



REFRACTORY INSPECTION AND QUALITY CONTROL

Our specialist engineers have performed refractory inspection/Quality Control on the following FCC units and vessels:

CLIENT/LOCATION

DESCRIPTION

ESSO Fawley	Flue Gas Ducting 1979/80
BP Rotterdam	Grassroots FCC - Anchorage Inspection 1980
TEXACO Pembroke	Main Stack Lining Supervision 1980
ESSO Fawley	Regenerator Cyclones 1981
ESSO Fawley	Waste Heat Boiler 1981
BP Llandarcy	FCC T/A - Cyclones and Riser repairs 1981
SHELL Pernis	Regenerator Cyclones Inspection 1981
ELF Donges	FCC T/A 1981 Inspection and Supervision
ICI Wilhelmshaven	External Third Stage cyclones 1981
PO REFINERY Sannazzaro	FCCU T/A Inspection and Supervision 1981
PETROLIBER La Coruna	Grassroots FCC 1981/82 Inspection and Supervision
MOBIL OIL Coryton	Grassroots FCC 1981/82 - Core sampling of linings for analysis
ESSO Augusta	Reactor/Regenerator Cyclones and Transfer Lines 1981/82
ESSO Trecate	Flue Gas Cooler 1982
ESSO Trecate	Reactor Cyclones 1982
ESSO Augusta	Supervision of FCC complete T/A 1982
ESSO Pappas	Fired Heaters 1982
SIBP Antwerp	FCC T/A 1982 Reactor Cyclones
MOBIL OIL Yanbu	Grassroots Refinery 1982/83 Project Team Member responsible for all Refractory works
PETROMED Spain	Complete new Grassroots FCC 1982/83
MOTOR OIL HELLAS Corinth	FCC Dry-out 1983
SCANRAFF Lysekil	Grassroots FCC - Off-sites Inspection and Supervision 1983
AMOCO Milford Haven	FCC Ducting 1983
ANIC Gela	FCC Upgrading Project 1983
MOBIL OIL Coryton	FCC T/A 1983 Inspection and Supervision
SIBP Antwerp	Reactor Sub-units 1983
ELF Feyzin	On-site Slide Valve repairs Inspection 1984
PETROLIBER La Coruna	FCC T/A 1984 Inspection and Supervision
ESSO Dansk	Powerformer Reactor 1984
MOTOR OIL HELLAS Corinth	Expansion Joints 1984
ESSO Flexicoker, Rotterdam	Venturi Scrubber 1984
ESSO Flexicoker, Rotterdam	All Transfer Lines 1984
ESSO Flexicoker, Rotterdam	Heater Cyclones 1984
ESSO Flexicoker, Rotterdam	Venturi Separator 1984



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ESSO Flexicoker, Rotterdam
ESSO Flexicoker, Rotterdam
ESSO Flexicoker, Rotterdam
ESSO Flexicoker, Rotterdam
ESSO Flexicoker, Rotterdam
ESSO Fos
DKV Szazhalombatta
ERDOEL Neustadt

BP Llandarcy
ESSO Fawley
ESSO Antwerp
ELF Grandpuits
ESSO Rotterdam

MONTEDISON Priolo
VISHAKHAPATNAM India
ESSO Augusta

MOBIL OIL Coryton

CRD TOTAL Gonfreville
MOTOR OIL HELLAS Corinth
ANIC Gela
CRD TOTAL Gonfreville

ESSO Port Jerome
ESSO Fawley
ESSO Karlsruhe
ESSO Fawley
ESSO Port Jerome

MONTEDISON Priolo
OMV Vienna

SIBP Antwerp
ASPROFOS Athens
ASPROFOS Athens

NESTE OY Porvoo

ESSO Trecate
PETROMED Spain
EMP Puertollano

ESSO Port Jerome

VPS Liner 1984
Quench Vessel 1984
Sulphur Convertors 1984
Steam Reformer 1984
Fired Heaters 1984
Regenerator Cyclones 1984
Grassroots FCC - In-situ erosion testing 1984
FCC T/A 1984 Regenerator Cyclones and Reactor Wye Piece Inspection
FCC Slide Valves 1984
Main Riser and Standpipe 1984
Reactor/Transfer Lines 1984
Regenerator Cyclones 1984
Complete Inspection of Flexicoker/ Sulphur Facs/Hydrotreater Stacks 1984/85
Regenerator Cyclones 1985
Expansion Joints
Inspection and Consultancy of FCC/ ALKY/Sulphur Linings T/A 1985
FCC T/A 1985 Inspection and Consultancy Reactor Cyclone System Inspection and Supervision Regenerator Standpipes Lining Design/ Specification Regenerator Cyclones 1985
FCC T/A 1985 Inspection and Supervision
FCC T/A 1985 Inspection/Supervision/ Consultancy
Inspection and Consultancy of FCC Refractory Linings T/A 1985
FCC T/A 1985
Tertiary Cyclones/Deflector Plate 1985
Cooler Rotors 1985
Regenerator Cyclones 1985
Complete Inspection of Refractory Lining in Regenerator Cyclones (in-situ) 1985
Orifice Chamber Inspection and Supervision 1985/86
Inspection and Supervision of Reactor Wye Piece Vibro-cast 1986
FCC T/A 1986 Inspection and Consultancy
Inspection and Consultancy of new Fired Heaters 1986
FCCU new construction 1986 - Inspection and Supervision of all Refractories
FCC T/A 1986 Refractory Consultancy on gunning techniques
Erosion Resistant Lining Consultancy 1986
FCC T/A 1986
Inspection and Consultancy of FCC Refractory linings T/A 1986
APS T/A 1986 - Inspection of Sprayable Ceramic Fibre in Heater



CRD TOTAL La Mede	FCCU T/A 1986 - Inspection and Supervision of all Refractory repairs.
ESSO Port Jerome	Emergency Shutdown FCCU 1986 Inspection and Consultancy
ESSO Port Jerome	Inspection of Vibro-cast Refractory in new J-bend Riser and Flue Gas Lines 1986
ESSO Port Jerome	Inspection of Anti-acid Refractory in new Auxiliary Stack 1986
ESSO Port Jerome	FCCU T/A October-November 1986 - Inspection of all Refractory repairs
ESSO Port Jerome	Regenerator Cyclones 1986
ESSO Port Jerome	Guillotine Dampers and Auxiliary Stack 1986
SHELL UK Stanlow	Inspection of new FCC Regenerator 1986
SHELL UK Stanlow	Superheater 1986
SHELL UK Stanlow	CO Boiler 1986
SHELL UK Stanlow	Regenerator Cyclone 1986
SHELL UK Stanlow	Flue Gas Ducting and Spray Shields 1986
SHELL UK Stanlow	Catalyst Hoppers 1986
SHELL UK Stanlow	New FCC Reactor Riser, Stripper, Standpipe and Cyclone System 1986/87
KUWAIT NATIONAL PETROLEUM	Vibro-cast of Wye Piece and Gunnite of Regenerator 1986/87
SHELL UK Stanlow	Catalyst Coolers 1987
SHELL UK Stanlow	Auxiliary Burner 1987
SHELL UK Stanlow	Expansion Joints 1987
CRD TOTAL Dunkerque	Regenerator Cyclones 1987
CRD TOTAL Dunkerque	Reactor Cyclones 1987
CRD TOTAL Dunkerque	New Reactor Riser 1987
ELF Grandpuits	Rough Cut Cyclones 1987
ELF Grandpuits	New Flue Gas Line Vibro-cast 1987
MOBIL Coryton	Emergency FCCU Turnaround 1987
ELF Grandpuits	New Reactor Riser 1987
BP Lavera	FCC Turnaround 1987
ELF Grandpuits	FCCU Turnaround 1987
CRD TOTAL Gonfreville	Emergency Shutdown FCCU 1987 Inspection and Consultancy
MOBIL Worth	Reactor, Cyclones and Stripper 1987
BP Vohburg	Reactor Riser Vibro-cast 1987
STATOIL Mongstadt	CO Boiler 1987
STATOIL Mongstadt	Vibro-cast of Flue Gas System and Stack 1987
CRD TOTAL Dunkerque	Inspection and Consultancy of FCC Refractory Linings T/A 1987
ECOPETROL Columbia	FCCU Turnaround 1987
STATOIL Mongstadt	Auxiliary Burner 1987
STATOIL Mongstadt	Hot Wall & Cold Wall Expansion Joints 1987
MOBIL Worth	FCCU Turnaround 1987
ERDOEL Neustadt	Reactor Cyclone System 1987
ERDOEL Neustadt	Complete new Reactor and Stripper 1987



