



TURN KEY to POWER®

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GENERAL PROFILE

BGM started providing services as a Power Plant Engineering & Automation company under the name of BGM Engineering Ltd. in 1998, and continued to provide Engineering and Automation services for more than ten years. Then, BGM Engineering Ltd. partners decided to enhance the contribution of the company to the Power sector with the addition of the Power Plant Construction services via establishment of the BGM Industrial Plants Co. Inc. in 2007.

With the establishment of BGM Industrial Plants Co. Inc., the BGM Group was formed in 2007, the Group transformed to rendering services as a TURN-KEY EPC (complete ENGINEERING PROCUREMENT & CONSTRUCTION) contractor in Industrial Facilities, specializing in POWER GENERATION in Turkey & nearby geography. The group headquarters is located in Istanbul with offices in Yalova, Ankara and Moscow. With experienced personnel, majority of which are engineers specialized in Power Generation sector, BGM GROUP continues to strive for excellence in POWER PLANT ENGINEERING & AUTOMATION and TURN-KEY EPC SERVICES as its core business.

Customers looking for competitive, on-time, high quality, comprehensive EPC Services in the areas of Power, Industrial & Petro-chemical Plants, Gas Treatment & Gas Storage Facilities, Gas Compressor Stations, Refineries find BGM with no reservations. Reputation in rendering complete range of services, including EPC Turn-key, Engineering, Construction, Consultancy, Industrial Automation Applications, Plant Monitoring & Optimization Solutions, as well as Procurement, Boiler Manufacturing and Industrial Control & Measurement Equipment Supply, place BGM at a competitive level with the sector's giants. With strong supplier-contractor relationships, and a solid, dynamic know-how, BGM strives to render specially tailored Innovative Solutions for clients.

BGM Group's major principles are revealed by its core aspects: flexible group/company structure and management approach to meet project specific requirements; highly skilled Turnkey project

execution via accumulated know-how; quality oriented corporate procedures; a team of dedicated professionals; global company & team experience; well established relationships and experience with OEMs, equipment suppliers and local companies, and in-house engineering expertise.

Holding your hand from the start until the end is our job as BGM team is dedicated to satisfaction of clients, and to maintaining dynamic growth in providing quality services in: options ranging from individual services to EPC Turn-key Solutions in different geographical locations with a worldwide Procurement Capability, established Original Equipment Manufacturer Relationships, proven Engineering know-how, efficient use of Project Control & State of the Art Engineering Tools and Value Engineering.



KEY ACTIVITIES

Greenfield, Plant Rehabilitation, Modification & Retrofit works for Compressor Stations, Power Plants, Refineries, Petro-Chemical Plants; Industrial, Infrastructure, Gas Treatment/ Storage Facilities via following services:

- Engineering
- EPC
- Construction & Erection
- Commissioning
- Industrial Automation Applications
- Plant Monitoring & Optimization Solutions
- Industrial Control & Measurement Equipment Supply

PROJECT CAPACITY REACHED				
Status	Engineering		EPC	
Completed	2225 MWe		485 MWe	
	Aksa	750MWe	Entek	60MWe
	Entek	60MWe		
	Cerkezkoy	50MWe	Kayseri Şeker	15MWe
	Sadelmi	50MWe		
	Bosen	60MWe	Cerkezkoy	50MWe
	Ataer	60MWe		
	Kayseri Şeker	15MWe	Ataer	60MWe
	Ugur	60MWe		
	Ambarlı	810MWe	Ambarlı (Steam Turbine Island)	2x150 MWe
	Aksa	250MWe		
	Zorlu	60MWe		

Q & A; and ENVIRONMENTAL HEALTH & SAFETY

- Welder test and certification
- Inspection and Test (NDT, Hydrostatic test)
- Final Control and Run

Inspection;

- Supplier Facilities
- On-Site
- Manufacturing Activities
- Client Reports

On-Site;

- Quality Manager
- QC Inspector
- NDT Specialist

OHSAS 18001: 2007 Certification

- OHSAS 18001 Standards have been integrated into the BGM major services

- Health & Safety risks to employees, visitors and customers are assessed and analyzed at all locations.
- Factors carrying potential risk for human health are controlled via Risk Assessment Equipment & Studies
- Health & Safety policy in parallel with suppliers, assuring application of standards via controls and education tools such as contracts, seminars and procedures.

ISO 14001: 2009 Certification

- Protection of Environment
- Crucial factor integrated into all major BGM activities
- Ordinary & Extraordinary Processes are evaluated and controlled for environmental risks
- Striving for environmental protection and for minimizing environmental risks

ISO 9001: 2008 Certification Project Quality

- Inspection & testing requirements
- Quality Plan based upon ISO 9001: 2008 standard
- Minimizing Risk through QA/QC Planning
- Design Control
- Material Incoming control
- Measuring Control (after marking, cutting, erecting)
- Welding preparation (Preparing WPS and PQR)





“POWER GENERATION”

Process, Mechanical/Piping, Electrical/Instrumentation and Controls with Full In-House Expertise in:

Combined Cycle Power Plants

Co-Generation Power Plants

Coal Fired Power Plants

Power House for Process Plants

Power Plant Balance of Plant Equipments

Power Plant Automation

Medium & Low Voltage Electrical Design

Pressure Vessels, Storage Tanks, Fuel Transfer Systems

Fuel Treatment Systems

Water Treatment Systems

Exhaust Gas Cleaning Systems

Primary Codes and Standards

- ASME Section I (Boiler and Boiler Associated Equipment)
- ASME B31.1 (Power Plant Piping)
- ASME Section VIII (Pressure Vessels)
- ISA Standards for Control Valves and Instrumentation
- API Codes (Storage Tanks)
- VDE Codes (Electrical)
- IEC Codes (Electrical)

STATE of the ART ENGINEERING TOOLS:

- Bentley Products
 - > AutoPLANT Equipment V8i
 - > AutoPLANT P&ID V8i
 - > Bentley AutoPlant Piping V8i
 - > Bentley AutoPIPE V8i
 - > ProjectWise Navigator V8i
 - > Bentley Data Manager V8i
 - > Bentley Hookups V8i
 - > Bentley Instrumentation & Wiring V8i
- Werco 1.4.1
- Triflex Piping System Stress Analysis Software & Design
- AutoCAD 2009
- ETAP Power Station
- Aveva PDMS 12.0.SP6.7

Conceptual Design

- Plant Capacity, Heat Rate, Fuel Consumption Studies, Equip. & Tech. Assessments & Various Scenario Studies
- Preliminary Plant Performance Assessments (Heat & Mass Balances)
- Effluents & Emissions
- Auxiliary Power & Cooling Requirements
- Preliminary Electrical Single Line Diagrams
- Preliminary Site Arrangement
- Reporting & Documentation for:
 - » System Definitions
 - » License Application Deliverables

Basic Engineering

- System Descriptions and Design Criteria
- Thermal & Hydraulic Performance Requirements
- Consolidation of Standards/ Codes/Regulatory Requirements and Site Data
- Component List
- Process Flow Diagrams
- P & I Diagrams
- Pipe Sizing & Material Selection
- Interface Identification
- Definition of Operating Conditions
- Electrical Single Line Diagram
- Plant Control Philosophy

Detailed Engineering

- Mechanical & Process,
- Plant Layout & Mechanical Arrangements
- Piping Layouts, Isometrics and Material Lists
- Piping Stress & Support Design
- Sizing of Control Valves, Pumps, Heat Exchangers, Tanks, etc.
- Specifications & Datasheets for BOP of non-major equipment
- Arrangement & Nozzle orientation drawings for Atmospheric Storage Tanks / Pressure Vessel

Electrical,

- Grounding Network
- Cable Sizing Calculations
- Single Line Diagrams
- Short Circuit, Load Flow & Motor Starting
- Load List & Transformer Calculations
- Routing of Cable Trays
- Specifications & Datasheets of Electrical Erection Materials

