





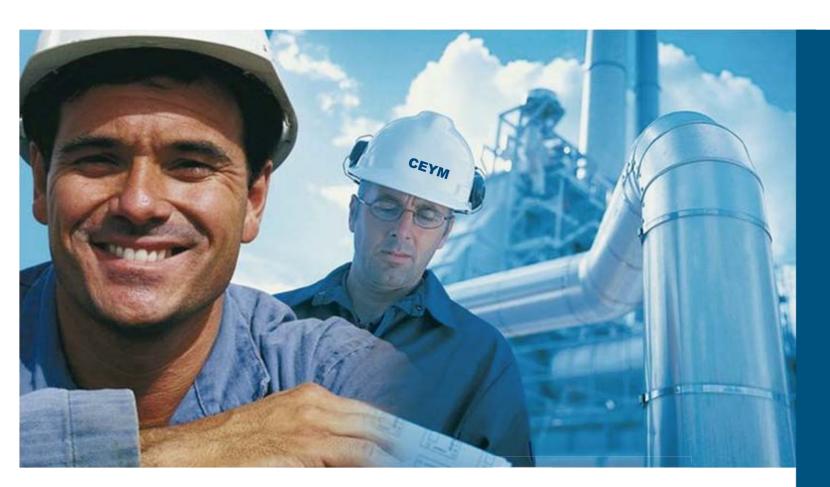


#### **EPCM SERVICES**

Engineering Procurement Construction Maintenance

#### **BUSINESS SEGMENTS**

Power Generation
Oil & Gas
Industrial & Infraestructure
Global Services



# WHO WE ARE?



**CEYM** is a leading international consulting, engineering and construction contractor, with proven history and expertise in complete project management, complex system integration, detailed engineering and technical field support, for private and commercial customers around the world with a 100% satisfaction rate since 1999.

From planning and design to commissioning and maintenance, our clients are assured of our wide industry experience, technical and managerial capabilities to undertake challenging projects.

With the resources, skills, and experience, CEYM is continuously striving to secure competitiveness in every aspect of quality, technology, services and management.

# Quality and Safety Management Systems

**ENVIRONMENT, HEALTH AND SAFETY.-**

**CEYM** is committed to fulfill our social responsibilities through the development of safe and environment-friendly solutions.

With the conviction that all injuries and accidents are preventable, Our Safety and Health Management System is clearly endorsed by the upper management and has been developed following OHSAS 18001 standards with strict quality control and continual improvement.



#### **QUALITY MANAGEMENT SYSTEM.-**

**CEYM** strives for excellence, following not only the Quality Assurance Policy, but every design, construction and manufacturing procedure and instruction.

The Quality Management System is certified for all engineering, procurement and construction services under the ISO 9001:2008 standards and all applicable legislation and codes.

#### CEYM, COMPAÑIA ELECTRICA Y MECANICA S.A.



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Diseño y desarrollo de proyectos de ingeniería eléctrica y mecá Incluyendo mantenimiento de turbogeneradores y montaje de equi