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SIBP Antwerp	New Regenerator Grid 1987
SIBP Antwerp	New Reactor Riser and Vibro-cast Wye Piece 1987
ERDOEL Neustadt	New Regenerator Flue Gas Lines 1988
SELM Priolo	Complete new Reactor, Riser, Stripper and Vibro-cast of Wye Piece 1988
ESSO Augusta	FCCU Turnaround 1988
SELM Priolo	New Reactor and Regenerator Cyclones 1988
SELM Priolo	Spent Catalyst Standpipe and Flue Gas Line Expansion Joints 1988
ENICHEM/ANIC Gela	Emergency FCCU Shutdown 1988
ENICHEM/ANIC Gela	Complete Turbo Expander/Third Stage Separator 1988
SIBP Antwerp	FCCU Turnaround 1988
HAR Athens	FCCU Consultancy 1988
CRD TOTAL Gonfreville	Regenerator and Third Stage Separator Cyclones 1988
CRD TOTAL Gonfreville	New Reactor Riser 1988
CRD TOTAL Gonfreville	New Regenerator Head 1988
ESSO Augusta	Reactor Cyclones and New Feed Injector 1988
PETROMED Castellon	Emergency FCCU shutdown 1988
MOBIL Coryton	New Reactor Riser and Regenerator Cone 1988
ESSO Augusta	MOGAS Project - New Powerformer, Reactor and Furnaces 1988
MOBIL Coryton	FCCU Turnaround 1988
MARAVEN Venezuela	Off-sites - Cyclones and Riser
MOBIL Yanbu	FCCU Turnaround 1988
ENICHEM/ANIC Gela	FCCU Turnaround 1988
CRD TOTAL Gonfreville	FCCU Turnaround 1988
ESSO Augusta	FCCU Turnaround 1988
SELM Priolo	FCCU Pre-turnaround 1989 - Regenerator Air Grid, Regenerator Head, Expansion Joints, Cyclones, New Reactor & Riser
ESSO Port Jerome	New Reactor Cyclones 1989
MARAVEN Venezuela	FCCU Turnaround 1989
SARAS Sardinia	FCCU Turnaround 1989
SELM Priolo	FCCU Turnaround 1989
SHELL Berre	FCCU Turnaround 1989
PETROMED Castellon	FCCU Turnaround 1989
CRD La Mede	FCCU Turnaround 1989
DKV Szazhalombatta	Vibro-cast of Wye Piece 1989
CRD Gonfreville	Vibro-cast of J-bend 1989
SELM Priolo	Expansion Joints and Vibro-cast of Wye Piece 1989
ESSO Port Jerome	New Reactor and Riser 1989
PETROMED Castellon	Sulphur Furnace and Stack 1989
ESSO Port Jerome	FCCU Turnaround 1989
MILAZZO Refinery	Regenerator Cyclones, Air Grid, Seal Pot, Expansion Joints and Slide Valves 1989
SHELL Berre	Emergency Turnaround - Re-line of Regenerator 1989
BP Lavera	Reactor Cyclones 1989
ENICHEM Gela	Vibro-cast Wye Piece 1989 Third Stage Separator



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MOBIL Worth	Regenerator Cyclones, Third Stage Separator, Expansion Joints, Slide Valves Flue Ducting and CO Boiler 1990
ELF Grandpuits	Regenerator Cyclones, Reactor Cyclones, Reactor Riser, Slide Valve Revamp and Air Grid 1990
MOBIL Coryton	Emergency Shutdown - repairs to Orifice Chamber 1989
ESSO Fawley	Vibro-cast 42" Risers 1990
ENICHEM Gela	Third Stage Separator Vibro-cast Ducting 1989
MOBIL Yanbu	Caustic Incinerator re-line 1990
PETROMED Castellon	New Powerformer Furnace and Reactor 1990
SHELL Reichstett	FCCU Turnaround and all associated Furnaces 1990
ELF Grandpuits	FCCU Turnaround 1990
KNPC Mina Al-Ahmadi, Kuwait	FCCU Turnaround 1990
NNPC Warri, Nigeria	FCCU Turnaround 1990
BP Lavera	FCCU Turnaround 1990
ECOPETROL Columbia	FCCU Turnaround 1990
MARAVEN Curacao	FCCU Turnaround 1990
CRD Dunkerque	Tertiary Cyclones 1990
MILAZZO Refinery	FCCU Turnaround 1990/91
ABB Sweden	Sinter Ash Cyclone System 1990
NNPC Warri, Nigeria	Carbon Black Reactors 1990
ESSO Port Jerome	Emergency FCCU Turnaround 1990
ESSO Fawley	FCCU Turnaround 1990
MOBIL Worth	FCCU Turnaround 1990
CRD Dunkerque	FCCU Turnaround 1990
CRD Gonfreville	Emergency Turnaround 1990
BAPCO Bahrain	Wye Piece Vibro-cast 1990
AGIP Sannazzaro	Reactor Cyclones 1991
AGIP Sannazzaro	Regenerator Cyclones 1991
ERDOEL Neustadt	New Third Stage Separator 1991
ESSO Fos	Reactor Cyclones 1991
PRAOIL Gela	FCCU T/A 1991
SHELL Berre	New Regenerator Cyclones 1991
SHELL Berre	Twin Drum Separator 1991
ESSO Port Jerome	Powerformer Reactors 1991
AGIP Sannazzaro	FCCU T/A 1991
ERTOIL Huelva	Reactor Cyclones 1991
ERTOIL Huelva	Regenerator Cyclones 1991
ERTOIL Huelva	Grassroots FCCU 1991/92
ERTOIL Huelva	Expansion Joints 1991
ERTOIL Huelva	Slide Valves 1991
PETROMED Castellon	Emergency FCCU Turnaround 1991
ESSO Augusta	Regenerator Cyclones 1991
FINA Antwerp	Vibro-cast Flue Gas Lines 1991
FINA Antwerp	Regenerator Cyclones 1991
FINA Antwerp	FCCU Turnaround - Unit 67 1991
ESSO Sarpom	Powerformer Reactors 1991
SHELL Berre	FCCU Turnaround 1991



