	Electrostatic filters
Terna SA	Volos	3.000 m ²	2005	Metalic constructions
Consteel SA	Thiva	20.000 m ²	2005	Steel frame warehouse
Consteel SA	Romania	12.000 m ²	2005	Industrial buildings
Consteel SA	Oinofita	5.000 m ²	2005	Steel frame building
Consteel SA	Oinofita	8.000 m ²	2005	Steel frame building
Sovel SA	Almyros	1.500 t	2006	Steel frame building
Metro AEBE	Oinofita	44.000 m ²	2006	Frizer unit
Nestle SLR	Romania	20.000 m ²	2006	Steel frame building

Customers	Place	Unit	Year	Description
Aktor SA	Athens	500 t	2006	New Acropolis Museum
Sovel SA	Almyros	1.500 t	2007	Steel frame building
Aeiforos SA	Almyros	70 t	2007	Anthacite unit
Consteel SA	Elefsina	800 t	2007	Steel frame building
Ikea SA	Athens	1.500 t	2007	Shoping centre
Consteel SA	Thiva	700 t	2007	Steel frame warehouse
Phoenix real estate	Romania	400 t	2007	Steel frame building
PBT SLR	Romania	1.100 t	2008	Pipera business tower
Consteel SA	Avlona	700 t	2008	Steel frame building
Aktor SA	Oinofita	1.100 t	2008	Steel frame warehouse
Aktor SA	Peania	700 t	2008	Press centre
DS ATE	Volos	170 t	2008	Steel frame bridge
Sovel SA	Almyros	100 t	2008	Screening unit
Cythera Developments	Aglantzia	1.900 m ²	2008	Steel frame building
Arcon ATE	Athens	1.800 t	2008	Exhibition centre
Metka SA	Pakistan	200 t	2008	Gas pipes unit
Metka SA	Pakistan	300 t	2008	Steel boiler
Lafarge SA	Volos	450 t	2009	Steel frame warehouse
Coop SA	Larisa	170 t	2009	Logistic centre
Martman LTD	Larnaca	5.000 m ²	2009	Novel tower (12 Floor)
Aktor SA	Sindos	3.500 t	2009	Logistic centre ALDI
American academy	Pafos	8.300 m ²	2010	Steel frame building
Property gellery	Limassol	2.000 m ²	2010	Shoping centre

