


CURRICULUM VITAE

NAME	Murat Bayrak	
CONTACT ADDRESS	Yahyakaptan M C-11 D: 32 41650 Izmit/Turkey Mobile. +90 532 653 76 32 E-mail muratbayrak.tr@gmail.com	
NATIONALITY	Turkish	
DATE OF BIRTH	25 th November 1972	
PLACE OF BIRTH	Berlin, Germany	
EDUCATION	BS Degree in Chemical Engineering, Anadolu University. (September 1989 – July 1993) Bach. Degree, Business Administration Faculty, Anadolu University. (September 2003 – June 2007) MBA, ESMT – European School of Management and Technology. (January 2010 – December 2010)	
LANGUAGES	Turkish (Native), English (Fluent), Spanish (Conversational), German (beginner)	
COMPUTER SKILLS	Microsoft Office and its Applications. WinPCS (project completions system). Co-Console (project completions system). Certified programmer for Dbase IV Plus.	
HOBBIES	Cinema, football (played 22 years, licensed, semi-professional), good music, and traveling. Has travelled in 15 Countries; Germany, Italy, England, France, Spain, UAE, South Korea, Japan, India, China, Hungary, Netherlands, Belgium, Portugal and Austria (40 cities).	
HEALTH	Excellent condition.	
OBJECTIVE	To work with an esteemed organization in a challenging and managerial position which provides healthy, competitive environment to grow and develop multi-disciplinary skills suitable to his professional experience and background.	

PUBLICATIONS

"Can Business Continuity Management (BCM) help refineries during catastrophic events?" Master Thesis, ESMT – Berlin/Germany, Nov 24, 2010.

"The costs, benefits and good practices of Business Continuity Management" Consulting during Practice Project for EON AG Dusseldorf, ESMT – Berlin/Germany, Nov 19, 2010.

"Plt-25 Crude Unit and Plt-21 SWS Unit Briefing" for Engineer Evaluation for Supervisor Selection at TUPRAS İzmit Refinery, May 17, 2000.

SCHOOLS ATTENDED

Ulku Primary School, Eskisehir, Turkey

Mehmetcik Secondary School, Eskisehir, Turkey

Bahcelievler High School, Eskisehir, Turkey

Anadolu University, Eskisehir, Turkey

MBA, ESMT (European School of Management and Technology), Berlin, Germany

Interlink Language School, Bournemouth, England

Enforex Language School, Madrid, Spain

SEMINARS ATTENDED

Refining & Petrochemicals - UOP, Turkey, July 2002

Fouling Control - NALCO, Turkey, January 2002

Corrosion Control in Crude Oil Overhead Systems - NALCO, Turkey, July 1999

DCS Automation Applications – HONEYWELL, Turkey, July 1999

Control Systems – HONEYWELL, Turkey, July 1999

Corporate Reputation: Understanding and Navigating the Reputation Economy - Dominik Heil, Managing Director of the Reputation Institute office in South Africa, October 2010

COURSES
ATTENDED

ESD – TRICONEX Configuration and Maintenance, Milan, Italy
December 2006,

Process Safety Management of Highly Hazardous & Explosive
Chemicals, September 2006

Safety and environmental risks determination and evaluation, British
Standard Institution, May 2006

PSSR Studies, Madrid, Spain, December 2005

Introduction to SAP; FICO, SD, HCM, MM, PM, October 2005

MQD Hydro Desulfurization Dewaxing Process Technology Training
Course, UOP, September 2005

Microsoft Windows XP and Microsoft Office 2003, June 2005

CCR Platforming Process – Standard for CycleMax and Atmospheric
Technology Training Course, UOP, May 2005

Cranes and Lifting works safety, March 2005

UPS systems maintenance and operation, February 2005

HAZOP Studies, Madrid, Spain and Seoul, S.Korea, May – June 2004

Radiometric Measurement Techniques, September 2003

TPS DCS Operation/Engineering Course – HONEYWELL, Abu
Dhabi, UAE, June 2000

5755 – GUS Implementation/Maintenance Course – HONEYWELL,
Abu Dhabi, UAE, June 2000

Radiation and Protection against Radiation – Turkish Atomic Energy
Institution, Turkey, June 2000