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ESSO Augusta	Reactor Stripper 1992
ESSO Augusta	FCCU Turnaround 1992
FINA Antwerp	FCCU Turnaround - Unit 31 1992
MOBIL Yanbu	FCCU Turnaround 1992
MOBIL Coryton	3rd Stage Ducting 1992
ESSO Sarpom	Reactor/Regenerator Cyclones 1992
SASOL Sasolburg	Product Separator 1992
MOBIL Coryton	FCCU Turnaround 1992
ESSO Port Jerome	Regenerator Cyclones 1992
TRD Gonfreville	Reactor/Regenerator Cyclones 1992
TRD Gonfreville	Ballistic Separator & Riser 1992
NORTH SEA PETROCHEMICALS	Catofin Reactors 1992
PRAOIL Priolo	Regenerator Cyclones 1992
VEBA OEL	Reactor/Regenerator Cyclones 1992
ESSO Port Jerome	Regenerator Head 1992
PETROMIDIA Romania	Air Grid 1992
TRD La Mede	Regenerator & Reactor Cyclones 1992
SARPOM Trecate	New FCC Unit 1992
KRPC Nigeria	FCCU Turnaround 1992
PRAOIL Priolo	Flue Gas Line Ducting 1992
HOLBORN Hamburg	FCCU Refractory Reliability Study 1992
BP España Castellon	Powerformer Reactor 1992
FINA Antwerp	Emergency Shutdown - Unit 67 September 1992
FINA Antwerp	Emergency Shutdown - Unit 67 November 1992
TRD Gonfreville	FCCU Turnaround 1992
BP Lavera	FCCU Shutdown 1992
SARAS Sardinia	FCC Turnaround 1992
PRAOIL Priolo	Vibro-cast of Flue Gas Ducting 1992
PRAOIL Priolo	FCCU Turnaround 1993
TRD La Mede	Vibro-cast of new Riser 1993
TRD La Mede	Vibro-cast of Flue Gas Line 1993
TRD La Mede	Vibro-cast of Regenerated Catalyst Lift Pot Transfer Line 1993
PETROGAL Portugal	Inspection of Reactor Wye-piece Vibro-cast 1993
PETROMIDIA Romania	Vibro-cast of Wye-piece and FCCU Turnaround 1993
ELF Grandpuits	Vibro-cast of Riser Boot 1993
HOMS FERTILIZER PLANT Syria	Inspection of Furnaces 1993
IBN-ZAHR Saudi Arabia	MTBE Reactors 1993
SARPOM Trecate	Inspection of CO Boiler 1993
VEBA OEL Gelsenkirchen	FCCU Turnaround 1993
KRPC Kaduna, Nigeria	FCCU Turnaround 1993
BP España Castellon	Regenerator Cyclones 1993
BP España Castellon	Reactor Cyclones & Close Coupled Riser Transfer System 1993
BP España Castellon	Reactor Cold Wall Pump Cast 1993
ESSO Thailand	Regenerator Cyclones 1993
ESSO Thailand	Vibro-cast Transfer Lines 1993
ESSO Thailand	Pump Cast - Cold Wall Reactor & new Regenerator 1993
ESSO Port Jerome	Vibro-cast J-bend 1993
REFINERIA ISLA Curacao	FCCU Turnaround 1993



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SHELL Berre
SHELL Stanlow
SHELL Stanlow
SHELL Stanlow
LENTEP Russia
ESSO Port Jerome
BP España Castellon
TRD La Mede
AGIP Sannazzaro
ESSO Antwerp
PRAOIL Gela
PRAOIL Gela
SHELL Reichstett
PRAOIL Gela
AGIP Sannazzaro
ESSO THAILAND
ESSO FAWLEY
ANCAP Uruguay
METHANOL 2000 Venezuela
PEMREF MOBIL Yanbu
PEMREF MOBIL Yanbu
PEMREF MOBIL Yanbu
PEMREF MOBIL Yanbu
FINA Antwerp
FINA Antwerp
TRD DUNKERQUE
BP LAVERA
BP LAVERA
NNPC, WARRI
TRD DUNKERQUE
ESSO THAILAND, SRIRACHA
PEMREF MOBIL YANBU
MOBIL OIL CORYTON
MOBIL OIL CORYTON
MOBIL OIL CORYTON
MOBIL OIL CORYTON
AGIP PETROLI Milazzo
PEMREF MOBIL YANBU
ESSO Fawley
ESSO Fawley
ESSO Port Jerome
HAR Athens - Greece
ERTOIL Huelva - Spain
ESSO Singapore
FINA Antwerpen Belgium
BP Grangemouth GEC
NATREF/SASTECH - South Africa
SAPPI - South Africa
SEFI/SOFREGAS - Algeria
TOTAL - Le Havre
STATOIL - Norway

FCCU Turnaround 1993
Vibro-cast Wye-pieces 1993
Vibro-cast Slide Valves 1993
Vibro-cast Expansion Joints 1993
Vibro-cast Riser 1993
FCCU Turnaround 1993
FCCU Turnaround 1993
FCCU Rebuild 1994
New FCCU Reactor 1994
New Regenerator Cyclones 1994
New Regenerator Cyclones 1994
New Regenerator Head Plenum
FCCU Turnaround 1994
FCCU Turnaround 1994
FCCU Turnaround 1994
Vibrocast, Flue Gas Line 1994
FCC Shutdown 1994
New FCC 1994
Vibrocasting Ducting 1994
New Reactor Cyclones System 1994
New Expansion Joints 1994
Slide Valves 1994
Vibrocast Reactor Riser 1994
FCC UNIT 31 Shutdown 1994
FCC UNIT 67 New Regen Cyclones '94
New Reactor Cyclones 1994
New Regenerator Cyclones 1994
FCC T/A 1994
FCC T/A 1994
FCC T/A 1994
NEW FCC 1994
New Regenerator Riser 1995
New Expansion Joints 1995
New Catalyst Cooler Vibrocast 1995
New Regenerator Riser 1995
New Atomax Riser Vibrocast 1995
FCCU Shutdown 1995
FCCU Shutdown 1995
Reactor Cyclones 1995
Regenerator Grid Supports 1995
New Crude Furnace Ceramic Fibre 1995
FCC T/A 1995
STC RX Reactor Cyclones 1995
Lining of Steam Generator 1995
FCC Unit 67 T/A 1995
Lining of Cyclones 1995
FCC re-line 1995
Acid Tiles Aug 1995
Inspection/Supervision
Catalyst Cooler 1995
FCC T/A Sept - Oct 1995



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FINA - Angola
FINA - Antwerp
SHELL UK
FW - USA
ELF - Grandpuits - France
ESSO Fawley - UK
MOBIL OIL Coryton - UK
ESSO Augusta - Italy
LEUNA 2000 - Germany
Thames - Water UK
NNPC - Warri - Nigeria
INDIAN OIL Co - Panipat
TOTAL - Le Havre
OIL Refineries Ltd - Haifa
AGIP PETROLI - Gela, Italy
FINA OLEFINS - Antwerp
CYPRUS PETROLEUM - Cyprus
BP OIL - Castellon, Spain
NATREF - Sassolburg, S Africa
SOFREGAS - Algeria
PETROMAR - Malongo, Algeria
TUPRAS IZMIT REFINERY - Turkey
AGIP PETROLI - Priolo, Italy
YORK LININGS LTD - UK
RESCO USA
TOTAL, La Mede
TOTAL, La Mede
TOTAL, La Mede
TOTAL, La Mede
TOTAL, Le Havre