Instrumentation & Control,

- Instrument lists, Signal Cable Lists & Connections
- Instrument Datasheets & Specifications
- Functional Descriptions & Logic Diagrams
- Control Panel Design



CONSTRUCTION

Construction

- Soil Improvement
- Reinforced Concrete Structures
- Special Equipment Foundations
- Steel Structures
- Water Structures
- Fuel / Water Tanks
- Pipelines
- Silos
- Stacks

ERECTION

- Combined Cycle Power Plant Installation
 - » Gas Turbine
 - » HRSG/OTSG
 - » Steam Turbine
 - » BOP (Cooling Towers, Water Treatment Units)
- Thermal Power Plant Installation
 - » Gas Fired Boilers
 - » Coal Fired Boilers
 - » Steam Turbines
- Pipelines
- Steel Constructions (incl. manufacturing)
- Tanks & Vessels (incl. manufacturing)
- Technological Equipment & Machinery
- Electrical Works (Low & High Voltage)
- Site Arrangement

COMMISSIONING

Commissioning

- Administrative, Technical & Testing Preparations:
 - » Field Start-up, Testing & Control Procedures
 - » Detailed Start-up Schedule Preparation
 - » Scoped Start-up Drawings
 - » Construction, Engineering & Sub-contractor Interface
 - » Major Equipment Testing & Plant Systems Start-up
- Performance Testing & Reporting
- Instruments for Temporary Measurement
- Fuel Sampling & Fuel Analysis
- Schedule & Resource Planning

On-site commissioning activities:

- Hydrostatic Testing
 - » Steam Blow
 - » Natural Gas
- Electrical Cable Tests
 - » Continuity Check
 - » Megger
 - » High Voltage
- Electrical Motors Phase & Rotation Check
- Equipment Alignment
- Verification of DCS Logic prior to shipment to the site
- Site Safety Regulations Compliance
- Field Coordination & Performance
- Records inclusive of major equipment initial run data
- Systems & Equipment Turn-over

INDUSTRIAL AUTOMATION APPLICATIONS

Control Systems Design, Supply & Implementation

- Control Architecture Design
- Control Panel Design
- Hardware, Software & Panel Supply
- Hardware/ Software Configuration
- HMI/ SCADA Configuration
- FAT (Factory Acceptance Test)

Control System Start-up

- SAT (Site Acceptance Test)
- Commissioning

I & C Supervision

- Instrument Selection
- Instrument Hook-up
- Instrument Loop Wiring Diagram
- Functional Diagram

PLANT MONITORING & OPTIMIZATION SOLUTIONS

Customized Industrial Application Solutions

- In-House Expertise
 - » Microsoft SQL Server
 - » Microsoft Visual Studio
 - » Microsoft Visual Studio .Net
- Alternative Technology Assessments & Selections
- Conceptual Communication Infrastructure Design
- Implementation of Chosen Communication Components

Enterprise Data Collection Systems

Plant Information Systems

- More than a Decade of Experience
- Communication to DCS/PLC/SCADA systems

- Unit, Plant-wide or Enterprise-wide Plant Information Systems
- Development of Custom Graphics and Reports
- Development & Implementation of Site, Company-Specific Tools & Applications
- Value- Added Reseller (VAR) of OSIsoft Inc., Plant Information PI System

Automated Meter Reading Systems

Industrial Communications

Systems Integration

- Integration of Islands of Automation
 - » OPC Technology – DA, A&E
- Integration with Business-Level Systems
 - » SAP
 - » ORACLE

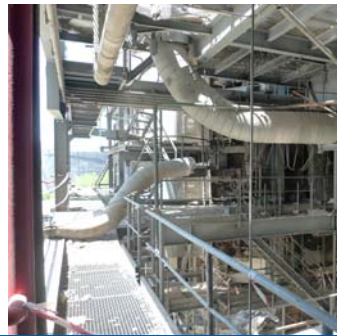
Power Plant Performance Monitoring & Optimization System:

Sigma Power

- An On-line, Real-Time Performance Monitoring & Optimization System
- Fully Developed in-House Systems
- Based on ASME standards & top-notch Industry Practices
- Modular Design
- Performance Modules
 - » GT, HRSG, FSG, STG, Block, Plant
 - » Actual, Expected & Corrected Performance Calculations
- Load Dispatch Optimization Module
- Hourly and Daily Capacity Forecasting Module



References



BGM

Owner: EUAS

Plant: Ambarli Power Plant

JV Contractor: Ekon Prokon Prokon (EPP) JV

Sub-contractor: BGM Engineering/ BGM Industrial

Contract Date 1/2: March 16th, 2010; Sept. 27th, 2010

End Date 1/2: July 22nd, 2012; Apr. 26th, 2012

Waste Heat Boiler: Austrian Energy (AEE) HRSG

Steam Turbine: Escher- WYSS-Oerlikon

Gas Turbine: Siemens SGT 4000F GT

ELECTRICITY GENERATION COMPANY (EUAS)

Ambarli 810 MWe Combined Cycle Power Plant

Project is the Repowering of 2x 150 MWe 4 & 5th Units of Ambarli Fuel Oil Power Plant to Dual-Fuel Combined Cycle Power Plant; with a capacity increase to 810 (2x-400 MWe) with the addition of two new Siemens 4000F Gas Turbines.

BGM Scope:

EPC Works for;

- Modernization of Steam Turbine and Generator Control and Protection System including new I&C and new Mechanical Scope.
- Steam Turbine Hall Mechanical Rehabilitation Works
- Implementation of Plant DCS System
- Plant Field Instrumentation
- Supply of LV Systems and Installation & Commissioning of Whole Electrical Balance of Plant

Combined Cycle Power Plant Engineering for;

- 2x Siemens SGT 4000F GT
- Replacement of Sulzer Boilers with 2x AEE HRSG
- 2x Existing Escher WYSS-Oerlikon ST Upgrade



BGM

Owner: Ataer Energy

Plant: Izmir Power Plant

Contractor: BGM Industrial

Contract Date: Aug. 1st, 2008

End Date: 2010

Boiler: IST (OTSG)

Gas Turbine: GE LM6000PC

ATAER ENERGY

Izmir 120MWe Combined Cycle Power Plant

Purpose of Izmir Extension Project is to add 60MWe additional generating capacity to Ataer's Izmir Plant and to take advantage of the presently unused steam swallowing capacity of the existing steam turbine to generate additional combined cycle power.

BGM Scope:

- Combined Cycle Power Plant Engineering & Design
- Plant Control (DCS / PLC)
- Equipment Supply of,
 - » Boiler Chemical Injection & Feedwater System and pumps
 - » Condensate Pumps & System
 - » Condensate & Air Removal Equipment
- Instrumentation & Control
- Mechanical Installation
- Electrical Installation
- Commissioning & Start-up



Owner: Azerenergy
Plant: Janub Power Plant
Contractor: Azenco
Sub-contractor: BGM Industrial
Contract Date: July 2012
End Date: Ongoing
Steam Turbine: Harbin
Gas Turbine: General Electric Frame 9E

AZERENERGY / AZENCO (Azerbaijan)

Janub 750 MWe Combined Cycle Power Plant

Project is 750 MW Combined Cycle Power plant consisting of 4x GE Frame 9E Gas Turbines, 4x Heat Recovery Steam Generators and 2x 125 MW Harbin Steam Turbines.

The Owner is State owned electricity production and distribution company Azerenergy and the the construction is completed by Azenco (Azerenergy owned construction company)

BGM Scope:

Erection Supervision, Complete Commissioning of the plant and Start-up

- Gas Turbines,
- Heat recovery steam Generators
- Steam Turbines
- All Plant Auxiliary equipment are
- Commissioned and started-up by BGM.



Owner: OMV (Austria)
Plant: Samsun Power Plant
Start of operation: 2013

OMV

Samsun 870 MWe Combined Cycle Power Plant

OMV (Austrian Energy Company) owned 870 MW Combined Cycle Power Plant is started operation in 2013.