Unicracking Process Technology Training Course, UOP, May 2000

ISO 9001:2000 Introduction Training, BUREAU VERITAS

ISO 14001&OHSAS 18001 Integrated Introduction Training,
BUREAU VERITAS

Environmental Aspect Evaluation Training, BUREAU VERITAS

Risk Assessment Training, BUREAU VERITAS

EXPERIENCE SUMMARY

<u>YEAR</u>	<u>COMPANY</u>	<u>LOCATION</u>	<u>POSITION</u>
1995 – 97	BIRLAS TIRE	TURKEY	Production Supervisor Planning Department Supervisor Shift Manager
1997 – 98	TOPRAK CERAMICS	TURKEY	Quality Control and Packaging Supervisor
1998 – 2004	TUPRAS REFINERY IZMIT	TURKEY	Operations Supervisor: 44,000 BPD Crude-1 Plant 4,200 m ³ /D Vacuum-1 Plant 1,100 m ³ /D Desulphurisation-1 Plant 100,000 BPD Crude-3 Plant 110 T/D Sour Water Treatment 3,020 m ³ /D Deisopentaniser Section 4,200 m ³ /D Desulphurisation-3 Plant 2,225 m ³ /D Unifiner-3 Plant 2,225 m ³ /D Platformer-3 Plant 318 kg/h Atmospheric CCR Plant 250 m ³ /hr Demineralized Water Plant 150 T/hr HP Boilers 50 T Nitrogen Facilities Earthquake Repairs Project Crude-3, NHT-CCR.Plat/Rejen. DCS Modernization Project
2004 – 2007	TUPRAS REFINERY IZMIT	TURKEY	Commissioning & Operations Supervisor: 8,500 m ³ /D MQD Unionfining 8,824 kg/hr Sulphur Recovery Unit 357 sm ³ /hr Amine Regeneration Unit 143 T/hr Sour Water Treatment 4,500 m ³ /D NHT Plant 4,500 m ³ /D Platformer Plant 907 kg/hr CCR Plant (CycleMax) 108 T, 2 tank Nitrogen Facilities 1,130 T/hr Flare, 50 T/hr Acid Flare
2007 – 2010	TECNICAS REUNIDAS MADRID	SPAIN	Deputy Commissioning Manager: Utilities (Air, Cool. Water/Sea Water, Demin.Water/Condensate, Flare, LP/HP steam, Nitrogen)

			Offsite and internal/external interconnecting lines.
			Tank Farm (Propylene, Butene, Ethylene, Hydrogen, Gasoline, Butane, Ethane, Liquid Fuel, Sulphuric Acid, Caustic)
			Waste Water Treatment Plant
2010 – 2010	MBA at ESMT BERLIN	GERMANY	MBA Class of 2010: Practice Project (for EON AG) Master's Thesis, International Field Seminar in China MBA Curriculum
2011 – Cont.	Socar&Turcas Refinery ISTANBUL	TURKEY	Project Superintendent, Process: 214,000 BPSD Crude Unit 85,000 BPSD Vacuum Unit 650 t/D Saturated Gas Unit 700 t/D Saturated LPG Merox Unit 170 m ³ /hr Sour Water Stripping Unit 360 t/D Unsaturated Gas Unit 700 t/D Saturated LPG Merox Unit 20,000 BPSD Naphtha Hydrotreater Unit 28,000 BPSD Platformer Unit 1359 kg/hr Cyclemax-CCR Unit 66,000 BPSD Hydrocracker Unit 160,000 Nm ³ /hr Hydrogen Generation Unit 460 t/D Sulphur Recovery Unit 400 t/D Amine Regeneration Unit 26,000 BPSD Kero Hydrotreater Unit 68,000 BPSD Diesel Hydrotreater Unit 40,000 BPSD Delayed Coker Unit 811,000 kg/hr Flare, 63,400 kg/hr Acid Flare 9,500 Nm ³ /hr IA & PA system 3,600 kg/hr Caustic Neutralization Unit

EXPERIENCE

1995 – 96

BIRLAS TIRE

Bilecik
Turkey

POSITION

Shift Manager

Responsible for all factory divisions and personnel on 2 shift cycles. Divisions consist of: Utilities, Water Treatment, Boilers, Banbury, Tube and Tire Productions, Pirelli Tube Production, Quality and Package Department, Warehouses.

1995 – 96

BIRLAS TIRE

Bilecik
Turkey

POSITION

Production Supervisor

Responsible for Tube Production Division, Quality and Package Department.

1996 – 97

BIRLAS TIRE

Bilecik
Turkey

POSITION

Planning Department Supervisor

Responsible for all factory divisions: Raw Materials, Tube and Tire Productions Planning's, Pirelli Tube Production Planning, Package Department Planning, Export/Import Products Planning, Customer Orders Planning.