BIOMAR SA



steel frame building - 8.000 m²



M-TEC GMBH



steel silos - 200 pcs



GEOHELLAS SA



steel constructions - 500 t



MINIMAX SRL - Romania



steel frame building - 12.000 m²



SOVEL SA



steel constructions - 500 t



NESTLE SRL - Romania



steel frame building - 20.000 m²



AEIFOROS SA



steel constructions - 70 t



NEW ACROPOLIS MUSEUM



steel frame building - 500 t

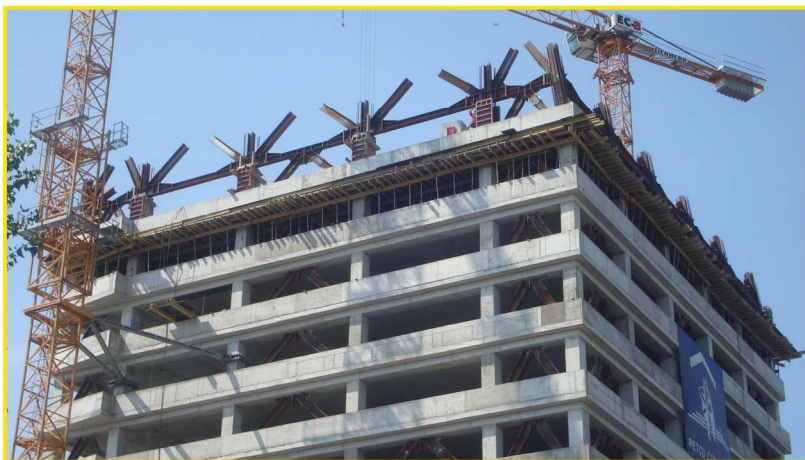


PIPERA BUSINESS TOWER - Romania



steel frame building - 17.000 m²





IKEA SA



shoping center - 1.500 t



CYTHERA DEVELOPMENTS LTD - Cyprus



steel frame building - 1.900 m²