BGM Scope:

- Long Term Service agreement for the following Plant divisions;
- Plant Control and Instrumentation
- Auxiliary Boilers
- Heat Exchanging Equipment



BGM

Owner: Entek Energy
Plant: Izmit Power Plant
Contractor: BGM Industrial
Contract Date: March 3rd, 2008
End Date: Sept. 9th, 2009
Boiler: IST (OTSG)
Gas Turbine: GE LM6000PC

ENTEK ENERGY

Izmit 160MWe Combined Cycle Power Plant

Purpose of Izmit Extension Project is to add 60MWe additional generating capacity to Entek's Izmit Plant and to take advantage of the presently unused steam swallowing capacity of the existing steam turbine to generate additional combined cycle power without significant steam cycle costs.

BGM Scope:

- Combined Cycle Power Plant Engineering
- Supply of MBOP & EBOP
- Transportation to the site
- Design & Construction of Civil Works and Buildings
- Detailed O&m Manuals, As- Built Drawings
- Providing design data, technical studies
- Work & Quality Assurance Procedures
- Commissioning & Start-up



BGM

Owner: Bromine Compounds
Plant: Bromine Recovery Unit Plant
JV Contractor: CTU Consortium
Sub-contractor: BGM Industrial
Contract Date: Sept. 10th, 2007
End Date: Dec. 18th, 2008

BROMINE COMPOUNDS

Bromine Recovery Unit Plant

Project is a turn-key project for collecting and burning the organic waste of BCL through a top fired static incinerator and recover heat via a water tube steam boiler fit for waste incineration (i.e. one with large radiation zone & designed for aggressive flow media and high dust load).

BGM Scope:

- Design, Manufacturing & Supply of Special Purpose HRSG (6T/h)
- Supply of HRSG Auxiliaries including:
 - » Feedwater Tank
 - » Deaerator
 - » Boiler Instrumentation



Owner: ERENCO
Plant: Erdemir Iron & Steel Factory Power Plant-40MWe 9th Steam Turbine Generator
Contractor: Skoda Power
Sub-contractor: BGM Engineering
Contract Date: Oct. 9th, 2006
End Date: July 30th, 2007
Steam Turbine: Skoda

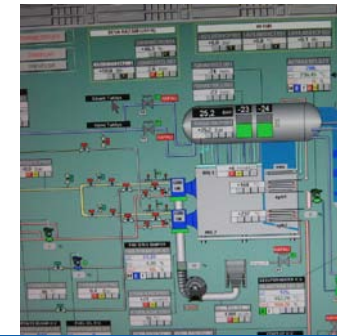
ERDEMIR ENGINEERING MANAGEMENT (ERENCO)

Erdemir Iron & Steel Factory Power Plant

Purpose of the project is to produce 40 MW additional electricity.

BGM Scope:

- Civil Works incl. Elevated ST Foundation
- Power House & Control Building
- HDPE Sea Water Cooling Pipe System, Cable & Pipe Bridges



Owner: Kayseri Bogazliyan Sugar Factory
Plant: Bogazliyan Sugar Factory
JV Contractor: Oyak Ekon Prokon (OEP) JV
Sub-contractor: BGM Engineering
Contract Date: Aug. 6th, 2005
End Date: July 6th, 2008
Steam Turbine: Siemens
Steam Boiler: Aalborg SteamGen
Control System: Siemens PCS7

KAYSERI SUGAR

Kayseri Bogazliyan Sugar Factory

Power plant of largest sugar factory in the world was designed and installed by BGM. The project consisted of turn-key supply of;

- Steam Production
- Electricity Production
- Balance of Plant

BGM Scope:

- Combined Cycle Engineering, Procurement, Erection, Commissioning & Start-up of 2x 75T/h Steam Boilers
- Erection, Commissioning & Start-up of 2x 7.5MWe Steam Turbines
- Engineering, Supply, Erection, Commissioning & Start-up of MBOP & EBOP



BGM

Owner: Cerkezkoy Energy
Plant: Cerkezkoy Cogeneration Power Plant
Contractor: Nar Engineering
Sub-contractor: BGM Engineering
Contract Date: Apr. 24th, 2005
End Date: June 15th, 2006
Boiler: IST (OTSG)
Gas Turbine: GE LM6000PC Sprint
Control System: Siemens PCS7

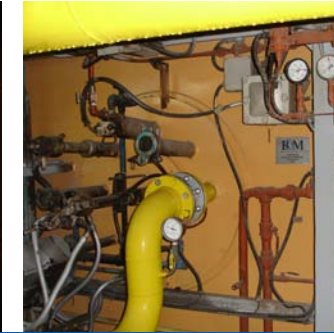
CERKEZKOY ENERGY

Cerkezkoy 48MWe Co-Generation Power Plant

Cerkezkoy Energy produces electricity and steam for the entire Cerkezkoy Organized Industrial Zone. This plant is unique in that it includes a Once-Trough Steam Generator (OTSG) which is the second application in Turkey.

BGM Scope:

- Power Plant Engineering & Applications
- Mechanical & Electrical Installation
- Power Plant Construction
- Supply & Erection of 5 km self-isolated underground steam distribution system
- Supply of Plant Control System



BGM

Owner: Sisecam Soda Industry
Plant: Mersin Soda Factory
Contractor: BGM Engineering
Contract Date: June 2004
End Date: March 2005
Burners: RJM
Control System: Honeywell Plantscape

SISECAM GROUP SODA INDUSTRY

Mersin Soda Factory

Soda Industry is member of the Sisecam Chemical Group- one of the four business groups of Sisecam. The company is the sole producer of soda ash and chromium chemicals in Turkey. Prior to Natural Gas conversion, the company's yearly fuel oil consumption was 250K Tones.

The project was completed in 3 months and boilers were not shutdown more than one week. After the conversion, efficiency of boilers increased by 18 - 23% and the rate of return of the investment was realized as only two months, whereas emission levels reduced to European Union acceptable standards

BGM Scope:

- Turn-key supply & replacement of 11x Fuel Oil Burners of 460T/h total capacity Steam Boilers (1x 120T/h; 1x 140T/h; 1x 200T/h) with Natural Gas including all fuel trains & control system.



BGM

Owner: Zorlu Energy
Plant: Luleburgaz Co-generation Power Plant
Contractor: Zorlu Industrial
Sub-contractor: BGM Industrial
Contract Date: July 3rd, 2008
End Date: Oct. 31st, 2010
Boiler: Deltak HRSG
Steam Turbine: Siemens
Gas Turbine: GE LM 600PC Sprint

ZORLU ENERGY

Luleburgaz 65MWe Co-Generation Power Plant

Design and engineering works of Luleburgaz Power Plant of Zorlu was performed by BGM.

BGM Scope:

- Simple & Combined Cycle Power Plant Engineering for:
 - » 1x 25MWe Siemens ST
 - » 1x GE LM 6000PC Sprint GT
 - » 1x Deltak HRSG



BGM

Owner: Ugur Energy
Plant: Cerkezkoy Combined Cycle Power Plant
Contractor: BGM Industrial
Contract Date: Dec.15th 2008
End Date: March, 2010
Boiler: IST (OTSG)
Gas Turbine: GE LM6000PC Sprint
Control System: Siemens PCS7

UGUR ENERGY

Cerkezkoy 65MWe Combined Cycle Power Plant

Cerkezkoy Combined Cycle Power Plant is planned to produce electricity via implementation of Once-Trough Steam Generator (OTSG) technology.

BGM Scope:

- Simple & Combined Cycle Power Plant Engineering
- Plant Control System Supply and commissioning



Owner: Aksa Energy

Plant: Antalya Aksa Combined Cycle Power Plant

Contractor: BGM Engineering

Contract Date: PartI/II/III: 01.10.2008;
01.10.2008; 02.09.2009

End Date: PartI/II/III: 09.30.2009;
Feb. 2009; 12.30.2010

Boiler: IST (OTSG); NE

Steam Turbine: GE Thermodyn; Siemens

Gas Turbine: GE LM6000PC/PD;
Siemens SGT 5 4000F

AKSA ENERGY

Antalya Aksa 1000MWe Combined Cycle Power Plant

Project is the construction of AKSA Energy's new power plant with an electricity generation capacity 1,000MWe.