1997 – 98

TOPRAK CERAMICS

Eskisehir
Turkey

POSITION

Quality Control and Packaging Supervisor

Responsible for overall ceramic tiles quality. Package Department Planning, Export/Import Products Package Planning.

1998 – 2004

TUPRAS IZMIT REFINERY

Korfez/KOCAELI

Turkey

POSITION

Operations Supervisor on:

44,000 BPD Crude-1 Plant, 4,200 m³/Day Vacuum-1 Plant, 1,100 m³/D Desulphurisation-1 Plant, 100,000 BPD Crude-3 Plant, 110 T/D Sour Water Treatment, 3,020 m³/D, Deisopentaniser Division, 4,200 m³/D, Desulphurisation-3 Plant, 2,225 m³/D Unifiner-3 Plant, 2,225 m³/D Platformer-3 Plant, 318 kg/h Atmospheric CCR Plant, 250 m³/hr Badger Demineralized Water Plant, 150 T/hr Babcock-Willcock HP Boilers, 50 ton Nitrogen facility.

Commissioning Supervisor:

During refinery start-up following Earthquake Repairs Project, Crude-3, NHT CCR Platformer/Regeneration. DCS Modernization Project (Project Worth: \$ 75 Million)

DUTIES

Responsible overall for the safe and efficient operation of above units including all shift operating and maintenance personnel. Operating personnel working on four shift systems with 10 operators per shift plus 4 maintenance personnel. Also responsible for planning shut downs and turn-arounds during bi-annual maintenance.

Controlled daily operations of units according to the specified product requirements.

Prepared daily reports for refinery management.

Attended routine operational meetings which included documenting required changes in production operations and implementing instructions

Administered employee performance reviews, staff training and dealt with work-related problems. Motivating work force to ensure efficient and safe operation of units and equipment

Maintained close interface with related departments in order to sustain high performance production expectations.

Managed and planned emergency operations in case of electrical power failure or fire to ensure maximum safety and minimum damage to personnel and equipment.

Prepared monthly working reports, annual expenditure and investment, budget of the units.

Inspected and assessed conditions of equipment and materials for maintenance referral to relevant departments.

Maintained safety and sanitary conditions as part of plant requirements and local safety regulations.

Assessed demand of material and chemical consumption and informed related departments

Improved operational conditions to minimize expenditure and to maximize efficiency, eliminating problems by proposing solutions to project department.

Managed operations in performance shut-down and start-up on units

Weekend “on-call” duties covering all areas of 220.000 BPD refinery in role of Operations Manager.

Preparation of information as required by Refinery Management for ISO Standards.

SPECIALISED EQUIPMENT

AEG recycle hydrogen compressor, Pignone reciprocating compressors, Ingersoll Rand Pumps, Gabbioneta Pumps, KSB pumps, Peroni pump, Goulds pump, Allweiler pumps, Wirrilies pumps, Cycloblower, ITEM Blower, Carter Howden Blowers, Finder Blower, John Zinc Incinerator, Honeywell TPS DCS, Yokogawa Centum DCS, Triconex ESD, UOP catalyst (NHT, CCR.Platformer and Desulphurization), Badger Heaters, Babcock-Willcock HP Boilers, Bingham BFW pumps

NOTES

Following 1999 Earthquake disaster supervised repairs to refinery including the following: Renewal of all damaged off-site and unit pipes, Crude unit charge heater and associated pipes, Main Concrete Stack, John Zinc incinerator for Sour Water Stripper Unit, Desulphurization unit charge and reboiler heaters. After repairs commissioned above units plus NHT, CCR Platformer/Regeneration and put back into operation in with new Honeywell DCS (responsible for overall DCS implementation and start-up).

Also supervised start-up of utilities section including Superheated Steam Production boilers (4 Babcock Wilcox boilers) producing 150 t/hr 70 barg at 400°C for GE turbo generators (10 MW x 3 & 15 MW x 1).