ALDI SA



logistic center - 50.000 m²



PARKING VOLOS



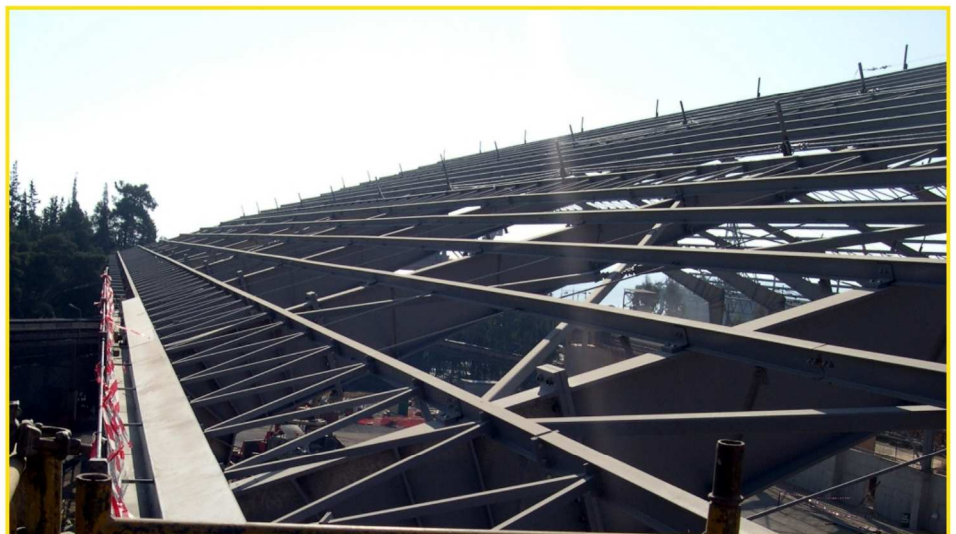
Parking - 14 storeys



AGET IRAKLIS

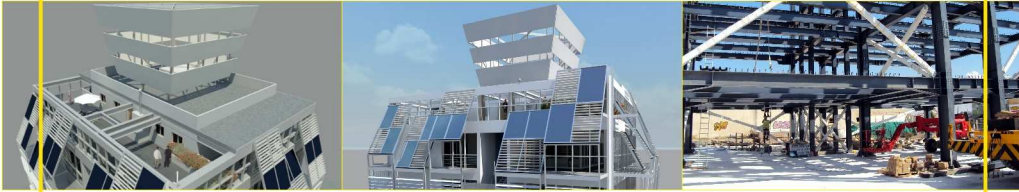


Steel frame warehouse - 450 t

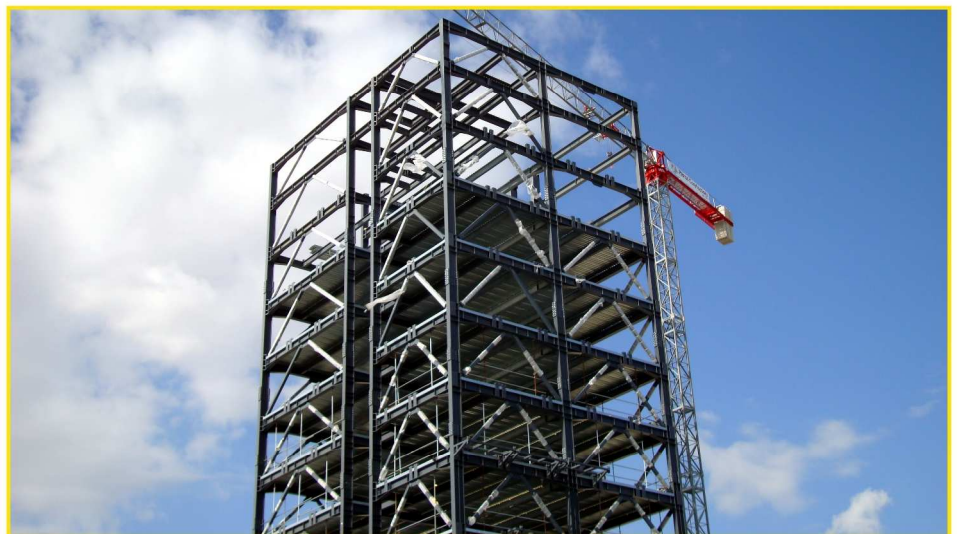




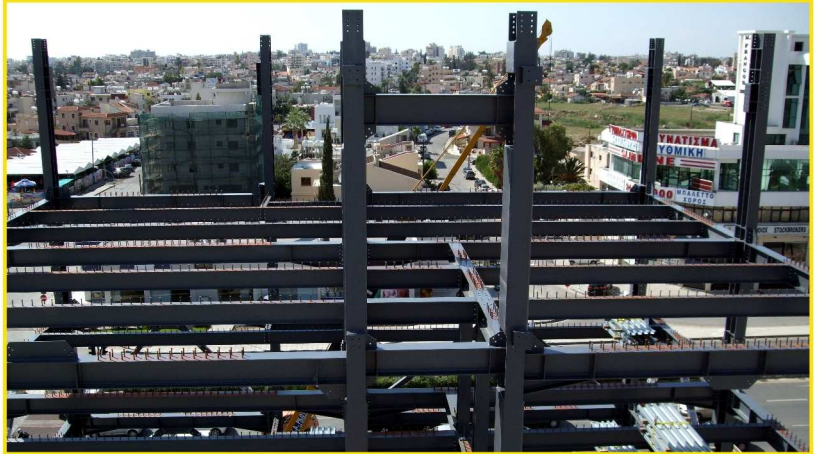
NOVEL TOWER - Cyprus



12 storeys tower - 4.400 m²







AMERICAN ACADEMY - Cyprus



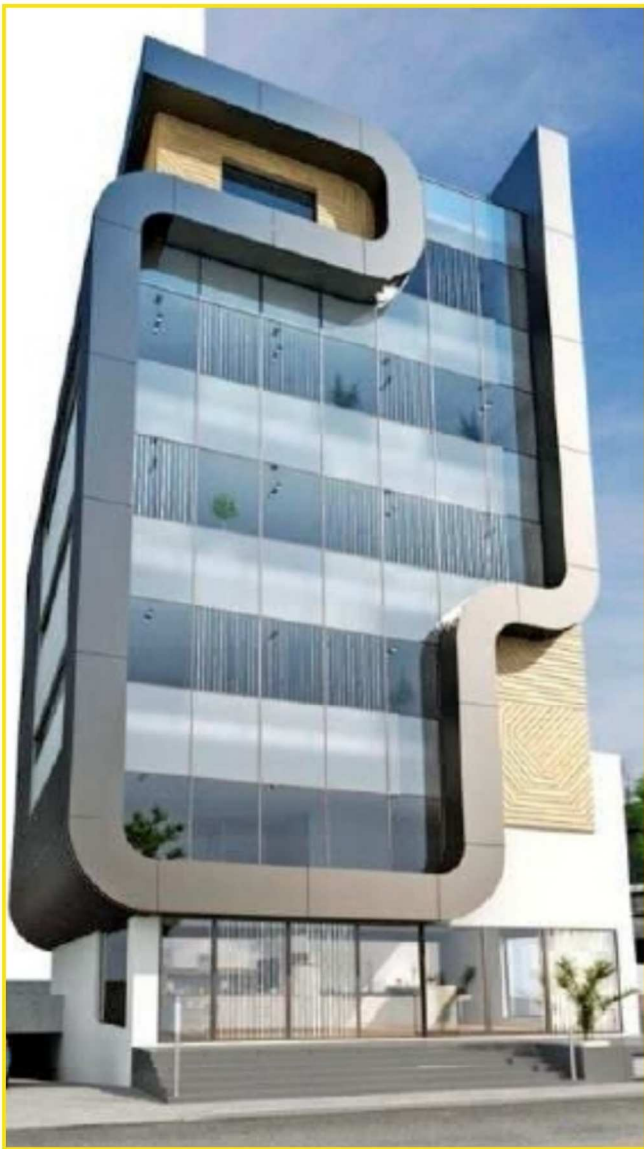
school - 8.300 m²



PROPERTY GALLERY - Cyprus



offices - 2.000 m²



PATROKLOS TOWER - Cyprus (Under construction)



offices - 2.000 m²



Steel frame villas - st stefanos (Athens)