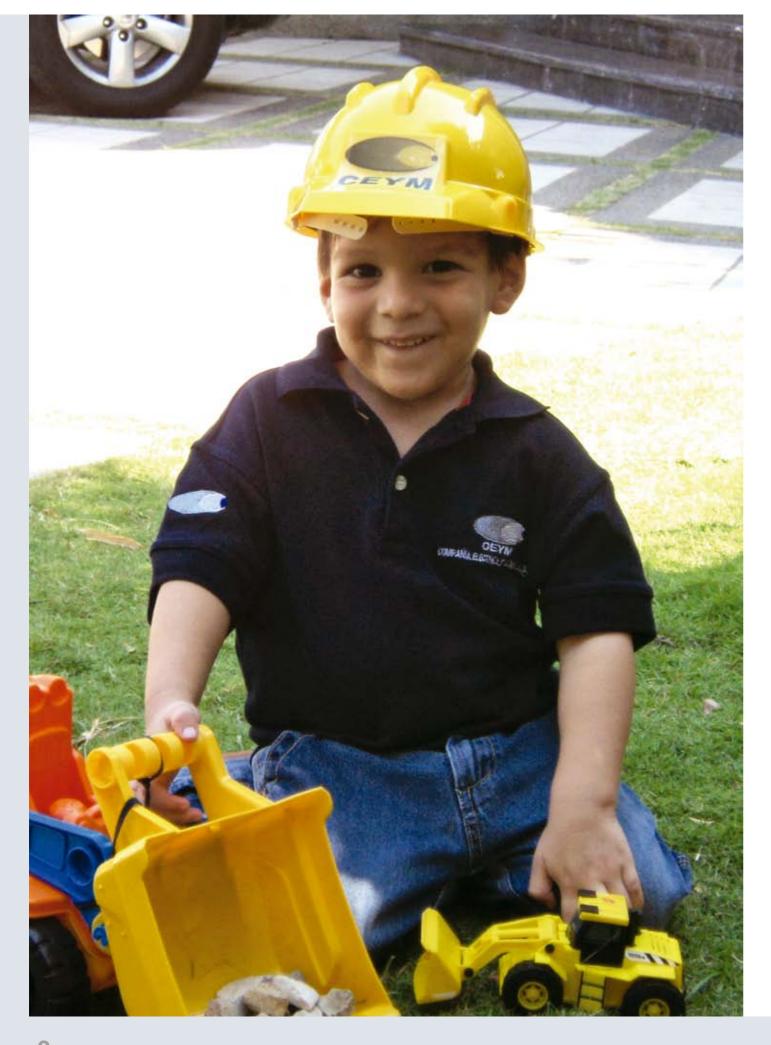
Design and project development of electrical and mechanic engineering, including maintenance of turbo generators and assemb of industrial equipment

> GO KKIT 2005 requirements may be obtained by consulting the organia Additional face.

Cdia. Santa Leonor, Av. Benjamin Rosales, MZ 5 Solar 16, oncina L-Guayaquil, Ecua

Ciudadela Sagrada Familia, Calle Miguel H. Alcivar, Segundo Call Mz 13 Sol Grandenii Free





"We help our customers to increase industrial productivity, to lower environmental impact in a sustainable way and we support our society through training and giving job opportunities for talented people."



"Establish **CEYM** as the premier engineering, procurement and construction company in Latin-America and the Caribbean, while maintaining our uncompromising principles as we grow"



- World Class Engineering
- Project Management Services
- Fast-Track Projects
- Construction-Operation-Maintenance Experience
- Global Coverage
- Single Source Solution











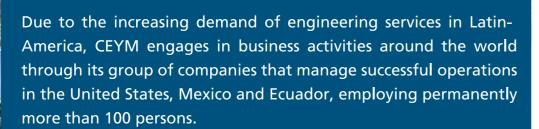




# **GLOBAL COVERAGE**

"CEYM has successfully accomplish diverse projects around the world through his network of companies"







Miami, United States of America

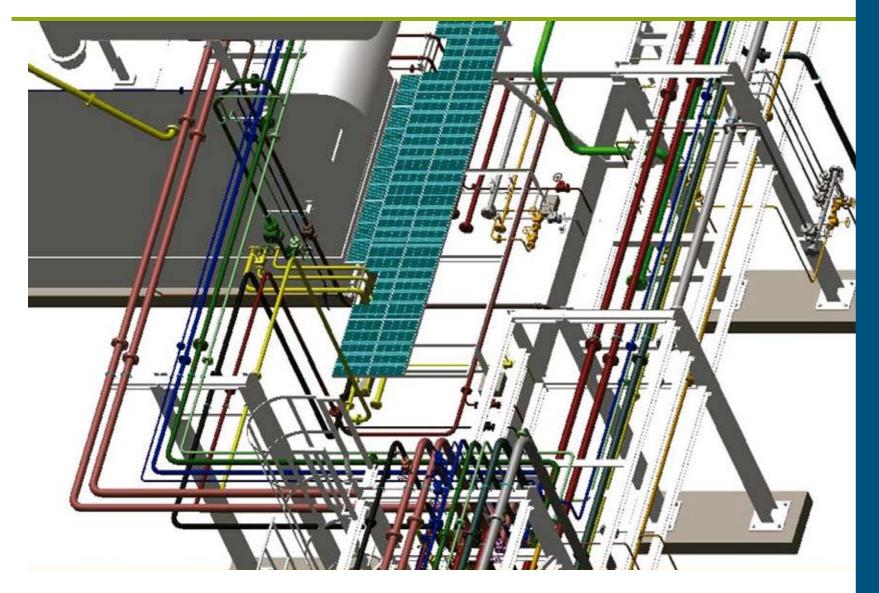


Monterrey, Mexico



Guayaquil, Ecuador

# **ENGINEERING**



**CEYM** specializes in all types of structural steel detailing and pipe spool drafting using a combination of the latest technology and traditional drawing methods in order to produce complete and precise details for isometric conversion and construction.