2004 – 2007

TUPRAS IZMIT REFINERY

Korfez/KOCAELI
Turkey

<u>POSITION</u>	Commissioning & Start-up Supervisor NHT/CCR Platformer Plants, MQD Unionfining Unit, Amine Treater, Sour Water System, Flare and Acid Flare, Sulphur Recovery Unit and Nitrogen Plant. (Project Worth: \$ 350 Million)
<u>NOTE</u>	Turnkey Project
<u>SPECIALISED EQUIPMENT</u>	UOP Catalyst (NHT, Platformer, MQD), Boldrotth, Sundyne Blowers, Elliot-Ebarra Compressors, Mitsui Compressors, Elliot Turbines, Dresser-Rand Turbines, John Zinc Burners, Foxboro DCS, Triconex ESD, Yokogawa Centum-3000 DCS, Autosurge systems for compressors, Sundyne Pumps, WEG Pumps, Siemens Pumps, KSB Pumps
<u>DUTIES</u>	<p>Responsible overall for the safe and efficient commissioning and start-up of the new DHRP extension project on behalf of Tupras.</p> <p>The startup activities involve precommissioning, commissioning, start up, performance tests and operation of these integrated units, management of the operation personnel working in the complex and establishing the coordination among the project contractor, unit licensor and the unit operating personnel in execution of the procedures to meet the requirements of the startup activities. The activities related to the startup and test run of the complex were completed, provisional acceptance of these units have been attained and the units have resumed normal operation</p> <p>Attended PSSR studies</p> <p>Coordination of activities with TR commissioning group and UOP licensor.</p> <p>Directly responsible for organizing shift operations personnel (45 operators plus maintenance workers and instrument&electrical personnel).</p> <p>Preparation and Start-up of NHT/CCR (Regeneration included) Plants, MQD Unionfining Unit, Amine Treater, Sour Water System, Flare and Acid Flare, Sulphur Recovery Unit including all precommissioning and commissioning activities.</p> <p>Followed field erection and construction.</p> <p>Worked closely UOP operations personnel in start-up and running of Plants.</p> <p>Prepared all start-up procedures i.e. Plant preparation, Line flushing & Blowing, Catalyst Loading, Turbine & Compressor testing, and Plant Start-up.</p>

Commissioned waste heat boilers.

Prepared Nitrogen system.

Tested all turbines & compressors.

Supervised catalyst loading.

Commissioned 1,000 T Amine Storage Tank

Trained operating personnel, Prepared and supervised training of new operating personnel on new equipment

Supervised Plant Acceptance Test.

Worked in close cooperation with TR commissioning team in preparation of Plant for Start-up & Operation.

Personally supervised all Line Blowing, Catalyst Loading, Vessel Inspection, checking, cleaning. Line hydro test, cleaning/ Flushing. Steam blowing, target cleaning. Leak test, refractory dry out, Inertization. Rotary equipment trial run. Hydrocarbon inventory, start-up. Documentation for all these listed activities and all related pre-commissioning activities. Inspected all equipment internals final inspection including reactors and regeneration equipment. Prepared SOP and manuals.

Directed plant and maintenance personnel activities and supervised all phases of Start-up (~ 90 workers).

Coordination with contractor people.

Arranged daily meetings between TUPRAS and TR/AA Joint Venture (plant co-ordination meetings with commissioning Team). Managed and controlled start-up group activities regarding flushing and line blowing activities, testing of new pumps, reciprocating and centrifugal compressors. Advised operators on start-up techniques associated with new equipment and process units.

Attended Hardware and Software FAT (Factory acceptance Test) for DCS and ESD activities in Madrid (5 weeks)

Attended HAZOP studies for NHT/CCR/SWS/ARU units in Seoul (S.Korea) (4 weeks), MQD, SRU units and Flares in Madrid (6 weeks)

Made PFD reviews

Made P&ID reviews and prepared modifications of necessary parts of items and supervised them in the plant during modifications.

Designed Plants' graphic pages in DCS system creating sections from P&ID's related to the operation philosophy.

Checked databases against P&ID's and prepared control lists-punch lists.

Checked re-acceleration studies and commented according to operations philosophy.

Prepared all punch lists (around 14.000 items) comparing P&ID's with plants' as built drawings.

Spent total of 5 months in the Project Liaison Office in Madrid and Seoul during the engineering phase of the project to work in completion of the engineering specifications for the project.

Participated in the negotiations with the unit licensor, preparation of the basic engineering design for the units, contract bidding documents for the project and technical specifications for the project.