TOTAL, Le Havre
ESSO Rotterdam
BP Grangemouth
BP Grangemouth
AGIP PETROLI, Priolo
BP, Castellon
KNPC Mina Al-Ahmadi, Kuwait
ESSO Augusta
ESSO Port Jerome
MOL, Hungary
FINA, Antwerp
HINDUSTAN PETROLEUM, India
ENGEN South Africa
BAPCO Bahrain
FORMOSA PETROLEUM Taiwan
RELIANCE Jamnagar, India
SOFREGAS -Skikda, Algeria
KVAERNER - Saudi Iron, Hadeed
TOTAL, La Mede
NATREF, South Africa

Refinery T/A Sept 1995
FCC T/A Unit 31 Sept 1995
Cold Collector Head 1996
ISLA, Curacao Cyclones 1996
FCC T/A 1996
FCC T/A 1996
FCC T/A 1996
FCC T/A 1996
Grassroots Refinery 1996
Sewerage Incinerators 1996
FCC T/A 1996
Sureflow in new external cyclones 1996
Emergency FCC shutdown 1996
Sureflow in FCC transfer lines 1996
FCC T/A 1996
Naptha Cracking Furnace 1996
Crude Furnaces (9) + ducting 1996
New Sulphur plant 1996
Reformer + FCCU t/a 1996
New gas plant boilers 1996
Topping plant furnace 1996
Crude heater 1996
FCC T/A 1997
Inspection of cow incinerator 1997
Furnaces at SSANG YONG Oil Refining Korea - 1997
New regenerator cyclones 1997
New orifice chamber 1997
New riser quarter turn separator 1997
New cold-wall riser 1997
New cold-wall riser, catalyst withdrawal
and riser separator 1997
FCCU shutdown 1997
RAP-X new furnace, breeching + stack 97
New riser for FCCU modernisation 1997
New Klaus combustor/stack sulphur recovery unit 1997
FCCU emergency shutdown 1997
Inspection of sulphur combustors post dry-out 1997
FCCU shutdown 1997
New sulphur combustor 1997
FCCU shutdown 1997
New FCCU riser 1997
FCCU unit 31 shutdown 1997
New regenerator cyclones 1997
New regenerator cyclones 1997-98
New reactor feed riser 1997
New tertiary cyclone vessels 1997-98
New grassroots FCCU 1997-99
Revamp of gas boilers 1997
New hydrogen reformer gas ducting 1997
FCC T/A 1998
New reactor/regenerator cyclones 1998



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FINA, Angola
ESSO, Sriracha, Thailand
AGIP PETROLI, Gela
AGIP PETROLI, Gela
NORSK HYDRO, Norway
RELIANCE Jamnagar, India
STATOIL Kalundborg
IOCL, Mathura, India
HPCL, Visakapatnam, India
RUHR OEL, Gelsenkirchen
NATREF, Sasolburg, S Africa
NATREF, Sasolburg, S Africa
SOFREGAS -Skikda, Algeria
BP Chemicals, Grangemouth
SAMREF, Yanbu Saudi Arabia
TOTAL, Le Havre
BP OIL, Spain
ESSO FOS France
KRPC, Kaduna
MIDER Germany
ELF GRANDPUITS, France
PERTAMINA, Indonesia
ESSO INGOLSTADT
VEBA OEL Holborn Germany
ESSO FOS France
ESSO ROTTERDAM
ESSO TRECATE, Italy
MOTOR OIL HELLAS, Greece
FORMOSA PETROLEUM, Taiwan
TOTAL Dunkerque
ELF Grandpuits
ESSO FOS France
KOA Refinery, Japan
HOLBORN Refinery, Germany
ENGEN Durban South Africa
ELF Grandpuits
TOTAL Dunkerque
PT EXOR VI Indonesia
BP Lavera France
TURKMENBASI OIL Turkmenistan
ESSO Ingolstadt
TOTAL-FINA Vlissingen
ICI POLYURETHANE UK
KEMYA Thailand
BAPCO UK
FOSTER WHEELER ITALIA Italy
IOCL GUJURAT India
IOCL GUJURAT India
OIL REFINERIES LIMITED Israel
New sulphur combustors 1998
New heaters for sulphur plant 1998
Revamp of crude heaters 1998
New furnace air heaters 1998
New vibrocast wye-piece 1998
FCCU T/A 1998
New HP steam boiler 1998
New grassroots SRU 1998-99
New Visbreaker heater 1998
Vibrocast of transfer lines 1998
Vibrocast of transfer lines 1998
FCCU T/A 1998
New air grid, riser, reactor/regen head 98
FCCU T/A 1998
Revamp of gas boilers 1998
New Ethylene Heaters
FCC T/A 1998
New regenerator cyclones 1998
FCC T/A 1998
New regenerator cyclones 1998
Refinery rebuild 1998/99
Emergency FCCU shutdown 1998
New regenerator cyclones 1998
FCC T/A 1998
Satcon project 1998/99
New reactor/regenerator cyclones 1998/99
New FCCU Regenerator 1998
New cyclones for Flexicoker 1998
FCCU T/A 1998
Pre-shutdown and FCCU T/A 1998-99
New RCCU regenerators 1999
New waste heat boiler 1999
New riser and standpipe 1999
FCCU T/A 1999
FCCU reliability study 1999
New regen/reactor cyclones 1999
Emergency FCCU shutdown 1999
FCCU T/A 1999
FCCU T/A 1999
FCCU T/A 1999
FCCU T/A 1999
New Grass-roots MSCC 1999
FCCU Satcon project 1999
New sulphur unit 1999
Repairs to Reducing Chamber/Cone 1999
Cracking Furnaces 1999
Single Stage Cyclone 1999
New Stack Lomellina Energia Project 1999
Vibro Casting of New Transfer Lines 1999
Five New Expansion Joints 1999
New reactor cyclones 1999



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MUNRO & MILLER/FLEXIDER

CESKA Czech Republic
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CESKA Czech Republic
CESKA Czech Republic
NODCO Qatar
AGIP PETROLI Priolo Italy
TOTAL-FINA Antwerp
PETRONOR Spain
ESSO AUGUSTA Italy
ESSO PT JEROME France
TOTALFINA Antwerp
TOTALFINA Antwerp
TOTALFINA Antwerp
TOTALFINA Antwerp
OIL REFINERIES Israel
KNPC Kuwait
CONOCO UK
CONOCO UK
TEMA OIL Ghana
IOCL BARAUNI India
BAPCO, Bahrain
HUNTSMAN POLYURETHANE UK
ABB LUMUS CESKA Refinery Czech
BP OIL Spain
GOUDA VUURVAST Mississippi USA
P.T. EXOR Indonesia
ORL Haifa Israel
FINA Angola
BP OIL, Coryton, UK
AGIP PETROLI, Priolo Sicily
ALSTOM POWER BOILERS, Algeria
SADAF Saudi Arabia
SCANRAFF Sweden
CEPSA Heulva, Spain
PT EXOR Indonesia
AMOC Egypt
ENGEN South Africa
AGIP PETROLI, Gela, Sicily
AGIP PETROLI, Gela, Sicily
RELIANCE PETROLEUM, India
ESSO FAWLEY, UK
TOTALFINAELF, Antwerp, Belgium
AGIP PETROLI, Gela, Sicily
TOTALFINAELF, Feyzin, France
BP OIL, Lavera, France
NODCO, Qatar
TOTALFINAELF, Pt Arthur, USA
IRVING OIL, St John, Canada
KRPC, Kaduna, Nigeria