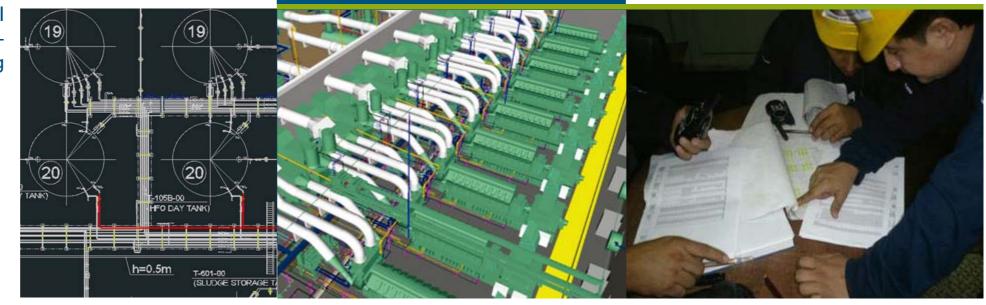
- 2D Drafting Services.
- 3D Modeling Services.
- Isometric Conversion.
- Floor Plans Layout.
- Concept Design and Drafting Services.
- AS BUILT Drawings.

**CEYM** is a single Source solution for all your engineering and technical requirements.

Using different 3D software's, CEYM has implemented the latest AutoCAD technology to create intelligent production models. Component and drawing data dynamically links pertinent information to an external project database, allowing the creation of bill of materials, isometric drawings and clash detection. Our engineering scope ranges from basic design to detailed calculation.

With over 30 years of experience designing industrial and commercial facilities, the company provides multidisciplinary engineering services in the following areas:

- Civil
- Structural
- Process
- Mechanical
- Electrical
- Instrumentation & Control



# THERMAL POWER CEYM BY THE NUMBERS



From concept to completion, **CEYM** can assist major companies with their complex Integrated Solutions.

**CEYM** has successfully assisted with major maintenances to more than 1000MW of power in different type of units.



### **Installed capacity**

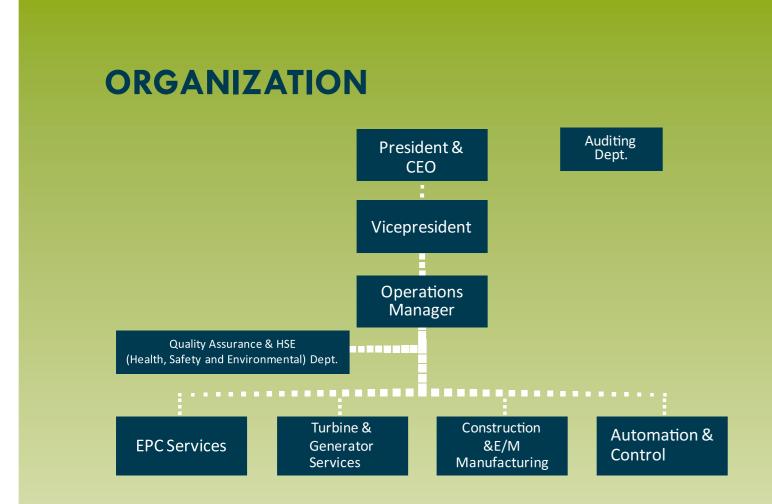
Gas Turbines 320 MW

Steam Units 130 MW

**Internal Combustion: 700 MW** 

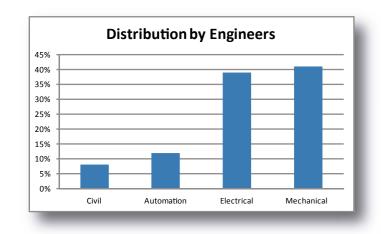


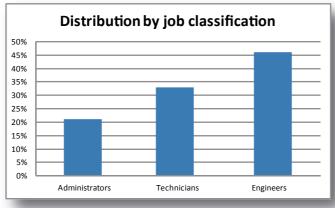




# SPECIALIZED SERVICES

# **MANPOWER**







# **EPC SERVICES**

CEYM, as an international EPC company has the capability and resources to undertake important projects on behalf of major companies.