BGM Scope:

Complete Power Plant Engineering; and site supervision

PART I Simple & Combined Cycle:

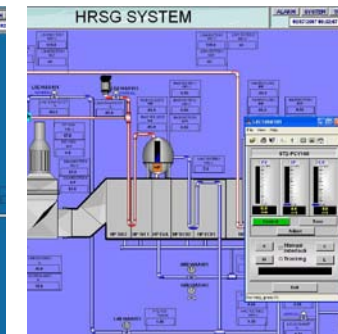
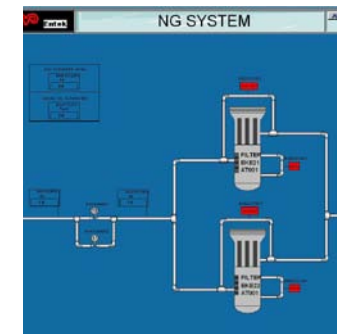
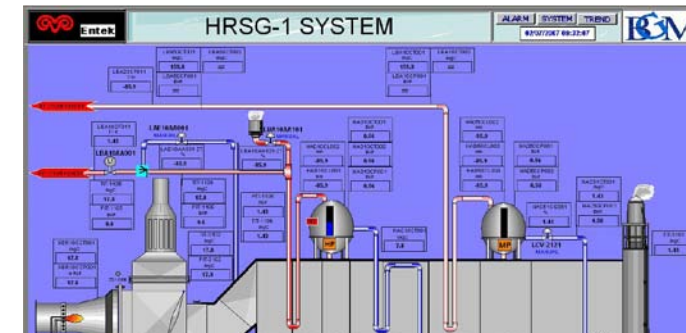
- 3x GE LM 6000 PC
- 1x GE LM 6000 PD;
- 4x IST HRSG;
- 2x 25 MWe GE Thermodyn ST

PART II Simple Cycle:

- 2x Siemens SGT 5 – 4000F;

Part III Combined Cycle:

- 2x NE HRSG;
- 1x 250 MWe Siemens ST



Owner: Turkish Petroleum Refineries

Plant: Tupras Izmir Aliaga Refinery
Combined Cycle PP

Contractor: Sadelmi SPA

Sub-contractor: BGM Engineering

Contract Date: Oct. 2006

End Date: Aug. 2007

Boiler: ABB

Gas Turbine: Siemens GT 10 B

Control System: GE Fanuc

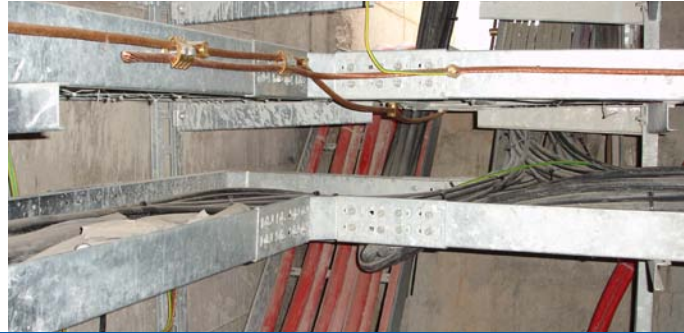
TURKISH PETROLEUM REFINERY (TUPRAS)

Tupras Izmir Aliaga Refinery Combined Cycle Power Plant

Relocation of Power Island from Entek Kocaeli Power Plant to
Tupras Izmir Aliaga Refinery.

BGM Scope:

- Power Plant Engineering, Control & Monitoring System Supply for Relocation of ;
 - » 1x Siemens GT & auxiliaries
 - » 1x ABB HRSG
 - » BOP
 - » Start-up & Commissioning



Owner: BOSEN Energy
Plant: Bursa Organized Industrial Zone CCPP
Contractor: Yalçın Engineering
Sub-contractor: BGM Engineering
Contract Date: Aug. 2004
End Date: 2006
Boiler: Aalborg SteamGen 8
Steam Turbine: Siemens
Gas Turbine: GE LM 6000 Sprint

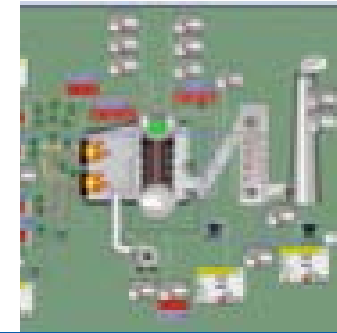
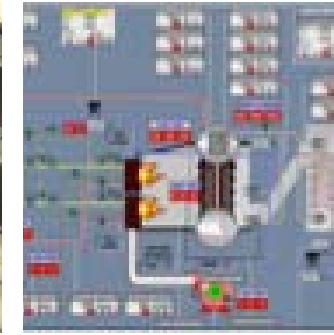
BURSA ORGANIZED INDUSTRIAL REGION ENERGY

Bursa 120MWe Combined Cycle Power Plant

BOSEN Phase II power plant produces electrical energy in a combined cycle application with a power output of 63MWe by burning natural gas or naphtha in the gas turbine for Bursa Organized Industrial Zone.

BGM Scope:

- Basic and Detailed Engineering of;
 - » 1x 60MWe GE LM 6000 GT
 - » 1x HRSG
 - » 1x 15MWe ST
 - » Cooling System
 - » Auxiliary Equipment



Owner: Enerjisa Energy
Plant: Adana Power Plant
Contractor: Gama Power Systems
Subcontractor: BGM Engineering
Contract Date: May 2003
End Date: Dec. 2004
Boilers: Babcock & Wilcox
Control System: Siemens PCS7

ENERJISA ENERGY

Adana Power Plant

Enerjisa is one of Turkey's largest and most distinguished electric power companies. Enerjisa's 120MWe Adana Power Plant has a steam boiler capacity of 2x 89T/h.

BGM Scope:

- Design, Supply, Implementation and Commissioning & Start-up of;
 - » Combustion Control & Burner Management System for 2x 89T/h Double Fuel Boilers
 - » Electrical, I&C Detailed Engineering



Owner: Entek Energy
Plant: Bursa & Iztek Co-generation Power Plants
Contractor: Gama Power Systems
Sub-contractor: BGM Engineering
Contract Date: July 2003
Finishing Date: Dec. 2005
Boilers: Gama

ENTEK ENERGY

Bursa & Iztek Izmit Co-Generation Power Plants

In 2003, Entek Bursa Co-generation Power Plant brought an additional 36MWe to the group's generation capacity. Entek purchased another 64MWe co-generation power plant in Izmit. With the acquisition of the latter power plant, namely Iztek, Energy Group's total generation capacity reached to 204MWe in 2004.

BGM Scope:

- I&C Detailed Engineering
- Instrument Installation Supervision
- Control Logic Design
- Boiler Commissioning & Supervision



Owner: Erdemir Iron & Steel Factory
Plant: Ereğli Iron & Steel Factory
 Co-Generation Power Plant
Contractor: Gama Power Systems
Subcontractor: BGM Engineering
Contract Date: March 2004
End Date: August 2005
Control System: ABB Infi90
Boilers: Babcock & Wilcox Gama

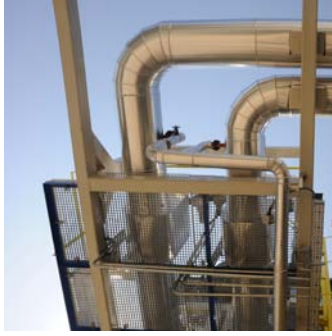
ERDEMIR IRON & STEEL FACTORY

Erdemir 80MWe Co-Generation Power Plant

Erdemir Iron & Steel Factory is the largest iron and steel company in Turkey and the only flat steel producer.

