



Elvan S.A.

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Basic Information

- Founded in 1972
- Manufacturer of cable trays and all associated accessories and lightning protection material
- Owned production facilities with production capacity of 5,000 tons of steel p.a.
- 2 96% owned by the founding family and managing director
- Current permanent staff: 42 (26 in production, 16 management)
- Operating in Greece and Romania (Elvan Electric Ro)
- Exporting to Balkans and Middle East

Products

- Cable Trays
- Cable Ladders
- Marine Type Cable Trays
- Supports for Cable Trays
- Pipe Supports
- Heavy Duty Supports
- Lightning Protection Systems
- Supports for Solar Panels



Certifications

- All products manufactured according to applicable international standards (EN ISO, DIN etc)
- The only company in Greece, and one of the few in Europe, certified for fire resistance of their cable trays for 90 minutes acc. to DIN 4102 Part 12.
- ISO 9001:2000 for design, manufacturing and sales of cable trays and support systems by TUV NORD
- Inspection Reports from international audit companies (upon customer request) including inspection Reports by TUV (for the Great Mabruk Development project - Libya) and Lloyds (HELLENIC PETROLEUM Refinery in Thessaloniki – Greece).



Elvan Managing Director





Konstantinos is Elvan's Managing Director. He started working in Elvan as Sales Manager in 1988. In 2004, he took over the management of the company.

During this time Elvan, Konstantinos established himself as a major player in the Greek market while he managed to expand the company's operations in both new countries (Balkans, Middle East) as well as new products (lightning protection – photovoltaic supports). Sales have grown from 150.000€ in 1988 to 7.000.000€ in 2012.

He has graduated from the National Technical University of Athens with a degree in Mechanical Engineering and earned an MBA in the University of Indianapolis, USA.

He is fluent in German and English.







APPENDIX A

REFERENCE LIST







ENERGY

Elvan has accumulated extensive experience and knowhow in oil and gas, energy and industrial projects having an impressive portfolio of successfully completed projects in this sector.

Vassiliko Power Station Phase Ш

CYPRUS



Contractor Joint Venture: J&P (Overseas) Ltd 25% - J&P-Avax S.A. 75%

Client **Electricity Authority of Cyprus**

Status Completed 2009

Description Complete combined cycle power station of 220 MW, comprising of two 6FA+E General

Electric gas turbines putting out 75 MW each, plus a 70 MW turbine utilizing the exhaust of

the two gas turbines, making use of either diesel fuel or natural gas

VTT Vasiliko Oil Tank Project **CYPRUS**



Contractor Joint Venture: J&P (Overseas) Ltd 45% - J&P Ltd 55%

VTT Vasiliko (Affiliate of Vitol International) Client

Completed 2014 Status

Oil Tank Farm of a net capacity of 630,000 cubic meters (34 oil storage tanks and 1 oily water Description

tank) at Vasiliko in the Republic of Cyprus.

COMPANY PROFILE



Great Mabruk Development

Project

LIBYA



J&P (Overseas) Ltd Contractor **TOTAL**

Client

Completed 2007 Status

Description Detailed engineering, procurement and construction of Great Mabruk Field Development Gas

& Oil Separation Plant (GOSP) for east and central Mabruk fields. Extension and rehabilitation of the existing GOSP facilities, de-salter, cleaning, dewaters, 8" and 10" flow lines, water injection network and all relevant electrical instrumentation works, as well as control system

equipment

Combined Cycle Power Plant of 701 MW, Deir Ali-Damascus, SYRIA

Consortium: METKA - ANSALDO Energia, with METKA as leader Contractor Public Establishment of Electricity for Generation (PEEG) Client

Status In progress

Complete combined cycle power plant on turn-key basis working on natural gas (main fuel)

and distillate oil (back-up fuel), and consisting of 3 sections:

- Section 1: first open cycle gas turbine (OCGT) unit with capacity of 279MW at ISO Description

conditions (complete, in operation)

Section 2: second open cycle gas turbine (OCGT) unit with capacity of 279MW at ISO

conditions (complete, in operation)

Section 3: completion of the combined cycle plant with total net capacity 701MW at site

Conditions (in progress)





Aliveri Unit V

420MW Combined Cycle

GREECE



Contractor Public Power Corporation S.A.