From engineering studies to site arrangements, construction and project commissioning, CEYM's experienced project managers and field engineers, supervise entire on-site process to fulfill customers' needs.

We guarantee high quality and competitive cost to maximize your satisfaction. Our key to success is our years of experience combined with our intensive focus on engineering development and a reliable global procurement network.

Whether it is a new installation or an expansion, we are able to provide a solution that is 100% compatible with your project.



# **CONSTRUCTION**

# & E/M Manufacturing

We recognize every project is unique, with different specifications, requirements and needs. We have the experienced workforce and leadership to tailor your civil and electromechanical requirements.

We offer construction services for:

- -Structures
- -Tanks
- -Pipe Spools
- -Boilers

facility plus office containers, specialized turbine tool containers, trucks, lifters, cranes and all the necessary equipment able to be taken to any working site and produce locally, in order to assure that the job can be completed without any delays.



# **TURBO GENERATORS**

# **Specialized Services**

**CEYM** has assisted major power generation companies from the early stage of a new project through the lifetime of the generation units.

#### **CEYM** is capable of:

For existing plants:

- Assist Manufacturer Technical Advisors on all type of field services from visual inspections to major overhaul of gas and steam turbines.
- -Assist with the maintenance of electrical generators.
- -Performance testing.
- -On Site Procurement
- -On Site Office, Tooling, and Heavy Equipment Supplier
- -Commissioning Assistance.

Our professional consulting and maintenance services is aimed to satisfy our customers with a 100% reliable and innovative solutions.

Whether is a natural disaster, premature failure, power outage, or simply a scheduled maintenance, CEYM will give you time, flexibility and quality services.





## FIELD SERVICES



Field Services has always been a hallmark of CEYM, providing the best and most comprehensive service based upon quality workmanship and highly personalized staffing for small to large projects and companies.

Our "Open, Clean, Fix & Close" service is available for all sizes and types of Steam and Gas Turbine equipment throughout its entire life cycle, from older to state-of-the-art technologies. We support operators and manufacturers by offering specialized technicians to assist with the inspection, evaluation and repair solutions. We have the experience, tools, equipment and personnel to perform routine and complex maintenance inspections.

#### Our services include:

- Installation, Removal and Relocation
- Turbine Disassembly and Inspection
- Non Destructive Assessment of Components
- Generator Testing and Condition Analysis
- Control Systems Retrofits



# **ELECTRICAL ENGINEERING**

In an effort to satisfy the diverse demands of it'scustomers and building on over 30 years of experience, CEYM covers a complete scope of electrical service offerings.



CEYM is capable of DESIGN-BUILD according to customers or OEM specs a wide range of electrical distribution and automation systems containing:

- MV / LV Switchgears
- NEMA and IEC Electrical Distribution Panel Boards.
- Generator Switchboards (ATS).
- Motor Control Centers
- MV / LV Motor starters and Push Button Stations.
- PLC's Panels
- Uninterruptible Power Supply (UPS) Systems



We provide complete electrical engineering services, from concept to completion, for jobs ranging from a single panel board or programmable logic controller (PLC) to multiple distribution transformers, switchgear line-ups and motor control centers.

CEYM delivers Full Service of Consulting, Design, and Installation of:

- Substations Conceptual & Physical Design.
- Ground Grid Systems.
- Load Flow Analysis/Short Circuit Analysis.
- Protection and Control Systems.
- Building Electrical Distribution and Energy Management Solutions.
- Cabling Raceway Systems.

Each solution is engineered and designed to fit the specific needs of the given application, helping our clients develop and manage their electrical infrastructure by improving efficiency, safety and quality.

A dedicated team of field service technicians is available for:

- New Equipment Installation & Relocation.
- Equipment Testing & Evaluation.
- Repair & Modification.
- Retrofitting & Replacement.





