

Petrochemicals - Project References

Year of Order	Customer	Plant Location	Plant / Product	Capacity (TPA)	Licensor	Services Rendered
2019	Nayara Energy	Vadinar	Asset Development			FEED, PMC
			Propylene Recovery Unit (PRU)	450 KTPA	UOP	
			Methyl Tertiary Butyl Ether (MTBE)	200 KTPA	Lummus Technology	
			Fluid Catalytic Cracking Unit (FCC) Revamp	3.9 MMTPA	Technip (after FMC)	
			Unsaturated LPG Unit	181 t/hr	Merichem	
			Polypropylene Unit	450 KTPA	Grace	
2019	Egyptian Propylene & Polypropylene Company (tkIS)	Egypt	Process Condensate Filtration Unit for Propylene/Polypropylene Complex		- tkIS	E (Detailed)
2019	MOL (tkIS AG)	Hungary	Polyol Project			E (Detail Engg), P
			Hydrogen Peroxide	138000	Evonik	
			Propylene Oxide	200000	tkIS AG	
			Propylene Glycol	60000	tkIS AG	
			Offsites & Utilities	-		
2018	Indian Oil Corpn.	Panipat	Naphtha Cracker Unit (Capacity Expansion)	847000 to 947000	CBI & Lummus	DFR, EPCM
			Mono Ethylene Glycol Unit	300000 to 425000	Scientific Design	
			Olefin Recovery C2/C3 Unit (ERU)	227000	CBI & Lummus	
2017	Reliance Sibur Elastomers	Jamnagar	Halogenated Isobutylene Isoprene Rubber	60,000	JSC Ri Yarsintez	ISBL: EPCM OSBL: EPCM incl. E (Basic)
2017	Farabi Petrochemicals	Yanbu, KSA	Paraffin	235,000	UOP	PMC
			LAB Derivatives	120,000		
2017	Hadaf International Energy	Al Jubail, KSA	Heat Transfer Unit for Paraffin Derivatives Complex	14,880	Jingdongjin g mao	EPCM
			HTF Blending	-	GDI	

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2017	Farabi Downstream	Al Jubail, KSA	Paraffin & Derivatives Complex			EPCM
			Sulfonation Unit	-		
			Alkyl Aryl Sulphonates	9,300	Chemithon	
			HAB Sulphonic Acid	18,000	Chemithon	
			Alkane & Alkene	20,000	Chemithon	
			Alkylation Unit	25,000	KSR	
			Fuel Additives	18,000	KSR	
			Offsites & Utilities	- -		
2017	Petron Scientech	USA	Ethylene Oxide / Ethylene Glycol	25000	Petron Scientech	E (Basic Engg)
2016	Kanoria Chemicals & Industries	Ankleshwar	Formaldehyde (technology upgradation project)	281 tpd	Johnson Matthey Formox AB	EPCM
2016	Farabi Petrochemicals	Al Jubail, KSA	Paraffin & Derivatives project	-	Various	Cost Estimation, E (Detail Engg) for O&U, Residual E (Basic Engg)
2016	Deepak Phenolics	Dahej	Cumene	260,000	UOP	EPCM
2015	Al Qahtani Chemicals Company	Saudi Arabia	Integrated EDC Caustic Soda Complex Ethylene Dichloride	150,000	tkIS PT	E (Detail Engg), P
2015	Deepak Phenolics	Dahej	Phenol	200,000	KBR	EPCM
2014	Indian Oil Corpn.	Orissa (Paradip Refinery)	Polypropylene Unit	2 x 340000	Basell Poliolefine	FEED, PMC
			Coker LPG Treatment Unit	165000	Engineers India	
2013	Farabi Petrochemical Co.	Saudi Arabia	NPN Splitter project in Linear Alkyl Benzene plant	- -		E (Basic Engg), Cost Estimate
2013	IBN – ZHR (Saudi European Petrochemical Co.)	Saudi Arabia	OCT Feed Purification project	Feed for CB&I 250000	Lummus Propylene plant	EPC-LSTK
2011	IBN Sina (Formox AB)	Saudi Arabia	Formaldehyde	66,000	Formox AB	E (Detail Engg)
2011	DCW Limited	Tamilnadu	C-PVC	10,000	Arkema	EPCM

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2011	Supreme Petrochem	Nagothane	Polystyrene	300000	ABB (after Lummus revamp)	E (Detail Engg)
2010	Indian Synthetic Rubber	Panipat	Styrene Butadiene Rubber	120,000	TSRC	FEED, PMC
2009	Farabi Petrochemical Co.	Saudi Arabia	Linear Akyl Benzene	Duplication of LAB (70000)	UOP	EPCM
2009	Qatar Petrochemical Co (QAPCO) (Uhde GmbH)	Qatar	LDPE	300,000	Lyondell Basell	E (Detail Engg)
2009	Kanoria Chemicals & Industries	Vizag	Formaldehyde	100,000	Formox AB	EPCM
2008	TICONA (Perstorp Speciality)	Germany	Formaldehyde	88000 (2 trains)	Formox AB	E (Detail Engg)
2008	Reliance Industries	Hazira	EO Reactor Modification (Revamp of MEG plant 3)	-	Shell	E (Detail Engg)
2007	Reliance Industries	Hazira	Revamp of Carbonate Section / Ethylene Glycol Section (Debottlenecking in MEG plants 2 & 3)	-	Shell	E (Detail Engg)
2007	SASOL (Uhde - A Divn.of TK Engg., South Africa)	S. Africa	Methyl Isobutyl Ketone (MIBK)	30,000	BEP : Uhde South Africa / Uhde	E (Detail Engg)
2007	Indian Oil Corpn.	Panipat (Naphtha)	LLDPE-HDPE Swing Unit	350,000	Nova Chemicals	FEED, PMC
2007	Egyptian Propylene & Polypropylene Company (Uhde GmbH)	Egypt	Propylene / Polypropylene Offsites & Utilities	350,000	Uhde / Basell	E (Basic Engg & Detail Engg), P, PS
2007	Indian Oil Corporation	Panipat (Naphtha Cracker Complex)	High Density Polyethylene	300,000	Basell Poliolefine	EPCM