BGM Scope:

- Boiler modification works for 2x 65T/H HRSG including:
 - » I&C Detailed Engineering
 - » Electrical Engineering
 - » Start-up Supervision
 - » Control System Modification



Owner: Turkish Petroleum Refineries
Plant: Tupras Izmit Refinery
Contractor: Gama Power Systems
Sub-contractor: BGM Engineering
Contract Date: June 2004
End Date: Jan. 2006
Boilers: Gama

TURKISH PETROLEUM REFINERIES

Tupras Izmit Refinery

Tupras's main field of activity is to supply the Turkish market demand with petroleum products via processing crude oil.

BGM Scope:

- Design & Implementation of;
 - » I&C Detailed Engineering
 - » Electrical Engineering
 - » Instrument Installation Supervision
 - » Control Logic Design
 - » Boiler Commissioning & Start-up Supervision



Owner: Isdemir Iskenderun Iron & Steel Factory
Plant: Slab Casting Plant
Contractor: BGM Engineering
Contract Date: Dec. 2005
End Date: 2006
Control System: Siemens PCS7

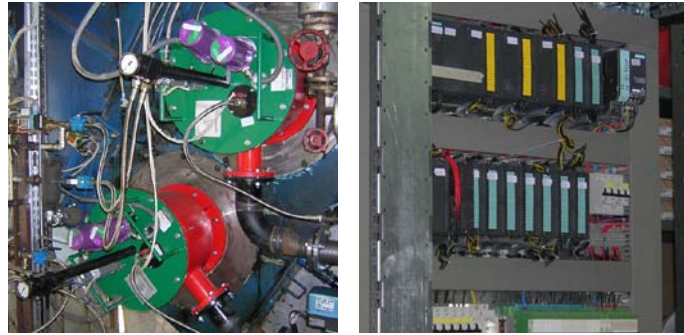
ISDEMIR ISKENDERUN IRON & STEEL FACTORY

Slab Casting Plant

Isdemir is the third biggest integrated iron and steel factory in terms of its production capacity of long steel products in Turkey. The project consists of modernization of Slab Casting Plant O₂ Pressure Reducing Station

BGM Scope:

- Designed & Turn-key supply of 6x Pressure Reducing Stations for Oxygen, Argon, Hydrogen
- Design & Supply of Control & Monitoring System
- Pressure Reducing Station
- Instrumentation & Automation of Slab Casting Gas Pressure Reducing System
- Supply of Additional Operator Stations
- Erection & Start-up



BGM

Owner: Advansa Sasa Polyester Industry
Plant: Adana Polyester Industrial Plant
Contractor: Gaz Teknik - SASA
Sub-contractor: BGM Engineering
Contract Date: February 2005
End Date: December 2005
Burners: Oertli
Control System: Siemens PCS7

ADVANSA SASA POLYESTHER INDUSTRY

Adana Polyester Industrial Plant

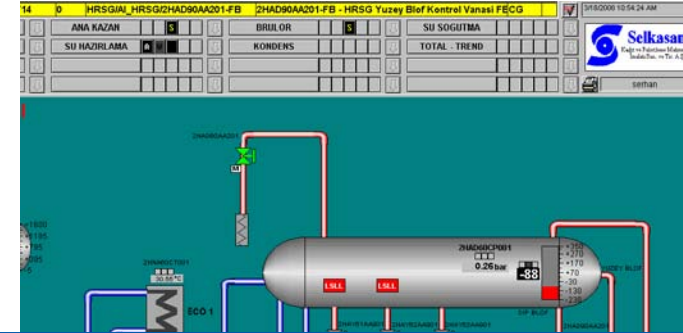
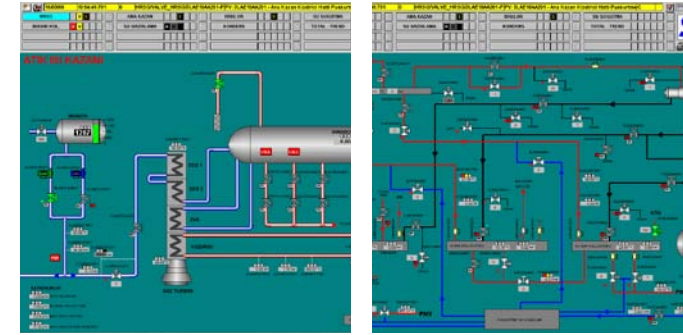
As the largest polyester producer of Europe, Advansa implemented Siemens architecture in the project, which was considered the largest industrial control project of its kind in Turkey.

With the upgrade of the Adana Industrial Facility, Advansa decreased its energy costs and helped maintain its competitive position at the global market.

BGM's installation of Burner Management System & Vaporizer Control System (upgrade) ensured operational continuity & safety; further enabling optimal use of the Thermex Boilers, i.e. heart of the polyester production.

BGM Scope:

- Burner Management System of 2x Double Fuel Burners for DOW-1 & DOW-2 Thermex Boilers
- Individual Vaporizer for Control System of 9x Boilers
- Redundant Master Control & Monitoring System for 9x Vaporizers
- Start-up & Commissioning



BGM

Owner: SCA Selkasan
Plant: Selkasan Paper Factory Power Plant
Contractor: BGM Engineering
Contract Date: Dec. 2007
End Date: Apr. 2008
Boilers: Babcock & Wilcock
Gas Turbine: Turbomach
Control System: Siemens PCS7

SCA SELKASAN

SCA Selkasan Paper Factory

SCA Selkasan, located in Manisa, is one of the largest paper factories in Turkey.

BGM Scope:

- Design & Supply of Steam Boiler, HRSG, Burner Management System
- Power Plant Automation including Control & Monitoring System of;
 - » 1x 9T/h HRSG
 - » 1x 42T/h Dual Fuel Conventional Boiler (BMS & Combustion Control)
 - » Balance of Plant
- Start-up & Commissioning



Owner: Akenerji
Plant: Yalova Power Plant
Contractor: BGM Engineering
Contract Date: March 2004
End Date: Oct. 2004
Control System: ABB Infi90

AKENERJI

Yalova Power Plant

Akenerji generates power and steam at its 12 Power Plants by employing co-generation and combined cycle technologies, and meets the power, steam and hot water requirements of over 600 industrial enterprises in an uninterrupted and reliable manner. Yalova Power Plant Burner Management Modernization and HRSG automation services were rendered by BGM.

BGM Scope:

- Combustion Control & Burner Management System
- Boiler Control System for;
 - » 3x 120T/H Dual Fuel Steam Boilers
 - » 2x HRSGs (1x Supplementary Firing)
 - » Modernization of BOP
- Start-up & Commissioning



Owner: Akenerji
Plant: Usak Power Plant
Contractor: BGM Engineering
Contract Date: May 2002
End Date: Dec. 2003
Boilers: Bill Boiler
Switchyard: Siemens
Control System: Siemens PCS7

AKENERJI

Usak Power Plant

Akenerji generates power and steam at its 12 Power Plants by employing co-generation and combined cycle technologies, and meets the power, steam and hot water requirements of over 600 industrial enterprises in an uninterrupted and reliable manner.