ClientMETKA S.A.StatusCompleted 2007

Description 420 MW Single Shaft Combined Cycle Unit V, natural gas fired, with auxiliary installations.

Lavrio Unit IV

550MW Combined Cycle

GREECE



ContractorPublic Power Corporation S.A.ClientConsortium: GEC Alstom - METKA

Status Completed 1996

Description 550MW Combined Cycle Unit, natural gas fired with auxiliary installations



Lavrio Unit V

378MW Combined Cycle

GREECE



Contractor Public Power Corporation S.A.

Client METKA S.A.
Status Completed 2004

Description 378MW Single Shaft Combined Cycle Unit V, natural gas fired with auxiliary installations

Fast Track Simple Cycle Project of 146 MW, Zarqa – JORDAN

ContractorConsortium METKA - Power ProjectsClientSamra Electric Power Co. (SEPCO)

Status Completed 2012

Alstom GT13E2 gas turbine and related auxiliaries, with output of 146 MW at site conditions.

Description

Combined Cycle Project of 143 MW, Zarqa - JORDAN

ContractorConsortium METKA - Power ProjectsClientSamra Electric Power Co. (SEPCO)

Status In progress

Description 143 MW expansion to an existing power plant, by addition of combined cycle plant of Alstom

technology to the existing open cycle gas turbines

Open cycle gas turbine power plant of 590,726 MW, Hassi R'mel - ALGERIA

Contractor Consortium General Electric - METKA S.A.

Client Société Algérienne de Production de l'Electricité (SPE Spa)

Status In progress

Description

Dual fuel (natural gas/diesel) open cycle power plant, with three gas turbines and a total

output of 590,726 MW at site conditions.

Open cycle gas turbine power plant of 368 MW, Hassi R'mel - ALGERIA

Contractor Consortium General Electric - METKA S.A.

Client Société Algérienne de Production de l'Electricité (SPE Spa)

Status In progress

Description open cycle gas turbine power plant with two gas turbines and a total output of 368,152 MW at

site conditions

COMPANY PROFILE



Aluminium of Greece Co-generation Plant, 320MW, GREECE

Contractor METKA

Client Aluminium of Greece S.A.
Status Completed in 2005

Description 320 MW (electrical, guaranteed net output) co-generation plant

Petrom Brazi, Combined Cycle Power Plant of 860 MW, ROMANIA

Contractor Consortium GE Energy - METKA

Client Petrom (member of OMV Group)

Status Completed (2008)

Description 860 MW combined cycle power plant

Megalopolis Unit V, 811 MW Combined Cycle, GREECE

ContractorPublic Power Corporation S.A.ClientMETKA S.A. (10%) – TERNA (90%)

Status In progress

Description Gas fired combined cycle power plant with a net power output of 811 MW

Thisvi, 421 MW Combined Cycle Power Plant, GREECE

Contractor ElpEdison Electricity Production

Client Consortium: Edison - AKTOR

Status Completed (2010)

Description 421 MW Combined Cycle gas-fired Power Plant

Ghiona Hydropower Plant, 1 x 8.5 MW, GREECE

Contractor METKA

Client Public Power Corporation

Status Completed

Description Hydropower Plant, 1 x 8.5 MW

Stratos Hydropower Plant, 2 x 3.5 MW, GREECE

Contractor Consortium: VOEST ALPINE AG - METKA - ALSTOM JEUMONT - AEG HELLAS

Client Public Power Corporation

Status Completed

Description Hydropower Plant, 2 x 3.5 MW

Hellenic Petroleum Refinery, Elefsina, GREECE

Contractor AKTOR

Client Hellenic Petroleum
Status Completed

DescriptionReconstruction of oil refinery units, installation of new towers and modern compressors and