# **Automation & Control**

CEYM understands that improving efficiency through automation requires more than implementing new technologies. CEYM will guide you through the process of delivering complete solutions featuring compact modules, reliable operation, safety and quality compliance.

#### Step 1:

Project Planning & Basic Engineering: Based on Customer's requirements, our engineers will produce basic engineering for the automation of the process.

#### **Deliveries:**

Functional Specifications, Operational Concepts, Input / Output List, Components List, Integration with legacy system

#### Step 2:

Detail Engineering:

Implementation engineering begins by selecting required instrumentation and components.

#### **Deliveries:**

Selection of devices and components Electrical Diagrams Network Design & Configuration Controller Programming Documentation Acceptance Tests

#### Step 3:

Installation and Commissioning:

Process Automation System is installed, integrated and commissioned at the customer's site for full compliance with industrial guidelines and according to customer's satisfaction.

Data adquisition Information Processing Control Integration Networking



# We offer services related to Automation projects in the energy and industrial sectors, such as:

- Control and protection design.
- Supply, installation, programming and testing of IEDs (Intelligent Electronic Device).
- SCADA (Supervisory Control and Data Acquisition).
- Solution in Integrated Substation Automation, including the provision of field equipment, metering, protection and control.
- We design and supply of Protection and Control panels.



#### THERMAL POWER

#### EPC PROJECTS EXPERIENCE.-

Power Plant	Customer	Capacity (MW)	Location	Description	Year
Planta Álvaro Tinajero	UEG	65	Ecuador	Project Management	1995
Termoeléctrica Santa Elena	HHI	90.2	Ecuador	Complete project integration (civil, mechanical and electrical).	2010
Termoeléctrica Quevedo	HHI	102	Ecuador	Complete project integration (civil, mechanical and electrical).	2010
Termoeléctrica Jaramijó	HHI	149	Ecuador	Complete project integration (civil, mechanical and electrical).	2011

#### MAINTENANCES.-

Power Plant	Customer	Capacity (MW)	Location	Description	Year
Machala Power	GE	65 (2x)	Ecuador	Maintenance services long term agreement for 2x GE 6FA	2004 - Present
Termoeléctrica Santa Rosa	GE	51	Ecuador	Major maintenance to 1x GE Frame 5	2012
Refinería Esmeraldas	GE	7 (4x)	Ecuador	Major maintenance to 4 steam turbines	2011
Bahia de las Minas	GE	120	Ecuador	Major maintenances to 3x GE 6FA	
Planta Álvaro Tinajero	UEG	38	Ecuador	Major maintenance 1x MS6001B	2006, 2010
Planta Aníbal Santos	UEG	26	Ecuador	Hot gas inspection to 1x MS5001B	2010
Planta Álvaro Tinajero	UEG	60	Ecuador	Major maintenance to generator GT6	2010
Planta Álvaro Tinajero	UEG	65	Ecuador	Aligning and Balancing for GE LM6000	2010
Planta Trinitaria	Intervisa	150	Ecuador	Major maintenance to Siemens W501D5A and BOP	2009
Planta Álvaro Tinajero	UEG	60	Ecuador	Major maintenance to generator GT5	2009
Planta Aníbal Santos	UEG	20	Ecuador	Major maintenance to Pratt & Whitney turbine	2008
Planta Trinitaria	Electroguayas	133	Ecuador	Major maintenance to 1x ABB steam turbine procurement assist	2008
Nassau Plant - Bahamas Electricity Corp.	GE	100	Bahamas	Major maintenances to several gas turbines GE 5FA and 6FA	05, 06, 07 and 2008
Freeport Plant - Grand Bahamas Power	GE	74 / 35	Bahamas	Major maintenances to GE 6FA	2005, 2008
Mandeville Plant - West Indies Alumina	GE	10	Jamaica	Major maintenance to 1x steam turbine and generator	2006
Montego Bay Plant - Jamaica Public Services	GE	120	Jamaica	Maintenance services long term agreement for 2x GE 6FA	2005, 2006
Operadora San Felipe	AEI Energy	180	Dominican Rep.	Major maintenance to 1x GE 7FA and 1x steam turbine	2008