BGM Scope:

- Automation and Monitoring System Supply of;
 - » 3x 11T/h HRSGs
 - » Balance of Plant
 - » Switchyard
 - » Fire Fighting System



BGM

Owner: Akenerji
Plant: Denizli Power Plant
Contractor: BGM Engineering
Contract Date: March 2002
End Date: Aug. 2002
Boilers: 2X Omnical & 1X Umag
Switchyard: Siemens
Control System: Siemens PCS7

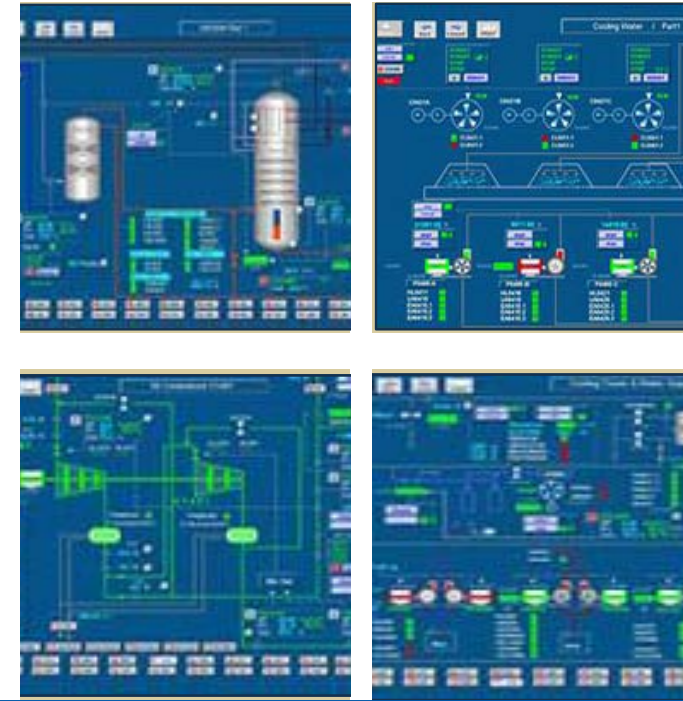
AKENERJI

Denizli Power Plant

Akenerji generates power and steam at its 12 Power Plants by employing co-generation and combined cycle technologies, and meets the power, steam and hot water requirements of over 600 industrial enterprises in an uninterrupted and reliable manner.

BGM Scope:

- Automation and Monitoring System Supply of;
 - » 2x 11T/h HRSGs
 - » 1x WHR Oil Heater
 - » Balance of Plant
 - » Switchyard
 - » Fire Fighting System



BGM

Owner: Erdemir Iron & Steel Factory
Plant: 5th Oxygen Plant
Contractor: BGM Engineering
Contract Date: May 2005
End Date: Dec. 2005
Control System: ABB Conductor NT

ERDEMIR IRON & STEEL FACTORY

5th Oxygen Plant

Erdemir Iron and Steel Factory is the largest iron and steel company in Turkey and the only flat steel producer. In 5th Oxygen Plant, Scadas at the DCS operator stations were modernized to work under new Symphony Series Conductor NT system; and some new hardware/ software were supplied for redundant operation & back-up facilities.

BGM Scope:

- Scada modernization of DCS for replacement with Symphony Series Conductor NT.



BGM

Owner: Habas Industrial & Medical Gases
Plant: Aliaga Steel Plant Combined Cycle PP
Contractor: BGM Engineering
Contract Date: May 2004
End Date: 2005
Steam Turbine: GE Thermodyn
Gas turbine: GE LM 6000
Switchyard: Siemens
Control System : GE Fanuc 90-70,
 Cimplicity PE Open Process

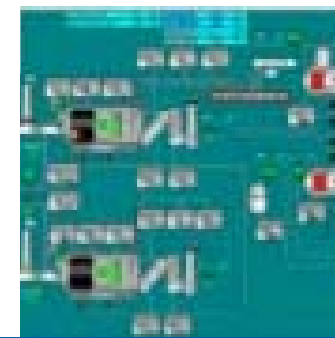
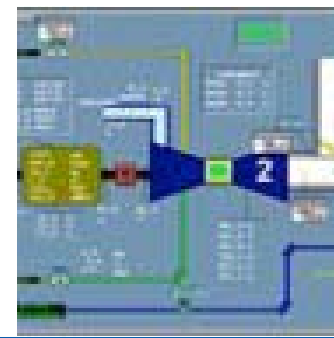
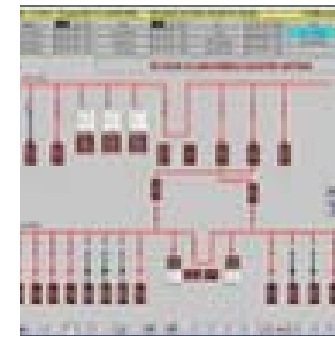
HABAS INDUSTRIAL & MEDICAL GASES

Aliaga Steel Plant 230MWe Combined Cycle Power Plant

With the rising energy demand of Habas, which is 10th largest exporter of Turkey, 230MWe Combined Cycle Power Plant investment at Aliaga Steel Plant was started.

BGM Scope:

- BOP design & Monitoring of;
 - » 2x 25MWe Thermodyn ST
 - » 4x 50MWe GE LM 6000 GT
 - » 4x 915kWe Chiller Group
 - » Demineralization Unit
 - » Boiler, Auxiliary Units & Hot Stand-by Redundant Control System of 4x 60T/h HRSG
 - » Hot Stand-by Redundant Control Switchyard Monitoring System for 154kV, 34.5kV Feeders & Load Frequency Control
- Start-up & Commissioning



BGM

Owner: ETI Mining Enterprise
Plant: Etibor –Emet Co-Generation Power Plant
Contractor: Oztas Construction
Sub-contractor: BGM Engineering
Contract Date: Aug. 2004
Finishing Date: Feb. 2005
Boilers: Umag
Gas Turbine: Turbomach
Switchyard: Siemens
Control System: Siemens PCS7

ETI MINING ENTERPRISE

Etibor-Emet Boric Acid 10MWe Co-Generation Power Plant

ETI Mining, the largest Boric Acid Plant located in Emet, opened in March 2004.

BGM Scope:

- Distributed Control & Monitoring System Supply, Engineering, Commissioning & Start-up of;
 - » 2x 25T/h Umag Boilers
 - » Turbomach GT
 - » 34.5kV Switchyard Systems
 - » Balance of Plant



References List

EPC/EPCM References

Customer/ Project	Project Scope	Completion Year
GARANTI & TSKB Banks, Turkey Atlas Energy Iskenderun Coal Fired 600MWe Thermal PP	Consultancy Services for Second Phase of 600MWe PP (Lender's Engineering)	2015
EKON PROKON PROKON, Turkey EUAS Ambarlı 810MWe Combined Cycle Power Plant Repowering	Modernization of Steam Turbine and Generator Control and Protection System including new I&C and new Mechanical Scope; Steam Turbine Hall Mechanical Rehabilitation Works; Implementation of Plant DCS System; Plant Field Instrumentation; Supply of LV Systems and Installation & Commissioning of Whole Electrical Balance of Plant	2012
ATAER ENERGY, Turkey Izmir 60MWe Combined Cycle Power Plant Extension	Engineering, Procurement, Automation & Commissioning of HP-LP Pressure Let down System	2012
AKENERJI, Turkey Bozüyük & Kemalpaşa Combined Cycle Power Plants	Engineering, Procurement, Installation & Commissioning of Natural Gas Preheating System for GE FRAME 6B and FRAME 6C	2012
ZORLU ENERGY, Turkey Luleburgaz CCGT Extension	Relocation of existing cogen plant consisting of 1 x Taurus 70 Gas Turbine, 1 x DESA HRSG and the relevant auxiliaries from their current installation in Kayseri to the Lüleburgaz Plant in Kırklareli.	2012
PALMET ENERGY, Turkey 60MWe Combined Cycle Power Plant	Simple & Combined Cycle Power Plant Engineering, Project Management	2012
ATAER ENERGY, Turkey Izmir 60MWe Combined Cycle Power Plant Extension	Supply & Erection of Heat Recovery Steam Boiler (OTSG), air cooled condenser; complete plant engineering; plant control system supply & implementation	2010

