







FIELDS OF EXPERTISE:

MARINE PORT WORKS PROJECTS

Design & construction of custom made solutions for upgrading existing Marine port installations & loading procudures.

- Detailed design and installation of port loading/off loading facilities, port electromechanical infrastructure, HV and MV Substations for permanent dry and floating docks
- Detailed Engineering and construction of mooring and anchorage systems, customized buoys and underwater pipelines.
- Shipyard's Infrastructure projects. Design and Construction of Workshops, Submarine Hangars, Shipbuilding berths.



CLIENT	INDUSTRIAL PROJECTS	YEAR
ONEX SYROS SHIPYARDS	Study and Engineering of M.V. Substations in Syros Shipyard.	2024-
ONEX ELEFSIS SHIPYARDS	Engineering, Procurement and Construction of M.V. Substations & OPS - Cold Ironing in Elefsis Shipyard.	2024-
CORAL	Multi buoy Mooring (MBM) for tanker ships - Vessels mooring analysis Kalochori-Thessaloniki	2024
GASTRADE	Study, Engineering and Installation of SPBM and LMB offshore Kalochori-Thessaloniki	2024
AVIN	Offshore Nitrogen Pigging System for submiarine pipeline cleaning	2020
CORAL	Pier Upgrade in the Installation of RAPI Rhodes	2019
CORAL	Kavala Submarine pipelines Installation	2018
CORAL	Environmental Licencing for Kavala Submarine pipelines Installation	2018
CORAL	Kavala offshore Mooring Installation	2018
CORAL	Thessaloniki Submarine pipelines Installation	2017
CORAL	Environmental Licencing for Thessaloniki Submarine pipelines Installation	2017
CORAL	Thessaloniki offshore Mooring Installation	2017
PUBLIC POWER CORPORATION S.A. (ΔΕΗ)	Design, licensing, construction & installation of sea buoys at Power Station of Mykonos & Paros	2017
LAFARGE Group-AGET VOLOS Plant	Pier C' Modification	2013
THYSSENKRUPP MARINE SYSTEMS Hellenic Shipyards S.A.	Complete Electromechanical Installation of Heavy Machine Shop. Study, Design ,Procurement, Erection and Commissioning.	2007



GASTRADE S.A. Kifissias Avenue 197 & Anavryton 40-42, Marousi, PC 151 24, Athens

MECHANICAL COMLETION CERTIFICATE

	MESTIANISAE SOMEETISM SERVINISATE	
For the Single Point Mooring Buoy detailed Engineering Design, Supply and Offshore Installation Services of the Pipeline for Alexandroupolis INGS dated 13/12/2023		
	GASTRADE	
	certifies that	
	on the date of 04/11/2024	
	PARALOS SYSTEMS S.A.	
ha	as completed all works, in full accordance with the Contract	
	up to the point of MECHANICAL COMPLETION	
Mechanical Completion certified by	Certificate issued by	
Representative of PARALOS SYSTEMS S.A.	Representative of GASTRADE S.A.	
ENERGY THE	1.Karamanlis	
Name: GEORGE CHRISTOPOULOS	Name: IOANNIS KARAMANLIS	



Plankton First S.A.

PROJECT CERTIFICATE

Conceptual Engineering design, Licensing, Dredging, Equipment/ Materials Supply and Offshore Installation of a 400 m, 8" underwater pipeline for feeding of sea water at Skarfia Fthiotis production plan/Production of Nannochloropsis Oceanica, a single cell phytoplankton that is highly nutritious and safe to eat with the highest EPA content providing holistic health and wellbeing benefits

PARALOS SYSTEMS SA has successfully completed the project in accordance with the overall contract requirements and international marine standards, rules and regulations.