addition/ upgrading of automation systems in the control centre

Hellenic Petroleum Refinery, Aspropyrgos, GREECE

Contractor TERNA

ClientHellenic PetroleumStatusCompleted

Hellenic Petroleum Refinery, Aspropyrgos, GREECE

Contractor SITIE Ital\y



Client Hellenic Petroleum

Status Completed

Hellenic Petroleum Refinery, Aspropyrgos, GREECE

ContractorTECHIMP - ItalyClientHellenic PetroleumStatusCompleted

Hellenic Petroleum Refinery, Thessaloniki, GREECE

ContractorFOSTER WHEELERClientHellenic PetroleumStatusCompleted

THERMAL POWER STATION AGHIOS DIMITRIOS V
 ANSALDO

THERMAL POWER STATION KOMOTINI
 ANSALDO - AEGEK

FILTERS MEGALOPOLI A.B.B.
 FILTERS AGHIOS DIMITRIOS METKA
 THERMAL POWER STATION VASILIKOS IV CYPRUS J&P – ABAE
 THERMAL POWER STATION VASILIKOS V CYPRUS J&P – ABAE
 THERMAL POWER STATION THISVI TERNA

THERMAL POWER STATION MEGALOPLIS IV TERNA

REFINERY ELF LIBYA
REFINERY TOTAL LIBYA
J&P INDUSTRIAL
J&P INDUSTRIAL

REFINERYRABIGH – SAUDI ARABIA
 Mina Abdulla Refinery – KUWAIT
 SETE S.A.
 C.C.C.

Roads & Infrastructure

Elvan has advised and supplied material for many challenging roads and infrastructure projects and our portfolio includes transportation projects, road and water conveyance tunnels, bridges, dams, irrigation schemes, steel structures, marine works, heavy foundations, infrastructure projects, water and sewage treatment plants and railway lines.

Egnatia Motorway Tunnels, GREECE

Contractor AKTOR

REFINERY MOTOR OIL

Client Greek Ministry of Public Works

Status Completed

Description 4double carriageway tunnels with a total length of 6.250km and 3 single carriageway

tunnels with a total length of 4.655km

Athens – Patras Motorways, Kakia Skala Tunnels, GREECE

Contractor AKTOR

Client Ministry for the environment, physical planning & public works

Status Completed

5 tunnels with a total length of 4,400m (including cut & cover sections), equipped with state-

VARIOUS CONTRACTORS

Description of-the-art E/M security and management systems, as well as eight escape tunnels (800m in

total).



Various Projects

Description

Psyttalia Wastewater Treatment Plant, GREECE

Contractor AKTOR

Client Ministry Of Public Works
Status Completed (2006)

The wastewater treatment plant of Psyttalia, is the final recipient of domestic sewage and

pre-treated industrial wastewater of the greater Athens area, with a hydraulic capacity of 27

m3/s and treatment capacity of 5.6 million PE.

Zlatna Panega Cement Plant Upgrade, BULGARIA

Contractor METKA

Client TITAN Zlatna Panega Cement

Status Completed (2006)

Mechanical construction and installation of cement mill

Mechanical construction and erection of two electrostatic precipitators and

Description reconstruction of a klinker cooler

Modification of two electrostatic precipitators to hybrid filters and preheater

reconstruction

Olympic Athletics Complex of Athens

Contractor AKTOR ATE

Client Ministry of Sports and Culture

Status Completed (2002)

- Pafos Airport, Cyprus
- 2 Athens Metro
- Palais des Sports (Phaliron)
- 2 Athens Olympic Village
- Onasis Cardiac Surgery center
- Iraklion Hospital
- 2 Arta Hospital
- Ioannina Hospital
- Drama Hospital
- Xanthi Hospital
- 2 Levadia Hospital
- Larissa Hospital
- 2 Alexandroupolis Hospital
- Serres Hospital
- West Attica Hospital
- 2 CONTINENT Super Markets
- 2 Athens University
- 2 National Technical University of Athens
- Thessalia University
- HENNINGER HELLAS Plant
- 2 Hellenic Aerospace Industry (H.A.I.)
- 2 44 West Bay Residential Tower, Al Waab City, Qatar
- 🛮 IKEA Sofia, Bulgaria







APPENDIX B

CERTIFICATIONS



CERTIFICATE

Management system as per DIN EN ISO 9001: 2008

In accordance with TÛV NORD CERT procedures, it is hereby certified that

ELVAN ABEE 20th km Lavriou Ave. 190 02 Paiania Hellas



applies a management system in line with the above standard for the following scope

Design, Production and Sales of Cable Trays, Support Systems, Lightning Protection Items & Supporting Systems of Photovoltaic Panels.