Expansion Joints EIL/IOCL India
New Grass-roots FCC 1999-2000 at site
New expansion joints 1999
New reactor & regenerator cyclones 1999
New reactor & regenerator vessels 1999-2000
New catalyst cooler 1999-2000
New grass-roots FCC 1999-2000
Regenerator cyclones 1999
New reactor riser/stripper 1999-2000
New reactor cyclones 2000
FCC T/A 2000
FCC T/A 2000
New Flue Gas Line 2000
New Quarter Turn Separator 2000
New Expansion Joints 2000
FCC T/A 2000
New Reactor/Stripper 2000
FCC T/A 2000
New VSS Reactor 2000
New Reactor and Regenerator Cyclones 2000
New Grass Roots FCCU 2000/2001
New Grass Roots FCCU 2000/2001
Y and T Piece 2000
Thermal Oxidiser 2000
New Sulphur Unit 2000
FCCU emergency shutdown 2000
QA/QC on 2 number CF Boilers 2000/2001
New Sulphur Stack 2000
FCC Shutdown 2000
Crude Furnace Shutdown 2000
FCCU Turnaround 2001
FCCU Turnaround 2001
Supervision of Boiler 2001
MTBE Reactor/Regenerator 2001
FCCU Shutdown 2001
FCCU Turnaround 2001
FCCU Shutdown 2001
Consultancy for Lube Oil Expansion Project 2001
FCCU Shutdown 2001
New FCCU VSS Reactor Vessel & Cyclones 2001
New expansion joints 2001
Emergency Shutdown 2001
FCCU Shutdown 2001
New Reactor & Stripper 2001
FCCU Turnaround 2001
New riser + cyclones 2001
Hydrocracker shutdown 2001
New FCCU dryout inspection 2001
FCCU Shutdown 2001
RFCCU Shutdown 2001
FCCU Shutdown 2001



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TOTALFINAELF , Grandpuits, France	FCCU/Reforming/Distillation Shutdown 2002
SAMREF , Yanbu, Saudi Arabia	FCCU Shutdown 2002 and furnaces
AGIP PETROLI , Gela, Sicily	FCCU Emergency Shutdown 2002
TOTALFINAELF , Donges, France	New RX/RG cyclones, stripper, riser 2002
TOTALFINAELF , Le Havre, France	New RX/RG cyclones 2002
TOTALFINAELF , Le Havre, France	FCCU Shutdown 2002
TOTALFINAELF , Leuna, Germany	New Regenerator cyclones 2002
TOTALFINAELF MIDER , Leuna Germany	Shutdown 2002 and furnaces
MARATHON ASHLAND PETROLEUM , USA	New VSS Reactor 2002
AGIP PETROLI , Sannazzaro, Italy	New Third Stage Separator 2002
AGIP PETROLI , Sannazzaro, Italy	FCCU Shutdown 2002
ENGEN , Durban, South Africa	New Reactor cyclones 2002
SCANRAFF , Sweden	Shutdown 2002 and furnaces
TOTALFINAELF , Feyzin, France	Reactor cyclones 2002
TOTALFINAELF , Agriandre, France	Riser Termination Device 2002
TOTALFINAELF , Dunkerque, France	New Reactor Overhead Line 2002
ALBA , Bahrain, India	Anode Baking Kiln 2002
TOTALFINAELF , Donges, USA	New Regenerator Cyclones 2002
TOTALFINAELF , Donges, France	Reactor Riser, Stripper, Combustion Riser 2002
TOTALFINAELF , Donges, France	FCCU Shutdown 2002
RESCO PRODUCTS , UK	Witnessing testing of Resco 17EC, 2002
FCP , Qatar	New FCCU 2002
OIL REFINERIES , Ashdod	FCCU Emergency Shutdown 2002
KBC , Petrobras, Brasil	FCCU turnaround 2002
TOTALFINAELF , Donges	Reactor Cyclones, Spent & Regen. cat standpipe 2002
TAMOIL , Switzerland	TRC 2000 Goggle Valves 2002
TAMOIL , Switzerland	TRC 2000 Internal & External Regen. Cycl. 2002
TOTALFINAELF , La Mede, France	Regenerator Cyclones 2002
TAMOIL , Remosa Italy	Slide Valves 2002
VAN TONGEREN , UK	Mock up trial 2 nd Stage Reg. Cyclones 2002
CONOCO , UK	Coker Heater 2002
DOW CORNING , UK	Repairs to Cyclones 2002
OIL REFINERIES , Ashdod	Reactor Cyclones 2002
ENGEN , Durban, South Africa	Regenerator Cyclones 2002
SHELL , The Netherlands	FCCU Shutdown 2002 at Ecopetrol Columbia
TOTALFINAELF , Antwerp	FCCU Emergency Shutdown 2002
TOTALFINAELF , Le Havre	Quarter Turn Separator 2002
TOTALFINAELF , Le Havre	FCCU Shutdown Aug/Sept 2002
VAN TONGEREN , Qualfab	External Cyclones 2002
FISHER-KLOSTERMAN , Donges	Hanger Welds 2002
IRVING OIL , Canada	RFCCU Inspection 2002
BP , Castellon	FCCU Shutdown 2002
AGIP GELA , Italy	Fire assessment of topping Furnace 2002
TOTALFINAELF , Dunkerque	Cat.Standpipe spoolpiece 2003
TOTALFINAELF , Dunkerque	Expansion Joint 2003
TAMOIL , Switzerland	Tamoil TRC 2000 New SRU 2003
TOTAL , Donges	FCC shutdown December 2002
FINA PETROLEOS , Angola	Heaters at Luanda Refinery 2003
TOTAL , Flandres	Compensator and Transfer line 2003
FOSTER WHEELER , Italy	Flue Gas Lines and SRU 2003
FOSTER WHEELER , Italy	Collombey TRC 2000 project (2003)



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STAR PETROLEUM

TOTAL, Normandy
TOTAL FRANCE, Le Havre
TOTAL FRANCE, Le Havre
BP, Castellon
FCP, Spain
TEXACO, UK
OIL REFINERIES, Haifa, Israel
BDT/Pertamina, Indonesia
ESSO, France
SARPOM, Italy
GOUDA VUURVAST, Netherlands
KBC, UK
OIL REFINERIES, Haifa, Israel
ENTREPOSE, France
TOTAL FRANCE, Le Havre
OIL REFINERIES, Israel
IAG, USA
BAPCO, Bahrain
BAPCO, Bahrain
GLESER, France
ENGEN, South Africa
LURGI, UK
TAMOIL, Collombey - Switzerland
IHI, Japan – JGC Tonen Sekiyu project
TEXACO, UK
CONOCO, UK