Ioannis Sterpis

COO

PLANKTON FIRST MONOTPOSOFIH A.E. ΠΑΡΑΓΩΓΗ ΙΚΟΧΌΤΡΟΦΩΝ ΚΑΙ ΑΛΓΗΣ ΛΕΩΦ. ΑΜΑΛΙΑΣ 38 - Ι.Κ. 105 58 - ΑΘΗΝΑ ΤΗΛ. 693 667 100 Τ.Ε.ΜΗ.: 152716501000 Α.Φ.Μ. 801 10897 - Δ.Ο.Υ. Φ.Α.Ε. ΑΘΗΝΩΝ A Company of ThyssenKrupp Technologies

ThyssenKrupp Marine Systems

Ελληνικά Ναυπηγεία Α.Ε.



19 - 11 - 2007

CERTIFICATE

We certify that PARALOS ENGINEERING S.A. has successfully and on time completed the erection works for the Heavy Machine Shop new Electrical Installation.

The project was executed on "turn key" basis (design, procurement, installation) and mainly included:

- Study & design of Heavy Machine Shop's new electrical installation.
- Design, construction & installation of LV Switchgears.
- · Provision, installation, termination & commissioning of:
 - Main power supply cables from MV Substation.
 - Machinery power cables.
 - Indoor, outdoor & emergency lighting systems.
 - Lightening protection & grounding system.

- LV & Data systems in HMS's offices.

L. WINTER
Infrastructure

Projects

G. VENTOURIS
Head
of Electrical



ΒΕΒΑΙΩΣΗ

Η ΑΝΩΝΥΜΟΣ ΕΤΑΙΡΙΑ ΤΣΙΜΕΝΤΩΝ ΑΓΕΤ ΗΡΑΚΛΗΣ – LAFARGE Group βεβαιώνει ότι η εταιρία PARALOS S.A. ολοκλήρωσε επιτυχώς το έργο της Μελέτης, Αδειοδότησης και Υλοποίησης του έργου πόντισης νέου ναυδέτου για το λιμάνι του εργοστασίου της εταιρίας μας στο ΒΟΛΟ.

Το έργο υλοποιήθηκε εξ ολοκλήρου από την ΠΑΡΑΛΟΣ ΑΕ κατά το έτος 2015 περιλαμβάνοντας:

- 1. Πλήρης Εκπόνηση των απαιτούμενων μελετών.
- 2. Συγκρότηση του φακέλου υποβολής και κατάθεση αυτού στις αρμόδιες αρχές.
- 3. Προώθηση και παρακολούθηση του θέματος και επικοινωνία με τις αρχές.
- 4. Μέριμνα για την έκδοση της άδειας.
- 5. Προμήθεια απαιτούμενου εξοπλισμού και υλικών.
- 6. Μελέτη και κατάστρωση σχεδίου πόντισης.
- 7. Εργασίες Πόντισης και αγκύρωσης του νέου ναυδέτου.

Nikolas Manohs

Expedition Manager & Port Facilities ISPS officer

Molos Cement Plant

Heracles-Lafarge Greece



Volos Plant 9.10.2012

CERTIFICATE

HERACLES GENERAL CEMENT COMPANY – LAFARGE Group hereby certifies that PARALOS Engineering S.A. has successfully completed and according to the contract requirements the EPC Project: "SLINGS TRANSPORTATION SYSTEM" for Volos Plant,

The Project was executed from July 2012 to September 2012 and mainly included:

- A. Complete Study, Detailed design, and Engineering of Mechanical, Electrical and Automation Processes.
- B. Fabrication of lifting equipment & hydraulics, rails, transportation cart, steel constructions, drive systems, etc.
- C. Development, Implementation and Installation of Automation Software
- D. Infrastructure Civil works (tunnel, access points, modifications and adaptation).
- E. Installation of all system components.
- F. Commissioning works, Performance tests & Personnel training.

For HERACLES G.C.C.

New Projects Manager

Lafarge, Volos Plant

ThyssenKrupp Marine Systems

Hellenic Shipyards S.A. – Ελληνικά Ναυπηγεία Α.Ε.