Certificate Registration No. 44 100 16370035 Audit Report No. GR-1163/2016 Valid from 2016-04-27 Valid until 2018-09-14 (until 2019-04-26 in case of Upgrade to ISO 9001 2015)

Certification Body at TÜV NORD CERT GmbH

Athens, 2016-04-27

This certification was conducted in accordance with the TÜV NORD CERT auditing and certification procedures and is subject to regular surveillance audits.

TÜV HELLAS S.A.

282, Mesogeion Ave.

155 62 Athens

www.tuev-nord-cert.com







INSPECTION REPORT ΕΚΘΕΣΗ ΕΠΙΘΕΩΡΗΣΗΣ

TUV-H-CONTRACT No : 02.05.137

TUV-H-ORDER No I.R. No: 096/05

Page: 1 of 2

Owner

: J&P

Project Engineer

Μελετητής Εργου

Κύριος του Έργου

IOANNOU & PARASKEVAIDES

: GREAT MABRUK DEVELOPMENT

INDUSTRIAL & COMMERCIAL S.A

ENERGY & INDUSTRIAL PROJECTS S.A

Project

Εργο

Project No.

Αριθμός Έργου

: %

: %

: %

Contractor

Contractor's Order No.

: JP-152/A-

Ανάδοχος

: %

Αρ. Εργου Αναδόχου

6403

Manufacturer Κατασκευαστής : ELVAN

Order No. of

manufacturer

Αρ. Παραγγελίας Κατασκευαστή

Material for inspection Υλικά για Επιθεώρηση

: CABLE LADDERS, TRAYS & ACCESSORIES

Subject of inspection Σκοπός Επιθεώρησης : CONFORMANCE WITH EN-ISO 1461:1999 STANDARD

"HOT DIP GALVANIZED COATINGS ON FABRICATED IRON AND STEEL

ARTICLES - SPECIFICATIONS AND TEST METHODS".

Inspection activities Ελεγχοι κατά την Επιθεώρηση ZINC COATING THICKNESS TEST (MAGNETIC METHOD) ON A RANDOM **BASIS**

SHEET THICKNESS MEASUREMENTS ON A RANDOM BASIS

ADHESION TEST OF COATING WITH CROSS-HATCH METHOD

VISUAL CHECK OF COATING ON A RANDOM BASIS

Place of inspection Τόπος Επιθεώρησης : ELVAN S.A SITE - PEANIA, GREECE

Date of inspection Ημερ. Επιθεώρησης : 08/07/2005

Requirements / Specifications Απαιτήσεις / Προδιαγραφές

EN ISO 1461:1999

Items inspected Αντικείμενο Επιθεώρησης

: All items in attached list except for items 1.24 and 3.5 to 3.12:

Attachments Επισυναπτόμενα

: List with items inspected and quantities





<u>INSPECTION REPORT</u> <u>ΕΚΘΕΣΗ ΕΠΙΘΕΩΡΗΣΗΣ</u>

TUV-H-CONTRACT No : 02.05.137

TUV-H-ORDER No

I.R. No: 096/05

Page: 2 of 2

Remarks Παρατηρήσεις

: 1. The items were inspected in the manufacturer's premises.

2. Items 1.24 and 3.5 to 3.12 were not inspected.

3. The minimum number of articles that forms the control sample for each item, is according to EN ISO 1461:1999 and the quantities given in the attached list.

4. ALL INSPECTION ACTIVITIES HAD SATISFACTORY RESULTS

Inspector Επιθεωρητής

Date Ημερομηνία K. PSARAKIS

FORTER

FOSTER WHEELER ITALIANA 20094 CORSICO, MILANO VIA S CABOTO,1 FAX (039) 2.4486.3118 This page to be telecopied to FWI as soon as visit completed