#### CONTROL RETROFITS TECHNICAL ASSISTANCE.-

Power Plant	Customer	Location	Description	Year
Refinería Esmeraldas	General Electric	Ecuador	Upgrade of control system from Mk 4 to to Mk 6 of 4 steam turbines	2010-2011
Cadafe	General Electric	Venezuela	Upgrade of control system from Mk 4 to to Mk 6 to 1x 6FA	2007
Nuevo Pemex	General Electric	Mexico	Upgrade of control system from Mk 4 to to Mk 6 to 1x 7FA	2005

#### SUBSTATIONS.-

Power Plant	Customer	Location	Description	Year
Terminal Terrestre Guayaquil	M.I. M. GYE	Ecuador	Substation 10-12 MVA	2007
Guayaquil International Airport	TAGSA	Ecuador	Substation 10-12 MVA, Includes 1 km of 69 kv line.	2004
Guayaquil Main Port	CONTECON	Ecuador	Substation 24-32 MVA Two power transformers MBA 12-16 each	2011
City Mall Shopping Center		Ecuador	Substation 10-12 MVA	2011
Alborada 2	UEG	Ecuador	Substation 18-24 MVA	2010
El Fortin	UEG	Ecuador	Substation 36-48 MVA Two power transformers of 18-24 MVA each	2010
Lotes con Servicio Alegría	UEG	Ecuador	Substation 36-48 MVA Two power transformers of 18-24 MVA each	2010
Puerto Santa Ana		Ecuador	Substation 38-24 MVA Two power transformers of 18-24 MVA each	2007
Lagos del Batán	M2	Ecuador	Substation 20-24 MVA Two power transformers of 10-12 MVA each	2010
Lagos del Batán	M2	Ecuador	Substation 20-24 MVA Two Kilometers airline with driver acar 336	2010
Autoridad Portuaria Puerto Bolivar	APPB	Ecuador	Substation 20-24 MVA	2009
Autoridad Portuaria Puerto Bolivar	APPB	Ecuador	Two power transformers of 10-12 MVA each	2010
Autoridad Portuaria Puerto Bolivar	APPB	Ecuador	House of generation with four generators of 2 MVA each	2010
Autoridad Portuaria Puerto Bolivar	APPB	Ecuador	Four lifting transformers 480/13.8 kV 2 MVA each	2010
Autoridad Portuaria Puerto Bolivar	APPB	Ecuador	Five feeders to the port of 13.8 KV	2010

#### **INDUSTRIAL**

#### EPC PROJECTS EXPERIENCE.-

Project Name	Customer	Location	Description	Year
Planta Guayaquil	Intaco	Ecuador	Electrical and mechanical works.	2008
Plásticos Rival	Plásticos Rival	Ecuador	Electrical and mechanical works.	2009
Planta Montecristi	El Café	Ecuador	Project management	2010
Ciudad Colón	Dosmil Corp.	Ecuador	Engineering and electrical construction of all buildings.	2007-2010
Hotel Wyndham	Nobis	Ecuador	Engineering and electrical construction of all buildings.	2012
Monteverde	Flopec	Ecuador	Electrical and mechanical works.	2012

#### ELECTROMECHANICAL INSTALLATIONS.-

Project Name	Customer	Location	Description	Year
Sote Phase II	Petroecuador	Ecuador	Installation of the control system and instrumentation.	2003
Osayacu Pumping Station	Petroecuador	Ecuador	Design and installation of the pumping system.	2002
Papayacta Pumping Staation	Petroecuador	Ecuador	Design and installation of of the pumping system.	2002
Unilever GYE	Unilever	Ecuador	Mounting of emergency gensets	1999
Unilever GYE	Unilever	Ecuador	Construction of fire protection system and process pipings.	1999
Procarsa	Procarsa	Ecuador	Design and construction of Fire Protection System	2004
CATEG – Álvaro Tinajero	UEG	Ecuador	Fuel Tank Construction	1999
Hotel Mompiche	Decamerón	Ecuador	1x30,000Gal. Tank / 1x2000 Gal. Tank	2009