EPC/EPCM References

Customer/ Project	Project Scope	Completion Year
ENTEK ENERGY, Turkey Izmit 60MWe Combined Cycle Co-generation Plant Extension	Turn-key construction of GE LM 6000 Gas Turbine, Heat Recovery Steam Boiler (OTSG) and electrical/mechanical Balance of Plant including equipment foundations & complete civil works; complete plant engineering & control system extension	2009
DOGA ENERGY, Turkey Natural Gas Heating System	Supply and installation of natural gas heating system for 3x GE Frame 6 Gas Turbines	2008
CTU CONSORTIUM, Switzerland Bromine Recovery Unit Plant	Design and manufacturing of heat recovery steam boiler (6T/h)	2008
SKODA POWER, Czech Erdemir 40MWe Steam Turbine Generator Extension	Civil works including elevated steam turbine foundation, power house building, control building, HDPE sea water cooling lines, cable & pipe bridges	2007
EKON, Turkey Askale Fuel Oil Treatment Plant	Engineering, manufacturing, installation and commissioning of fuel oil treatment plant	2007
OYAK EKON PROKON, Turkey Kayseri Bogazliyan Sugar Factory	Engineering, procurement, erection and commissioning of 2x Steam Boilers (75T/h ea.), 2x Siemens Steam Turbines (8.2MWe ea.) & auxiliaries including boiler control system	2007
MASTIR ENERGY, Turkey Eren Corlu Power Plant	Engineering, supply, installation and commissioning of Dearator (53m³) for steam boiler (135T/h)	2007

EPC/EPCM References

Customer/ Project	Project Scope	Completion Year
ENERJISA, Turkey Kentsa Power Plant Auxiliary Boiler Extension	Design, manufacturing, supply & installation of heating coils for auxiliary boilers	2006
CERKEZKOY & NAR ENERGY, Turkey Cerkezkoy 48MWe Co-generation Power Plant	Turn-key construction of GE LM 6000 Gas Turbine, Heat Recovery Steam Boiler (OTSG) and electrical/mechanical balance of plant including equipment foundations and complete civil works; complete plant engineering & control system supply; 5 km self isolated underground steam distribution piping, instrumentation & control system	2006
SISECAM GROUP SODA INDUSTRY, Turkey Burner Replacement of 3X Boilers for Mersin Soda Factory	Replacement of 11x fuel oil burners of 3x boilers (460T/h total) with Natural Gas, including all fuel trains & control system	2005

Engineering References

Customer/ Project	Project Scope	Completion Year
EUAS AMBARLI, Turkey EUAS Ambarlı Combined Cycle Power Plant (Fuel Oil & Natural Gas)	Disassembly, Design, Manufacturing, Installation & Commissioning of HP Turbine Outlet & LP Turbine Inlet Pipes (including bypass lines) and of equipment for ST 20 & ST 30 Steam Turbines	2012
AKENERJI, Turkey Bozüyük & Kemalpaşa Combined Cycle Power Plants	Engineering of Natural Gas Preheating System for GE FRAME 6B and FRAME 6C	2012
ATAER ENERGY, Turkey Izmir 60MWe Combined Cycle Power Plant Extension	Engineering & Automation of HP-LP Pressure Let down System	2012
EKON PROKON PROKON, Turkey EUAS Ambarlı 810MWe Combined Cycle Power Plant Repowering	Basic & Detailed Engineering of 2x Siemens SGT 5- 4000F GT, 2x HRSG, Rehabilitation of 2x 150MWe existing Steam Turbines	2012
ZORLU ENERGY, Turkey Luleburgaz CCPP Extension	Engineering for relocation of existing cogen plant consisting of 1x Taurus 70 Gas Turbine, 1x DESA HRSG and the relevant auxiliaries.	2012
BAYMINA ENERGY, Turkey Combined Cycle Power Plant	Engineering of Gas Turbine Inlet Air Cooling System	2012
ZORLU ENERGY, Turkey Lüleburgaz 65MWe CCCP Extension	Basic and Detailed Engineering of GE LM 6000 GT, HRSG, Steam Turbine, ACC and Auxiliary Equipment	2011

Engineering References

Customer/ Project	Project Scope	Completion Year
AKSA ENERGY, Turkey Antalya 1000MWe Power Plant	Basic & Detailed Engineering of 4x GE LM 6000 GT, 4x HRSG (OTSG), 2x GE ST, 2x Siemens SGT 5- 4000F GT, 2x HRSG, 250MWe Steam Turbine, Cooling Systems & Auxiliary Equipment	2011
UGUR ENERGY, Turkey Cerkez koy 65MWe Combined Cycle PP	Simple & Combined Cycle Power Plant Engineering, System Siemens PCS7 Plant Control System Supply	2010
ATAER ENERGY, Turkey Izmir 60MWe CCGP Extension	Basic and Detailed Engineering of GE LM 6000 GT, HRSG (OTSG), Steam Turbine, ACC & Auxiliary Equipment	2010
ENTEK ENERGY, Turkey Izmit 60MWe Combined Cycle Co-generation Plant Extension	Complete Combined Cycle Power Plant Engineering	2009
OYAK EKON PROKON, Turkey Kayseri Bogazliyan Sugar Factory	Engineering for 2x Steam Boilers (75T/h ea.), 2x Siemens Steam Turbines (8.2MWe ea.) & auxiliaries including boiler control system	2007
SADELMİ SPA, Turkey Entek Power Plant Relocation	Basic and Detailed Engineering for relocation of ABB GT, Heat Recovery Steam Boiler from Izmit to Tupras Aliaga	2007
ZORLU ENERGY, Russia Kozhukhovo, Tereshkova 2X 170MWe Combined Heat & Power Plants	Engineering Management Services for Combined Heat & Power Plants	2007

Engineering References

Customer/ Project	Project Scope	Completion Year
AKSA ENERGY, Turkey Samsun Power Plant	Stress Analysis for DN300 Steam Piping	2007
OZTAS CONSTRUCTION, Turkey Botas Corum Natural Gas Compressor Station	Engineering Services for Corum Natural Gas Compressor Station	2007
EKON, Turkey Askale Fuel Oil Treatment Plant	Engineering & commissioning of fuel oil treatment plant	2007
MASTIR ENERGY, Turkey Eren Corlu Power Plant	Engineering & commissioning of Dearator (53m³) for steam boiler (135T/h)	2007
BOSEN, Turkey Bursa 63MWe CCGP Extension	Basic and Detailed Engineering of GE LM 6000 GT, HRSG, Steam Turbine, cooling system and Auxiliary Equipment	2006
ENERJISA, Turkey Kentsa Power Plant Auxiliary Boiler Extension	Basic & Detailed Design for manufacturing of heating coils for auxiliary boilers	2006
ERGAZ, Turkey Enerjisa Adana Combined Cycle Power Plant	Detailed Engineering of 2x GE Frame 6 B Gas Turbine Inlet Air Cooling Systems (chiller)	2006

Engineering References

Customer/ Project	Project Scope	Completion Year
GAMA POWER SYSTEMS, Turkey Entek Bursa & Iztek Izmit CCPPs Erdemir Power Plant Tupras Izmit Refinery	Design, Engineering and I & C of Heat Recovery Steam Boilers	2006
CERKEZKOY & NAR ENERGY, Turkey Cerkezkoy 48MWe Co-generation Power Plant	Complete Power Plant Engineering of GE LM 6000 Gas Turbine, Heat Recovery Steam Boiler (OTSG) and electrical/mechanical balance of plant including equipment foundations, Control System & Underground Steam Distribution Piping	2006
SISECAM GROUP SODA INDUSTRY, Turkey Burner Replacement of 3x Boilers for Mersin Soda Factory	Engineering for Replacement of 11x fuel oil burners of 3x boilers (460T/h total) with Natural Gas, including all fuel trains & control system	2005
CALIK ENERGY, Turkmenistan Buzmein Combined Cycle Power Plant	Basic Engineering for proposal	2005