INSPECTION REP	ORT				-
REPORT NO.	CONTRACT	CLIENT			
ELVAN 001.2009	1BD0425A	Hellenic Petrole	ım S.A.		PAGE 1
VENDOR ELVAN S.A.(IT3077) SUB VENDOR	<u> </u>			ORDER NO. Inquiry:IT0099 ORDER DATE	
ADDRESS FOR ORDER				SUB-ORDER NO.	-
20 km Athens-Lavriou A PEANIA 190 02 GREE WORKS LOCATION (Address	Bid number:HPT-9255 \$UB-ORDER DATE				
Same as above		WODERTON			
INTERVIEWED		DEC 10/2009		Nikolaos Filippatos	
2 - APPLICABLE RE 3 - INSPECTION AN 4 - RESULTS OF TE 5 - CLICIFICATION	DY LOR TEST/INSPECTION FERENCE/SPECIFICATIONS DITESTS WITNESSED STS AND INSPECTION REVIEWED AND/OR SIGNED ALIBRAT & PERSONNEL O	0	8 - ACTION TO BE TA 9 - T.P.I. OR STATUT 10 ATTACHMENTS	ASE, RI JI CTION, NON- IKEN OR RECOMMI NIJA ORY INSPECTION AUTH ERY DATES OF MATERIA	ORITY (IF ANY)
1.0 MATERIAL REAL 1.1 Project: Instrum	ADY FOR TEST/INSI nent Cable Trays an		<u> </u>	VENDOR JOB NO. 1681-A	CRITICALITY RATING (FMI)

REPORT SUMMARY:

Material for inspection: Cable Trays and accessories

Subject for inspection: Hot dip galvanized coatings on fabricated steel and iron articles-specifications and test methods

Inspection activities:1)Zinc coating thickness test on random basis (>70µm) 2)Adhesion test of coating with cross-hatch method (satisfactory results) 3)Visual check of coatings on random basis 4)Review of material certificates, chemical analysis certificates and coating thickness certificates (signed).

Place of inspection:ELVAN site, PEANIA GREECE.

Remarks: 100% of the order is complete (according to FW list HPT9255 Rev. 0). All the inspection activities had satisfactory results. The sampling frequency for testing for each item was defined in accordance to EN ISO 1461:1999

ISSUED BY

N.Filippatos

DATE OF REPORT

Dec 14, 2009

REVIEWED BY

O. Guerra

FOSIFH WHEFIFR

FOSTER WHEELER ITALIANA

FAX (039) 2.4486.3118

- 2.0 APPLICABLE REFERENCE/SPECIFICATIONS/CODES
- INSPECTION AND TESTS WITNESSED Visual, dimensional, spot witness of cable trays and accessories
- **RESULTS OF TESTS AND INSPECTION** Satisfactory and accordance with the listed references.
- CERTIFICATION REVIEWED AND/OR SIGNED Review of material, chemical analysis and coating thickness certificates.
- TEST EQUIPMENT CALIBRATION & PERSONNEL QUALIFICATION 6.0
- SUMMARY (RELEASE, REJECTION, NON-CONFORMITY) 7.0 The inspected materials have been released for further fabrication.
- **ACTIONS TO BE TAKEN OR RECOMMENDATION**
- 9.0 T.P.I. OR STATUTORY INSPECTION AUTHORITY (IF ANY)
- 10.0 ATTACHMENTS **Photos**
- 11.0 PRESENT DELIVERY DATES OF MATERIAL : After issuance of the Relevant Release Notice (to be issued by FWI).

DATE OF REPORT Dec 14, 2009 N.Filippatos_



DMT GmbH & Co. KG Gebäude Sicherheit Prüfstelle für Brandschutz

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gs2@dmt.de www.dmt.de

Prüfbericht

DMT-31/68

Dokumentennummer: DMT-DO-31/68 Auftragsnummer: 20642157 Auftraggeber: ELVAN S.A. Cable Trays and Support Systems 20 Km Lavriou Ave. 19002 PEANIA ATHENS Griechenland Auftrag vom: 05.02.2014 Inhalt des Auftrags: Brandtechnische Prüfung einer Kabelanlage mit integriertem Funktionserhalt (E 90) nach DIN 4102-12:1998-11 Prüfungsgrundlage: DIN 4102-12:1998-11 Probeneingang: 10.02.2014 Prüftermin: 19.02.2014 Geltungsdauer bis: 19.02.2019

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