Provide technical input as required by the EPC contractor and others in the development of the design and detailed engineering from operations point of view

Trained 2 fresh engineers for overall complex

2007 – 2010

TECNICAS REUNIDAS

MADRID
Spain

POSITION

Deputy Commissioning Manager for Borouge-2 Project
(Project Worth: \$ 1, 4 Billion)

NOTE

Turnkey Project

SPECIALISED
EQUIPMENT

Hitachi Cooling Water and Sea Water pumps, Cameron air compressor, PDC Hydrogen compressor, Burckhardt BOG compressor, CBI cryogenic (propylene) storage tank, Honeywell TDC-3000 DCS (MAC), METITO Waste Water Treatment Plant, Carter Cryogenics submerged propylene tank pumps, SHIN NIPPON turbines, Lucy software (Co-Console)

DUTIES

Responsible overall for the safe and efficient commissioning and startup of the new Borouge-2 extension project on behalf of Tecnicas Reunidas as Deputy Commissioning Manager (for Utilities and Offsite: CBI Propylene Tank, Ethane Sphere Tanks, Closed Circuit Cooling Water System along with Sea Water System, Plant&Instrument Air System, Off-sites and internal/external interconnecting lines, Ethylene Vaporizer and

transfer system, Ethylene/Propylene Transfer System, Butene Sphere Tanks, Hydrogen Compressor and Storage Packages, Liquid Fuels Storage, Gasoline Storage, Butane Storage, Fuel Gas System, LP/HP Steam Distribution, Condensate Polishing and Demineralized Water Systems, Sulphuric Acid Storage, Caustic Storage, Nitrogen Distribution, EU2, OCU, HP PO, LP PO Flares, Waste Water Treatment Plant

Responsible from Maintenance, Operations and Training division. Worked together with MOT in the development of the execution plans for Operations, Maintenance and Training, Planning and contracting the development of operations and maintenance manuals and procedures, develop training plans, normalization and performance test runs of the U&O facilities for Borouge-2 project, execution of the maintenance plans from pre-commissioning until partial acceptance, implementation of training plans for operators, maintenance technicians and plan availability engineers.

Responsible from MOC (Management of Change) for commissioning department including Maintenance, Operations and Training division.

Preparation and Start-up of all sections in the project including precommissioning and commissioning activities.

Coordination of activities with Tecnicas Reunidas and Borouge-2 Commissioning Groups. Leading the Commissioning Teams

Manpower planning for the commissioning personnel including MOT team

Participation/coordination of meetings with customer/PMC and all relevant parties (subcontractors, vendors, project's other EPCs) during the overall project phase

Participated in project team; ensured that all engineering design meets the requirements of applicable codes and standards and that work is performed in accordance with approved procedures and quality requirements

Participation of daily construction meetings

Participation/coordination of daily commissioning meetings (EPC, PMC and client)

Prepared/reviewed all precommissioning and commissioning procedures

Controlled and supervised of Kizer Energy (subcontractor for the project documentation preparation)

Prepared systemization of P&ID's

Attended HAZOP studies for the project (in Madrid and Sharjah)

Attended PSSR studies

Attended PDRI reviews for the project (in Madrid and Abu Dhabi)

Made P&ID reviews (in Madrid and Abu Dhabi)

Made 3D Model reviews (in Madrid and Sharjah)

Checked re-acceleration studies and commented according to operations philosophy.

Joined to project team during engineering (Operations input). Participated basic and detailed engineering related to the project,

Followed field erection and construction.

HSE for Commissioning/Start-up planning (together with Project Management and HSE)

Prepared Logic Diagram for Commissioning & Start-up,

Prepared Commissioning & Start-up activities for the project Planning Team

Prepared the list of technical deliverables and ensured the timely submission of these deliverables

Coordinated and oversaw all commissioning activities by sub-contractors

Prepared progress report (complete monthly/weekly report with commissioning planner)

Created punch lists and managed together with customer and construction management

Responsible for the production of all reports on punch lists, percentage completion by check sheets, sub-systems, systems and units (used Co-Console)

Responsible overall Handover (including documentation and test runs and test-protocols; updating and finalizing with client), Handover of project (or systems) to customer by handover certificate

Responsible from RFT (Right First Time) program for the project, organized RFT workshops, prepared and issued related reports and documentation

Participated technical bid evaluations, commercial bid evaluations, contract negotiations and agreement with project subcontractors (including correspondences with bidders)

Monitored and evaluated key technical staff provided by the subcontractors for the commissioning team and ensured that they have the knowledge, experience and capability to deliver project requirements

2010 – 2010

MBA

ESMT (European School of Management and Technology)