#### MEDIUM SPEED ENGINES (ENGINEERING & INSTALLATIONS).-

Project Name	Customer	Location	Description	Year
Hotel Mompiche	Decamerón	Ecuador	3xGenerators (750kW)	2009
Hotel Mompiche	Decamerón	Ecuador	Complete Electrical Installations	2009
Hotel Mompiche	Decamerón	Ecuador	Distribution Boards	2009
Hiton Colon Hotel	Hilton Hotels	Ecuador	Power Plant and Electrical Design 3x850kW	2000
Sheraton Hotel	Sheraton Hotels	Ecuador	2x700kW Power Plants	2003
WORLD TRADE CENTER	Inmomariuxi	Ecuador	3x 1.5MW Power Plants	2003
WORLD TRADE CENTER	Inmomariuxi	Ecuador	Electrical Bards and Montage of Chillers	2004
Jabonería Nacional		Ecuador	Power Plant Installation and fuel tanks constructions1x450kW	2002
GYE Ground Terminal	M.I. M. GYE	Ecuador	Power Plant Installation and fuel tanks constructions 2x750kW / 1x350kW	2008
Malecón 2000	M.I. M. GYE	Ecuador	Power Plant Installation and fuel tanks constructions 3x750kW	2000
Enterios Shopping Center	El Rosado	Ecuador	Power Plant Installationand fuel tanks constructions 2x450kW / 1x600kW	2007
Riocentro Sur Shopping Center	El Rosado	Ecuador	Power Plant Installation and fuel tanks constructions 1x750kW	2007
Policentro Mall	Policentro	Ecuador	Power Plant Installation and fuel tanks constructions 2x1250kW	2009
San Marino Shopping Center		Ecuador	4x800kW Genset Installation, fuel tanks and electric panels construction	2003
Paseo del Sur- Hiper Market	El Rosado	Ecuador	1x800kW Genset Installation, fuel tanks and electric panels construction	2006
Del Sol Mall		Ecuador	4x750kW Genset Installation, fuel tanks and electric panels construction	2003
Quito Cinemas		Ecuador	1x750kW Genset Installation, fuel tanks and electric panels construction	2008
Hamburg Building		Ecuador	1x450kW Kohler installation and fuel tanks	2008
Hamburg Building		Ecuador	1x350kW Cummins installation and fuel tanks	2008
Guayaguil Mormon Temple		Ecuador	Power Plant and steam boiler installation	1999

#### **ENGINEERING & CONSTRUCTION**

Project Name	Customer	Location	Description	Year
Álvaro Tinajero Plant	UEG	Ecuador	Mounting of Fuel Treatment Plant	2000
Álvaro Tinajero Plant	UEG	Ecuador	Mounting of Water Treatment Plant	2001
Guayaquil International Airport	TAGSA	Ecuador	Design and installation of 2x 750kW CUMMINS plants.	2005
Guayaquil International Airport	TAGSA	Ecuador	Design and installation of Repositioning of 3 generators	2006
Guayaquil International Airport	TAGSA	Ecuador	Design and installation of Fire protection system.	2007
Guayaquil International Airport	TAGSA	Ecuador	Design and installation of Distribution Boards	2008
Guayaquil International Airport	TAGSA	Ecuador	Design and installation of Landing Track Lighting	2009
Santa Ana Tunnels	M.I. M. GYE	Ecuador	Mounting of air ventilation system.	2004
Santa Ana Tunnels	M.I. M. GYE	Ecuador	Mounting of lighting system	2005
Santa Ana Tunnels	M.I. M. GYE	Ecuador	Control system (SCADA)	2006
Santa Ana Tunnels	M.I. M. GYE	Ecuador	Emergency generation	2007
Santa Ana Tunnels	M.I. M. GYE	Ecuador	All electrical systems	2008
San Eduardo Tunnels	M.I. M. GYE	Ecuador	Mounting of lighting system	2008
San Eduardo Tunnels	M.I. M. GYE	Ecuador	Control system (SCADA)	2008
San Eduardo Tunnels	M.I. M. GYE	Ecuador	Emergency generation	2008
San Eduardo Tunnels	M.I. M. GYE	Ecuador	All electrical systems	2008
Intaco	Intaco	Ecuador	LT Contract for all new plant constructions	2008 - 2011
De Prati	De Prati	Ecuador	Mounting of building façade	2006
Centro Cívico	M.I. M. GYE	Ecuador	Mounting of all curtain systems	2006
Centro Cívico	M.I. M. GYE	Ecuador	Mounting of stage elevation system.	2006

#### **UNITED STATES OF AMERICA**

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