Memo - Σημείωμα

Skaramangas 20-11-08

Reference letter

We certify that PARALOS ENGINEERING S.A. has successfully and in time completed all project works for the Supply and Installation of Heating and Ventilation System of the Heavy Machine Shop.

The project was executed on "turn key" basis (design, procurement, installation) and mainly included:

- Study & Design of Heavy Machine Shop's Heating and Ventilation System
- Design & Construction of civil works for boiler and fuel tank facilities
- Installation & Commissioning of piping system
- Procurement, Installation & Commissioning of related equipment
- Procurement, Installation & Commissioning of related electrical and automation system

Head of Infrastructure Projects

www.thyssenkrupp-marinesystems.com

ΕΛΛΗΝΙΚΑ ΝΑΥΠΗΓΕΙΑ Α.Ε.

ThyssenKrupp Marine Systems



CERTIFICATE

We hereby certify that PARALOS ENGINEERING S.A. has been assigned as Subcontractor under the Main Contractor "Siemens S.A." and has successfully and on time completed the erection works for the upgrade of the electrical distribution system of the Shipyards.

The works mainly included:

- Erection of 17 Medium Voltage Substations
- Upgrade of High Voltage (150kV) Substation
 - Replacement of MV switchgear
 - Installation of LV and control circuits
 - Reinforcement of the grounding system
 - Installation of MV cables
 - Replacement and adjustments of two HV tap changers' controllers
- Implementation of Protection Selectivity Study
- · Settings and adjustments of MV protection equipment
- · Testing, commissioning and start-up of all MV installations
- Training of the Shipyards personnel

For Hellenic Shipyards S.A.

Lars Winter

Infrastructure Projects

George Ventouris

Head of Electrical Department



ThyssenKrupp Marine Systems

Hellenic Shipyards S.A. – Ελληνικά Ναυπηγεία Α.Ε



Memo - Σημείωμα

ΠΡΟΣ:

Mr. G.Christopoulos PARALOS SA

FROM: АПО:

Mr.J. Vogel Mr.A.Pappas

ΚΟΙΝΟΠΟΙΗΣΗ:

Mr. L. Winter

DIVISION-DEPARTMENT: Yard Operations ΔΙΕΥΘΥΝΣΗ - ΤΜΗΜΑ:

OUR REFERENCE:

YOUR REFERENCE: ΕΝΔΕΙΞΕΙΣ ΣΑΣ:

NUMBER OF PAGES: -1-ΑΡΙΘΜΟΣ ΣΕΛΙΔΩΝ:

ΕΝΔΕΙΞΕΙΣ ΜΑΣ:

No. HSY 015/07

DATE:

HMEPOMHNIA:

23/01/2007

SUBJECT: DEMA:

Medium Voltage Cable-Pulling Reference Letter

Dear Mr. Christopoulos,

Answering to your request as per your fax no. 0426, dated 27-12-06 we would like to certify that Paralos Engineering S.A. has completed successfully and on time the medium voltage cable pulling works according to our specifications.

The works included:

- -Facilitation of pulling machinery, related equipment and personnel
- -New MV cable 1x120 mm2 pulled, 15.000 m
- -Old MV cables dismantling and reinstallation, 4.500 m
- -Insulation and continuity measurements according to VDE 0276-HD620

A. Pappas

PM Infrastructure Projects

Director Yard Operations

HELLENIC SHIPYARDS S.A. HEAD OFFICE: 3, Palaska street, 124 62 Skaramagas, Greeca POSTAL ADDRESS: P.O. Box 3480, 102 33 Athens, Greece Telephone: +50 210 55 10 000, Fex: +50 210 55 70 700 & 55 70 719 E-Mail: marketing@hsy.gr