BERLIN
Germany

CLUB MEMBER

Investment Club

MASTER CLASSES

- Dr. Frank Appel, CEO Deutsche Post AG
- Dr. Micheal Haidinger, President Rolls Royce Deutschland
- Derk Haank, CEO of Springer Science+Business Media
- Dr. Marijn Dekkers, CEO of Bayer AG
- Dr. Grube, Chairman of the Management Board and CEO, Deutsche Bahn AG
- Georg Knoth, CEO & Regional Executive of GE in Germany, Austria and Switzerland
- Jeffrey Immelt, GE's CEO (video lecture from UC Berkeley's Haas Business School)
- Carlo Vassallo, CEO, Ferrero Deutschland
- Dr. Andreas Wiele, Member of the Management Board, Axel Springer AG and Head of BILD Division and Magazines
- Frank Mattern, Director and Managing Partner Germany, McKinsey

CURRICULUM

Integrative Leadership Exercise, Microeconomics, Introduction to Marketing, Organizational Behavior, Decision Making, Accounting, Managerial Accounting, Business Statistics, Marketing Management, Introduction to Finance, Foundations of Business Strategy, Operations Management, Corporate Finance, Macroeconomics, International Field Seminar (China), Corporate Strategy, Foundations of Strategic HRM, Global Marketing Strategy, Strategic Finance & Valuation, Consulting Week, Intopia Week, Becoming a responsible leader Part I, Markets and Regulations, International Finance, Strategic Innovation & Creativity, Competitive & Dynamic Pricing, Driving Marketing Decisions from Data, Doing Business in Developing Countries, Managing New Product Design and Development, Capturing Value from Innovation, Information Management and IT Strategy, Entrepreneurship, Sustainable Business, Behavioral Finance, Bringing Technology to Market, Becoming a responsible leader II

PRACTICE PROJECT "The costs, benefits and good practices of Business Continuity Management" Consulting during Practice Project for EON AG Dusseldorf, ESMT – Berlin/Germany, Nov 19, 2010.

MASTER'S THESIS "Can Business Continuity Management (BCM) help refineries during catastrophic events?" Master Thesis, ESMT – Berlin/Germany, Nov 24, 2010.

2011 – Present STAR (SOCAR&TURCAS Aegean Refinery)

ISTANBUL
Turkey

POSITION Project Superintendent for STAR Project, 214.000 BPD Refinery (Project Worth: \$ 4, 5 Billion)

NOTE Turnkey Project

SPECIALISED EQUIPMENT Crude Unit, Vacuum Unit, Saturated Gas Unit, Saturated LPG Merox Unit, Sour Water Stripping Unit, Unsaturated Gas Unit, Unsaturated LPG Merox Unit, Naphtha Hydrotreater Unit, Platformer Unit, CycleMax-CCR Unit, Hydrocracker Unit, Hydrogen Generation Unit, Sulphur Recovery Unit, Amine Regeneration Unit, Kero Hydrotreater Unit, Diesel Hydrotreater Unit, Delayed Coking Unit, Flare, Acid Flare, Natural/Fuel Gas Unit, Plant&Instrument Air System, Caustic Neutralization Unit, Jetty-1, Jetty-2, Jetty-3, Off-sites and internal/external interconnecting lines, Tank Farm, Caustic Storage, Nitrogen Distribution.

DUTIES Worked closely with licensors during preparation of BEDP of refinery units

Worked closely with FEED Contractor during preparation of FEED of refinery units

Worked closely with PMC (Flour – Amsterdam) during preparation of BEDP for overall refinery

Worked closely with PMC (Flour – Amsterdam) during preparation of FEED of refinery units

Attended HAZOP studies for the project (in Milan)

Attended PDRI reviews for the project (in Amsterdam)

Made PFD and P&ID reviews (in Milan and Istanbul)

Prepared Emergency Load Philosophy for Hydrocracker, Crude and Vacuum Distillation Units

Reviewed and commented datasheets, drawings, engineering reports and studies

Reviewed and commented production of engineering design books, manuals and other documents

Participated in Level-3 FEED Cost Estimation (in Milan and Istanbul)

Participated in EPC contract negotiations for OBE (in Milan, Amsterdam and Istanbul)

Participated in preparation of ITB for the refinery

Participated in preparation of project specifications

Participated in preparation of Vendor List for the project

Participated in preparation of Fire Fighting philosophy for the project

Participated in preparation of ESIA for the project

Participated in preparation of LLI for the project

Participated in preparation of Plot Plan study for overall refinery

Participated in preparation of training requirements for the refinery

Participated in meetings with DCS and ESD system vendors (Honeywell, Yokogawa, Foxboro) prior to MAC (Main Automation Contractor) selection

Participated in coordination meetings with PETKIM (petrochemical facility where refinery will supply feed to and will get utilities from)

Participated in preparation of WWTP tender (by PETKIM)

Participated in preparation of Cooling Water Towers tender (by PETKIM)