REPSOL PETROLEOS, Spain
FOURE LAGADEC, France
ALFRAN, Spain
OIL REFINERIES, Israel
NORDON, France
TEXACO, UK
PT RUI/Pertamina, Indonesia
BP, Castellon
FOSTER WHEELER, Italy
HUNTSMAN POLYURETHANES, UK
SARPOM, Italy
RELIANCE, Jamnagar, India
PERTIMINA, Balongan, Indonesia
AIR LIQUIDE, Netherlands
CEPSA, Huelva, Spain
TOTAL Dunkerque
CHENNAI Petroleum, India
BP Grangemouth, Scotland
COQUANT, France
CONOCOPHILLIPS, UK
BAHRAIN PETROLEUM, UK
ALFRAN, Bulgaria
FOURE LAGADEC, France

Replacement Cyclones 2003
Emergency shutdown February 2003
Reactor Riser and Stripper 2003-12-01
Turnaround La Mede Refinery 2003
Turnaround 2003
Regenerator R-202 at Luk Oil Refinery Bulgaria
Reactor Cyclones 2003
New VSS Reactor 2003
Transfer lines and Waste Heat Boiler 2003
FCC2 shutdown Feb/Mar 2003
Furnace F-101 shutdown 2003
Supervision Refractory lining at Anglesey, UK
TR1/TR2 Crude Furnace shutdown (WRG – Germany)
FCC Unit 2003
Turnaround Warri Refinery Nigeria 2003
CO Boiler and Regenerator (Normandy Refinery 2003)
1st & 2nd Stage Regenerator Cyclones 2003
Expansion Bellows 2003
Expansion Bellows 2003
RCSP 2003
Operator Qualification 2003
Shutdown at Durban Refinery May 2003
Incinerator 2003
FCC Construction Apr/June 2003
FCCU Regenerator Cyclones
Reactor 2003
Heaters, Radiant Boxes, Convection Boxes,
Transition Ducts and Collector Header Boxes 2003
Pre-shutdown works May/June 2003
Reactors 2003
FCCU Revamp 2003 at Luk Oil Refinery Bulgaria
FCC shutdown Aug/Sep 2003 at Ashdod Refinery
Expansion Joints 2003
Turnaround 2003 at Pembroke Refinery
Turnaround Sep/Oct 2003 Balongan Refinery
Furnace F-2901 Radiant Roof/Stack 2003
Bolt-on Panels to Main Body of Ground Flare System
Thermal Oxidiser Refractory Re-Line Oct 2003
Turnaround 2003 FCC Unit at Refinery in Trecate
FCCU Shutdown Oct/Nov 2003 at Jamnagar
Hydrocracker
ATR Reactor 2003
FCCU Shutdown Nov 2003
New 3rd stage separator and cyclones 2004
New FCCU reactor, riser, orifice chamber 2004
New FCCU air preheater and ducting 2004
TFE RN Tertiary Cyclones and Vessel 2004
Radiant Boxes H6001/2/3 2004
Regen. Catalyst Standpipe 2004
FCCU Turnaround 2004
Reactors R302 and R303 2004



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FWI, Priolo, Italy
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LARSEN & TOUBRO, India
TOTAL France, Antwerp, Belgium
IAG, UK – BP Grangemouth
IAG, UK – BP Lavera
BP CORYTON, UK
FKI, UK & Spain
EXXONMOBIL, Poland
TOTAL FRANCE, France
IMB, Italy
ESSO, Augusta, Italy
EXXONMOBIL, Italy
OIL REFINERIES LTD, Pittsburgh USA
OIL REFINERIES LTD, UK
SHAW – STONE & WEBSTER, Romania
DOW CORNING, UK
OIL REFINERIES LTD, UK
TOTAL FRANCE, Flandres, Dunkerque
CONOCOPHILLIPS, UK
CONOCOPHILLIPS, UK
FINA PETROLEOS, Angola
PETRONOR, Spain
BP LAVERA, France
CONOCOPHILLIPS, UK
L&T, India
ENI, Gela Italy
PETROBRAS, Brasil
KOCHI REFINERY, India
WRG, Germany
KBC, Petrobras Brazil
ESSO FOS, France
GOUDA, South Africa
POLIMERI, France
QATAR PETROLEUM
OIL REFINERIES LTD, Israel
OIL REFINERIES LTD, Israel
BP, Grangemouth
OIL REFINERIES LTD, UK
TAMOIL, Switzerland
ERG, Priolo Italy
ENI, Gela Italy
DOHA, Qatar
FWI, Netherlands
TOTAL FRANCE, Romania
JACOBS NL, Belgium
JACOBS NL, France
FWI / TOTAL ANTWERP, Belgium
PREEM PETROLEUM, Sweden

Bolt on post protectors 2004
C.O. Boiler 2004
RN Tertiary Cyclones & Vessel 2004
Radiant Boxes H6001/2/3 2004
FCCU Revamp CPCL 2004
Radiant Wall panels heater B-830001 2004
Air Pre-heater & pre-heater lines
FCCU Revamp 2004
FCCU Swoopdown march 2004
Witness Mockup & sample testing 2004
Charge heater 2004
SRU Waste Heat Boiler 2004
Heat Exchanger 2004
FCCU/ALKY/S1-S2/SWS 2004
Heater F-7001 2004
Flue Gas Cooler 2004
Regenerator Cyclones 2004
RS2 Separator 2004
Cyclone inspection & repair 2004
Cyclofines 2004
Turnaround 2004
Cyclones for 3rd stage separator 2004
3rd Stage Separator 2004
Shutdown during September/October 2004
Primary & Secondary Cyclones 2004
Turnaround 2004
Head & Plenum for 3rd stage separator 2005
RR Revamp KRL project Kochi Refinery 2005
Emergency SD 2005
FCCU t/a review 2005
FCCU + Cyclones 2005
Burner units 2005
RPBC RAM project 2005
Turnaround 2005
Hillside Project 2005
Hydro-cracker furnaces revamp 2005
FCCU t/a 2005
3rd Stage Separator, catalyst cooler 2005
Riser, air grid 2005
New SRU 2005
Regenerator Cyclones 2005
RCC unit 2005
CR27 FCC unit 2005
Tertiary Cyclone Vessels, Regenerator Cyclones 2005
FCCU t/a 2005
Cement lines 2005
Furnace 2005
Stripper & Lift Pot 2005
Expansion Joints 2006
FCCU Turnaround 2005
FCC unit Turnaround 2005/2006



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OIL REFINERIES LTD, Israel
IRVING OIL, Canada
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BLACK & VEATCH, BP Grangemouth

TOTAL FRANCE, Italy
OIL REFINERIES LTD, Israel
SOHAR REFINING, Oman
NEREFCO, Holland
CEPSA, La Rabida, Spain
TOTAL, Lindsey Oil, UK
RELIANCE, Jamnagar, India
ENI, Gela, Italy
ENI, Gela, Italy
SAMREF, Yanbu, Saudi Arabia
CEPSA, La Rabida, Spain
CEPSA, La Rabida, Spain
CEPSA, La Rabida, Spain
RABIGH, Saudi Arabia
ASESA, Taragona, Spain
ESSO, Port Jerome, France
TAMOIL, Collombey, Switzerland
IDESA, Aviles, Spain
SHELL, Holland
L&T, India
ESSO, Fawley UK
GOUDA, Anglesey UK
TOTAL, Flandres France
GOUDA, Lynemouth UK
CHEVRON, UK
CHEVRON, UK
TOTAL, La Mede, France
JGC, Belgium
JGC, Canada
DOW CORNING, UK
SAF Ouest, France
ORL, Haifa Israel
TAMOIL, Collombey Switzerland
BECHTEL, Jamnagar India
CHEVRON, UK
JACOBS, UK
PREEM PETROLEUM, Sweden
JGC, VRV Italy
TOTAL, Antwerp
ESSO PETROLEUM, Fawley UK
FWI, Italy
ESSO PETROLERA, Argentina
BECHTEL, Thailand
ESSAR OIL, India
SAF Ouest, France
TOTAL, Antwerp