Internet: www.nellenic-shipyards.gr www.thvssenkrupp-merinesystems.tcm EAAHNIKA NAYTHEEJA A.E. ΕΔΡΑ: Παλάσκα 3, 124 62 Σκαρομογκάς, Απική ΤΑΧΥΔΡΟΜΙΚΗ ΔΙΕΥΘΥΝΣΗ: Ταχυδρομική Θυρίδα 3480, 102 33 Αθήνα Tricowo: +30 210 55 10 000. : +30 210 55 70 700 & 55 70 719 E-Mail: marketing@hsy.gr

nternet: www.heilenic-shipyaras.gr

Myw.thyssenkruod-marinesystems.com

of ThyssenKrupp Technologies

ThyssenKrupp Marine Systems

Ελληνικά Ναυπηγεία Α.Ε.



10 - 10 - 2006

CERTIFICATE

We certify that PARALOS ENGINEERING S.A. has completed successfully and on time repair works on No.1 Floating Dock Electrical Installation.

The works included:

- Replacement of Medium Voltage Circuit Breaker.
- Repair of Medium Voltage Cubicle.
- Supply and Installation of Low Voltage Switchgear.
- Power and Signal cables installation.
- Electrical Measurements of Power Transformer.

Manager

Maintenance

G. VENTOURIS Responsible for **Electrical Installations** A Company of ThyssenKrupp Technologies

ThyssenKrupp Marine Systems

Ελληνικά Ναυπηγεία Α.Ε.



25 - 10 - 2006

CERTIFICATE

We certify that PARALOS ENGINEERING S.A. has completed successfully and on time maintenance works of two (2) On Load Tap Changers of Shipyard's Voltage Transformers and repair works on 150 KV disconnector switches.

The works included:

- Fully maintenance procedures and related works according manufacturer's directions (Machinenfabric Reinhausen).
- Supply and Installation of necessary spare parts.
- Inspection and Regulation of control parts.
- · Inspection and Repair of 150 KV drive unit of the disconnector switches.

G. PYRPYLIS Manager

Maintenance

Responsible for Electrical Installations

Ελληνικά Ναυπηγεία Α.Ε. ΕΔΡΑ: Παλάσκα 3, 124 62 Σκαρομαγκός, Δήμος Χαΐδαρίου, Αττική ΤΑΧΥΔΡΟΜΙΚΗ ΔΙΕΥΘΥΝΣΗ: Ταχυδρομική Θυρίδα 3480, 102 33 Αθήνα Τηλ: 210 55 10 000, Φαξ. 210 55 70 700 & 210 55 70 719 E-Mail: marketing@hsy.gr Internet: www.hellenic-shipyards.gr www.thyssenkrupp-marinesystems.com of ThyssenKrupp Technologies

ThyssenKrupp Marine Systems

Hellenic Shipyards S.A.



20 - 01 - 2006

CERTIFICATE

We certify that PARALOS ENGINEERING S.A. has completed successfully and on time maintenance works in High and Medium Voltage Electrical Substations for Hellenic Shipyards S.A., according to our specification.

The works included:

- Supply and replacement of transformers insulating oil. (Shell Diala D, quantity ≈14tn).
- Treatment (filtering/dehydration) of insulating oil with special purifying device. (1 unit Transformer 150/20KV, 23 units Transformers 22/0,4 KV and 2 units Transformers 0,4/0,4KV).
- Disposal according to legal rules for the used insulating oil.
- Maintenance of Shipyard's High and Medium Voltage transformers. (Transformer cleaning by using special liquids, replacement of the silica gel, sealing of oil leakages, vaporization from all possible points, general inspection of all electrical connections etc).

ard Operations

OGEŁ

G. PYRPYLIS Manager

Maintenance

G. VENTOURIS Responsible for

Electrical Installations

Mobil Oil Hellas A. E. Petroleum Company

194 SYNGROU AVE. ATHENS, GREECE

TELEPHONE 951-3111

CABLE ADDRESS MOBILOIL - ATHENS TELEX 215150 FAX No. 9501238

CERTIFICATE

It is hereby certified that Mr. Apostolos Pappas (Mechanical Engineer B.Sc., Management Science/Operations Research M.Sc.) has executed successfully on behalf of Mobil Oil Hellas the following projects:

1992 - 1995

- A. MOBIL OIL HELLAS SALONICA FUELS TERMINAL 2nd EXPANSION (Budget: 1.900.000 U.S. Dollars 450.000.000 DRS)
 - Three vertical cylindrical tanks:
 2700 m3, 6900 m3, 2130 m3 correspondingly
 - Fuel pipelines
 - Product separation "pig" system/fuel receiving and discharging automations, valves motorization.
 - Fuel level gauging automations
 - Fuel additive injection systems
 - Introduction of the new type "Super-Unleaded" Gasoline in the installation
 - Railway through the installation
 - New tanks dyke
 - New fire fighting system
 - Fire fighting tanks enlargement (using finite element analysis on the key structural points)

Mr. A. Pappas was responsible for the conception design as well as for the technical and financial Supervision of the project. (Project Manager)

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B. MOBIL OIL HELLAS KRETE (LINOPERAMATA) FUELS TERMINAL UNDERWATER RECEIVING PIPELINE (Budget: 330.000 U.S. Dollars 80.000.000 DRS).

Mr. A. Pappas was responsible for the conception design as well as for the technical and financial supervision of the project. (Project Manager) MOBIL OIL appropriated for Mr. A. Pappas scuba diving training and he was therefore able to supervise and photograph the whole underwater installation.

1991-1992

- A. <u>LPG INSTALLATION AT "METAXA" DISTILLERS</u>
 (Budget 65.000 U.S. Dollars 16.000.000 DRS).
- B. LPG INSTALLATION AT "YFADIS" SAUSAGE MAKERS (Budget 60.000.000 U.S. Dollars 15.000.000 DRS)

Mr. Pappas was responsible for the conception design as well as for the technical and financial supervision (Project Manager) of the above mentioned projects.

E. MOBIL OIL HELLAS LUBES BLENDING PLANT RE-ORGANIZATION (ISO CERTIFICATE ACQUISITION) (Budget 2.500.000 U.S. dollars 600.000.000 DRS)

Mr. Pappas was responsible for the conception design of the project (1/3 of the Budget)

- D. MOBIL OIL HELLAS KRETE LINOPERAMATA EXPANSION (Budget: 500.000 U.S. dollars_120.000.000 DRS)
 - Two cylindrical vertical fuel tanks: 2500 m3 1890 m3 correspondingly
 - Fuel pipelines
 - Automatic level gauging, level alarms
 - Fire fighting system
 - Valves motorization
 - Product separation "pig" system/fuel receiving and discharging automations

Mr A. Pappas was responsible for the conception design of the project.

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E. MOBIL OIL HELLAS SALONICA FUELS TERMINAL 1st EXPANSION (Budget 2.000.000 USD 480.000.000 DRS)

- 4 vertical cylindrical tanks 3000 m3, 3500 m3, 1500 m3, 2900 m3 correspondingly
- Fuel pipelines
- Fuel pump station
- Tank truck filling racks (bottom loading)
- Fire Fighting system

Mr A. Pappas was responsible for the conception design of the project. (1/3 of the Budget).

F. MOBIL OIL HELLAS LUBES BLENDING PLANT NEW BLENDING KETTLE (Budget 40.000 U.S. dollars 10.000.000 DRS)

Mr. A. Pappas was responsible for the conception design as well as for the technical and financial supervision of the project.

G. MOBIL OIL HELLAS ASPROPYRGOS FUELS TERMINAL ELECTRICAL GENERATOR INSTALLATION (Budget 80.000 U.S. dollars 20.000.000 DRS)

Mr. A. Pappas was responsible for the conception design of the total electrical circuit as well as for the technical and financial supervision of the project.

D. Houndras Technical Manager

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