Commissioning and Maintenance References

Customer/ Project	Project Scope	Completion Year
OMV, Austria Samsun Power Plant	Long Term Service agreement for the Plant Control and Instrumentation, Auxiliary Boilers, Heat Exchanging Equipment	2013
AZERENERGY, Azerbaijan Sirvan Power Plant	Erection Supervision, Complete Commissioning of the plant and Start-up	2012
EKON PROKON PROKON, Turkey EUAS Ambarlı 810MWe Combined Cycle Power Plant Repowering	Modernization of Steam Turbine and Generator Control and Protection System including new I&C and new Mechanical Scope; Steam Turbine Hall Mechanical Rehabilitation Works; Implementation of Plant DCS System; Plant Field Instrumentation; Supply of LV Systems and Installation & Commissioning of Whole Electrical Balance of Plant	2012
ATAER ENERGY, Turkey Izmir 60MWe Combined Cycle Power Plant Extension	Supply, Erection, Commissioning of Heat Recovery Steam Boiler (OTSG), air cooled condenser; complete plant engineering; plant control system supply & implementation	2010
ENTEK ENERGY, Turkey Izmit 60MWe Combined Cycle Co-generation Plant Extension	Turn-key construction of GE LM 6000 Gas Turbine, Heat Recovery Steam Boiler (OTSG) and electrical/mechanical Balance of Plant including equipment foundations & complete civil works; complete plant engineering & control system extension	2009
OYAK EKON PROKON, Turkey Kayseri Bogazliyan Sugar Factory	Engineering, procurement, erection and commissioning of 2x Steam Boilers (75T/h ea.), 2x Siemens Steam Turbines (8.2MWe ea.) & auxiliaries including boiler control system	2007
UNIT INTERNATIONAL, Turkey Rudeshur 750MWe Power Plant	Commisioning of instrumentation and Control System of 3x Siemens SGT 5- 4000F GT Power Plant	2005

Automation References

Customer/ Project	Project Scope	Completion Year
EKON PROKON PROKON, Turkey EUAS Ambarlı 810MWe Combined Cycle Power Plant Repowering	Unit Control System for 810MWe CCPP including 2x Gas Turbine, 2x Heat Recovery Steam Boiler, 2x Steam Turbine and BOP and Steam turbine control system modernization; Design, Implementation, Supply and Start-up	2012
TERMO HEAT Sivas-Kangal EUAS Power Plant	Implementation, Start-up & Commissioning of Siemens S7-3XX Boiler Control System	2011
UGUR ENERGY, Turkey Cerkezkoy Combined Cycle Power Plant	Automation of of CCPP including 1x Gas Turbine, 1x Heat Recovery Steam Boiler (OTSG), 1x Steam Turbine and BOP; Design, Implementation, Supply and Start-up	2010
ATAER ENERGY, Turkey Izmir Combined Cycle Power Plant Extension	Automation of CCPP extension including 1x Gas Turbine, 1x Heat Recovery Steam Boiler (OTSG) and BOP; Design, Implementation, Supply and Start-up	2010
AKENERJİ Uluabat Hydroelectric Power Plant	Wireless Data Communication, and control project	2010
ISTAC Odayeri Waste to Heat Plant	Control System Re-programming, Implementation, Start-up and Commissioning of 1x Fired Steam Boiler Burner Management System with Combustion Control; and BOP	2010
ENTEK ENERGY Bursa Power Plant	RF Data Communication System, Design, Supply and Commissioning.	2009

Automation References

Customer/ Project	Project Scope	Completion Year
ENTEK ENERGY, Turkey Izmit 60MWe Combined Cycle Co-generation Plant Extension	I & C Engineering and Commisioning Supervision of CCPP extension including 1x Gas Turbine, 1x Heat Recovery Steam Boiler (OTSG), and BOP.	2009
ISKENDERUN IRON & STEEL FACTORY, Turkey O ₂ Pressure Reducing Station	Instrumentation & Automation of Slab Casting O2 Gas Pressure Reducing System, Supply and Start-up	2009
ADVANSA, Turkey Adana Power Plant	Control System Implementation and Start-up for CIPS Transfer System	2009
OZG ENERGY , Turkey Hamitabat Power Plant	Fuel oil Storage and Distribution System Instrumentation Engineering and Supply	2008
ADVANSA, Turkey Adana Power Plant	2x HT Boiler Control System Design, Engineering including Burner Management System and Start-up	2008
DOGA ENERGY, Turkey Bahcesehir Power Plant	Monitoring System for Liquid Fuel Pressures of the Gas Turbines	2008
ENERJISA, Turkey Izmit Combined Cycle Power Plant	Isochronous Mode Scenarios Between Generators, Load Sharing, Load Shedding Automation	2008

Automation References

Customer/ Project	Project Scope	Completion Year
ISKENDERUN IRON & STEEL FACTORY, Turkey	Electrical, Automation, Instrumentation and Control Works	2008
Water Network Control & Monitoring		
KONYA SUGAR, Turkey	Electrical Systems & Automation of Pulp Drying Facility & Thin Juice Decalcification Unit and Lime Kiln	2008
Cumra Sugar Factory		
AKENERJI, Turkey	ABB Remote Terminal Unit (RTU) Data Exchange System	2008
Aksa Akal Factory		
SCA SELKASAN, Turkey	Automation of Steam Boiler, Heat Recovery Steam Boiler and BOP; Design, Engineering including Burner Management System, Implementation, Supply and Start-up.	2008
SCA Selkasan Manisa Power Plant		
ISKENDERUN IRON & STEEL FACTORY, Turkey	Turn-key Design, Implementation, Supply and Start-up of 6X O2 , Ar, H2 Pressure Reducing Stations, Control & Monitoring System, Pressure Reducing Station; Instrumentation & Automation of Slab Casting Gas Pressure Reducing System, Supply of additional operator stations	2007
Slab Casting Plant O ₂ Pressure Reducing Station		
SADELMİ SPA, Turkey	Distributed Control System (including site services), Supply, Engineering, Commissioning & Start-up of Heat Recovery Steam Boiler	2007
Aliaga Power Plant		
TERMO HEAT, Turkey	Burner Management System for 2x Double Fuel Burners, 4x Single Fuel Burners, Boiler Control Syatem for 4x Boilers (Siemens S7-300)	2007
Agri Sugar Factory		

Automation References

Customer/ Project	Project Scope	Completion Year
CERKEZKOY & NAR ENERGY, Turkey	Design, Supply, Engineering, Commissioning & Start-up of Distributed Control System.	2006
Cerkezkoy 48MWe Co-generation PP Plant		
AKENERJI, Turkey	Supply, Engineering, Commissioning & Start-up of Distributed Control System for 9 power plants located in different regions of Turkey	2002 2006
9x Co-generation Power Plants		
ERDEMİR, Turkey	Modernization of Distributed Control System	2006
Oxygen Plant # 5		
HABAS, Turkey	Distributed Control System, Supply, Engineering, Commissioning & Start-up	2006
Aliaga 230MWe Combined Cycle Power Plant		
OYAK EKON PROKON, Turkey	Complete Power Plant Distributed Control System, Supply, Engineering, Commissioning & Start-up	2006
Kayseri Sugar Factory Power Plant		
MILTEN, Turkey	Boiler Automation System	2006
GAZ TEKNİK - SASA, Turkey	Burner Management System for 11x Double Fuel Burners, Individual Vaporizer for Control System & Redundant, Master Control System for 9x Vaporizers	2005
Adana Polyesther Industrial Plant		

Automation References

Customer/ Project	Project Scope	Completion Year
SISECAM GROUP SODA INDUSTRY, Turkey Burner Replacement of 3x Boilers	Distributed Control System, Supply, Engineering, Commissioning & Start-up	2005
KAREGE, Turkey Kemalpasa Power Plant	Distributed Control System, Supply, Engineering, commissioning & Start-up of 3x HRSG & Balance of Plant	2005
OZTAS, Turkey Etibor-Emet 10MWe Co-generation Power Plant NG Conversion	Distributed Control System, Supply, Engineering, Commissioning & Start-up of HRSG, Balance of Plant & 34.5 kV Switchyard Systems	2005
GAMA POWER SYSTEMS, Turkey Adana Power Plant	Design, Supply, Implementation of Boilers Control Systems and Boiler Management System	2005