Lower (Combustor) Head 2005
Technical issues on D42504 A/B
FCCU Revamp 2005
Incinerator, Waste Heat Boiler, Reaction Furnace, Stack 2005
New furnace F1 2006
Slide Valves 2006
New grass-roots UOP FCCU 2005
New reactor, cyclones, slide valves 2005
Preparation Turnaround 2006
Stage 3/4 T&I 2005
FCCU shut down 2005
FCCU shut down 2006
Regenerator Head 2006
FCCU shut down 2006
3rd Stage & Regenerator Cyclones 2006
New Regenerator Head 2006
FCC unit shut down 2006
New Grass Roots FCCU 2006
Anti Acid lining in new metal liner for stack
CDU Furnace shut down 2006
FCCU shut down 2006
Cat Coolers 2006
New Stripper Liftpot
FCCU Revamp HPCL Mumbai 2006
New Regenerator Head Project 2006
SD 2006
Emergency inspection to B-202 Tertiary Cyclone Vessel
Inspection services at Alcan Aluminium 2006
Boiler t/a 2006
Heaters t/a 2006
D4 Plant, F1 new Furnace 2006
Reactor/Regenerator for Rabigh Refinery 2006
Reactor/Regen.Cyclones for Rabagh Refinery 2006
Inspection & repair to Cyclones 2006
Operative Qualification 2006
Emergency SD FCCU 2006
R2R internals 2006
JERP Project 2006
Popton Fort Project 2006
SRU 6 Project at BP Grangemouth 2006
FCC Shut down 2006
Orifice Chamber for Rabigh Project 2006
Emergency FCC shutdown 2006
FCCU Turnaround 2006
Lomellina Energia Project 2006
FCCU t/a 2006
Convection sections Heaters for JERP Project 2006
FCCU Reactor Regenerator new construction 2006
Operative Qualification 2006
Seal pots & steam ring 2007



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CHEVRON, UK
CHEVRON, UK
TOTAL FRANCE, France
F&V, Portugal
DELFIN TUBES, Spain
TAMOIL, Collombey
TAMOIL, Italy
TOTAL, Antwerp
BP CASTELLON, Spain
FOSTER WHEELER, UK
IRVING OIL, Canada
TOTAL DONGES, France
ENI, Italy
TOTAL FLANDRES, France
BECHTEL FRANCE
FOSTER WHEELER, UK
ERG, Priolo, Italy
POYRY ENERGY, UK
TOTAL ROME, Italy
DOW CORNING, UK
RHI DINARIS, Germany
YORK LININGS, UK
ORL, Haifa, Israel
TOTAL FLANDRES, France
FORES, Italy
RISKTEC/KRC, Sudan
TOTAL FRANCE, Normandy
TOTAL FRANCE, Normandy
TOTAL FRANCE, Normandy

Shut down 2007
RPL-J project 2007
3rd Stage Separator & Mitre bends 2007
Rabigh Project, KSA New refinery construction 2007
Spent Catalyst Expansion Joint 2007
Vis Breaker Heater 2007
3rd Stage separator inlet nozzle 2007
HTU 1 & 2
Transfer lines 2007
Operative Qualification 2007
New VPS Heater 2007
FCCU Shut down 2007
New Riser 2007
FCCU Shut down 2007
FCCU Shut down 2007
FCCU Catalyst Circulation Project for INEOS 2007
FCCU Shutdown 2007
FCCU Shutdown 2007
New CPO Reactor 2007
New FCC Reactor Overhead Line 2007
Reliance, Jamnagar - new refinery construction 2007
INEOS Project FCCU Catalyst 2007
Reactor & Regenerator Cyclones 2007
Allington EfW Project 2007 - Incinerators
FCCU 31 Turnaround & Heater repairs 2007
Cyclone inspection & repair 2007
Consultancy RHI Techn. Centre, Austria 2007
Witness trial of refractory material 2007
Emergency shutdown 2007
Emergency shutdown FCC 2007
SCT-CPO Zero Regio project 2007
RFCCU reliability study 2007
Air rings & Spent Cat Line 2007
Slide valves at Tapco USA 2007
FCCU Turnaround 2007

PREEM PETROLEUM, Sweden
UOP, Spain
TOTAL UK, Lindsey Oil Refinery
PAZ, Ashdod, Israel
TOTAL FRANCE, Spain
ESSO AUGUSTA, Italy
TOTAL, Leuna, Germany
GROUPEMENT BERKINE, Algeria
L&T, HAZIRA, India
POYRY ENERGY, UK
SRC, Oman

FCC shutdown 2007
3rd Stage separator vessel for INA 2007
T&I 2007
FCC & Heaters t/a 2007
F2 furnace unit D4 2007
VPS,Lube Shutdown 2007
Leuna ADU/VDU Project – new ducting 2007
3 Fired Heater Units shutdown 2008
FCC Reactor Project, India 2008
K.E.S. Allington EfW Project (incinerator lines) 2008
RFCC Unit 2008



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MTC, Kuwait
PETROPLUS, UK
ESSO PETROLEUM, UK
FORES, Italy
ENI, Italy
QINETIQ, UK
TOTAL FRANCE, PROVINCE, Romania
Q-CHEM, Qatar
CHIMNEYS & REFR. INT, Italy
EXXONMOBIL, Asia
PERTAMINA, Indonesia
OIL REFINERIES, Haifa, Israel
BAPCO, Bahrain
INTERTEK, Abadan Oil Refinery, Iran
TOTAL, Angola
TOTAL, Grandpuits, France
ESSO Augusta, Italy
TOTAL Leuna, Germany
ESSO Trecate, Italy
TOTAL La Mede, France
FOSTER WHEELER
SEFI FICA France
UNITED UTILITIES UK
TAMOIL S.A Switzerland
EXXON MOBIL, Thailand
OIL REFINERIES LTD, Israel
QATAR PETROLEUM, Qatar

QATAR PETROLEUM, Qatar

INTERNATIONAL ALLIANCE GROUP

ESSO ROTTERDAM, Belgium
INA, Spain
ABADAN OIL, G&G Belgium
POYRY ENERGY, UK
QATAR PETROLEUM, France
ESSO AUGUSTA, Italy
ESSO ROTTERDAM, UK
EXXONMOBIL, UK

EXXONMOBIL, G&G Belgium
EXXONMOBIL, Granziero Italy
SHELL Harburg, France
LLOYD INSULATIONS, India
ISAB S.r.l (ERG), Italy
LARSON & TOUBRO LTD, India
ESSO, FOS SUR MER, France

Refractory Presentation 2008
FCC Regenerator Cyclone Dustbowls 2008
FCC Unit #86 Mina Ahmadi Refinery 2008
2009 Turnaround preparation
PS/PV-3 T/A 2008
X-01 Quencher and R-02 Reactor 2008
Repairs to Reactor and Syngas Cooler 2008
Thermal Oxidiser 2008
New Furnace F303 2008
March furnaces Turnaround 2008
Pre-shipment surveillance UK 2008
New ethylene furnaces in Thailand 2008
FCCU shut down 2008
New Flue gas valves 2008
New regenerator cyclones 2008
New FCC unit 2008
Distillation shutdown 2008
FCCU, Distillation shutdown 2008
T5/VPS 2 shutdown 2008
FCCU shutdown 2008
FCCU shutdown 2008
New regenerator cyclones 2008
Lining for the V 601 Cyclones for BAPCO 2008
Witness application of Actchem and Vibrocast 2008
Incinerator Refractory lining Shell Green 2008
FCCU thermography 2008
Inspection Services 2008 - 2010
Regenerated catalyst slide valve 2008
- Cyclones Hason Steel Canada 2009
- Upper Regenerator Head, Plenum Chamber,
- Combustion Riser and Expansion Joint at FL France
- Wye Distributor at FL France 2009
- Expansion bellows at SFZ France 2009
Shop Refractory Inspection Services 2009 of Cyclones,
Flue Gas items, Regenerator Head and Air Distributor
Refractory Installation of Head & Cyclones 2009
Refractory Inspection for Naftna Industrija 2009
Regenerator/Combustor 2009
Allington EFW project 2009
Regenerator head, riser and cyclones 2009
FCCU shutdown 2009
Inspection new regenerator Head & Cyclones 2009
FXK Heater Internals Replacement project for Esso
Rotterdam 2009
Quench Tee 2009
Reactor Cyclones 2009
Hot Wall Expansion Bellows and Operative Qualification
Vibro Casting/Guniting 2009
FCCU shut down 2009
HPCL (R R Package) Reactor Project 2009
FCCU Shut Down 2009



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JGC, Saudi Arabia
MURCO PETROLEUM, Italy
SEFI FICA, France

ESSO, PORT JEROME, France
BAPCO, Bahrain
SAMREF, Saudi Arabia
BECHTEL, India
OIL REFINERIES LTD, Israel
PETROPLUS, Coryton, UK
QP REFINERY, Macchi Italy
TOTAL LINDSEY OIL, UK
HPCL Vizag, India
TOTAL FLANDRES, France
EXXONMOBIL, Thermax India
PETROMIDA REFINERY, Romania
GURU GOBIND REF., Remosa Spain
LLOYD INSULATIONS, India
SHELL GREEN, UK
HYUNDAI, Korea
ENI, Italy
PTTEP, Thailand

HPCL, Thermax India
L&T Powai, China
FOSTER WHEELER, UK
TOTAL FLANDRES, France

MURCO PETROLEUM, UK
MURCO PETROLEUM, UK
HPCL, India
QATAR PETROLEUM, Qatar
GURU GOBIND REFINERY, India
SAF OUEST, France
SONANGOL, Luanda Refinery
HMEL Guru Gobind Refinery, India
HYUNDAI, Korea
TOTAL FLANDRES, France
TOTAL FLANDRES, France
BHPV/HPCL, India
ESSO FAWLEY, UK
ESSO FAWLEY, UK
TOTAL FLANDRES, France
POYRY ENERGY, UK

Convection sections 2009
RFCCU Shutdown 2009
Project E2935 2009
New expansion joints 2009
Inspection of refractory lining into compensator and qualifications 2009
FCCU Shut Down 2009
Recirc. Catalyst Standpipe 2009
New Cyclones 2009
Inspection Services 2009
FCCU Shut down 2009
FCCU Shut down 2009
Boilers 2009
Inspection of refractory lining for the T&I 2009
New UOP FCCU 2009
Regenerator Cyclones 52 S202-R201 2009
Waste Heat Boiler for SAMREF 2009
Internal & External Riser 2009
Slide Valves 2009
Project FCCU for BHPV 2009
Incinerators 2009
Regenerator & Reactor Cyclones 2009
Emergency SD 2009
Offshore – Arthit Production Platform – Adsorber Vessel 2009
UOP Separex Membrane System CO2 Removal Project 2009
Inlet Duct of Flue Gas Cooler 2009
Jianfeng Project – Waste Heat Boiler and Superheater
Steam Methan Reformers 2009
- Air Grid 2009 at Ribatti France
- Separator, Anti Coking Ring, prestripping New Reactor Tubes 2009 at CMP Arles
- Cyclones, Plenum & Riser Tube at Granziero Italy
- Cyclone Dustbowls 2009 at Coquant France
New regenerator cyclones 2009
New riser 2009
New FCCU 2009
FCCU shutdown 2009/2010
Slide Valves 2009
Operative Qualification 2009
Shut down 2010
Cyclones 2010
Reactor & Regenerator Cyclones 2010
V-anchorage into Expansion Joints 2010
New Riser Separator and Steam Distributors 2010
New FCCU – II Visakhapatnam 2010
Witness Refractory Lining Mock-Up 2010
QA/QC Repairs in the reactor cone 2010
Expansion joint SXB8001 2010
Allington EfW Project 2010 - Incinerators



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ESSO PORT JEROME , France	2010 STIG Turnaround
GURU GOBIND REFINERY , India	Shut down 2010
ESSO ITALIANA, August Refinery , Italy	Shut down 2010
BATON ROUGE REFINERY , USA	Regenerator Catalyst Slide Valves 2010
CHINESE PETROLEUM CORP. ,Taiwan	FCC Reactor and Orifice Chambers 2010 Catalyst Coolers 2010
MRPL Mangalore Refinery , India	Slide Valves 2010
NESTE PORVOO Refinery , Helsinki	Flue Gas Line & Expansion Joint 2010
ORPC , Sohar, Oman	FCCU and refinery shutdown 2009/2010
ENI , Milazzo Refinery, Italy	Shut down 2010 Furnace 92H01, 92H04 and 93H01
BP Lavera, France	Cyclones, 2010
ENI , Gela Refinery, Italy	Cyclones, 2010
TATA PROJECTS , HPCL,India	Duct Fabrication, 2010
EXXONMOBIL , Remosa, Spain	Slide Valves, 2010
L&T , Mumbai,India	FCC-RR, 2010
SHAW , Man Turbo, Germany	CPC Ta-Lin RFCC Propriety Equipment Supply, 2010
SHAW , Taiwan	Catalyst Coolers, 2010
TOTAL , France	Revising TOTAL SPEC ISL 230, 2010
NEOSTRUCTO , HPCL, India	FCCU, 2010
BAPCO , Tulsa, USA	Replacement of refractory lined transfer line for Hydrogen Reformer furnace, 2010 Upgrade, 2010
HELLENIC , Idesa, Spain	Refractory Lining Repairs, 2011
ESSO , Fawley, UK	Orifice Chamber and Reactor, 2010
BEHMANN , Germany	AAAR Project – Syngas Development, 2010
BP , Hull, UK	Shutdown, 2011
MTC , Kuwait	Refractory Inspection R2R, 2011/12
TAMOIL , Collombey, Switzerland	Cyclones for TOTAL, Antwerp, 2010
EMTROL , Granziero, Italy	Riser, 2010
PREEM PETROLEUM , Sweden	Shutdown 2011
TOTAL , Grandpuits, France	