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2007	Gujarat Alkalies and Chemicals	Baroda	Chloromethanes (Debottlenecking)	14,985 x 2 - trains		EPCM
2006	SABIC Polyolefine (Uhde GmbH)	Germany	High Density Polyethylene	220,000	Basell	E (Detail Engg)
2006	Haldia Petrochemicals	Haldia	Polypropylene LLDPE-HDPE Swing Unit (Revamp)	320,000 368000 (after expn.)	Basell	EPCM incl. E (Extended Basic Engg)
2005	Finolex Industries	Ratnagiri	S-PVC Expansion	Expansion by - 120000		E (Detail Engg), P, CS
2005	Vinyl Chemicals (India)	Mahad	Vinyl Acetate Monomer [Debottlenecking (Phase III)]	30000 - (after debottlenecking)		E (Detail Engg)
2005	Nirma	Baroda	Linear Alkyl Benzene (Revamp & Debottlenecking)	-	UOP	E (Detail Engg)
2004	EMS Inventa	Confidential	Man-made fibres (Raw materials)	Confidential	-	E (Detail Engg)
2004	Supreme Petrochem	Nagothane	Polystyrene (Expansion)	300000 - (after expn.)		E (Detail Engg)
2004	Nirma	Baroda	LAB - Define Unit of LAB	43,500	UOP	E (Detail Engg)
2004	Farabi Petrochemical	Saudi Arabia	n-Paraffin Linear Alkyl Benzene	120,000 70,000	UOP	EPCM
2003	Reliance Industries	Hazira	Ethylene Oxide Ethylene Glycol (Revamp - part of MEG Capacity Expansion)	-	Shell	E (Detail Engg)
2002	Jal International	Saudi Arabia	Vapour Separation for Polyethylene plant	-	MTR Inc.	E (Detail Engg)
2001	Indian Oil Corpn., Gujarat Refinery	Baroda	PMC Services for LAB project	120,000	UOP	FEED, PMC
2001	Nirma	Ahmedabad	Linear Alkyl Benzene (Revamp)	-	UOP	E (Detail Engg)
2000	SASOL (Uhde - A Divn.of TK Engg., South Africa)	S. Africa	n-Butanol	150,000	Mitsubishi	E (Detail Engg)

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2000	SASOL (Uhde - A Divn.of TK Engg., South Africa)	S. Africa	Detergent Alcohol	120,000	Uhde / Kvaerner	E (Detail Engg)
2000	ThyssenKrupp Engg.(Pty.)	S. Africa	PDMS Model for Polypropylene plant	- -		E (Detail Engg)
2000	VAM Organics	Gajraula	Vinyl Acetate Monomer (Expansion)		Bayer	E (Detail Engg)
2000	Vinyl Chemicals (India)	Mahad	Vinyl Acetate Monomer [Debottlenecking (Phase II)]	20000 (after debottlenecking)	Bayer	E (Detail Engg)
2000	Supreme Petrochem	Nagothane	Polystyrene (Revamp 2nd Line)	66,000	-	E (Detail Engg)
1999	Radici (Uhde GmbH)	Germany	Adipic Acid	80,000	Radici	E (Detail Engg)
1998	Nirma	Ahmedabad	LAB Front-end	65,000	UOP	EPCM
1998	Qatar Vinyl Co.	Qatar	Ethylene Dichloride	175,000	Hoechst /	E (Detail Engg)
			Vinyl Chloride Monomer	230,000	Uhde	
1998	Supreme Petrochem	Nagothane	Polystyrene (Expansion 3rd Line)	33,000	ABB Lummus	E (Detail Engg)
1997	Hoecsa	Turkey	Polyester Tyre Cord	14,000	Hoechst Celanese	EPCM
1997	P.T.Styrindo Mono (MHI, Japan)	Indonesia	Ethyl Benzene Styrene Monomer	200,000	ABB Lummus	E (Detail Engg)
1996	Indian Petrochemicals Corpn.	Dahej	High Density Polyethylene	160,000	Hoechst	EPCM
1995	Nirma	Ahmedabad	Linear Alkyl Benzene	80,000	UOP	EPCM
1995	Chemplast Sanmar	Chennai	Incinerator for Chlorinated Wastes		- Caloric	EPCM
1995	SPIC Petrochemicals	Madras	Polyester Filament Yarn	63,000	Hoechst	EPCM
1994	PETROCORP (Uhde GmbH)	Philippines	Polypropylene	160,000	BASF	E (Detail Engg)
1993	BASF India	Mumbai	Metal Complex	1,700	BASF	EPCM
			Dyes & Dispersions	8,200		
1993	Tamilnadu Petroproducts	Chennai	Epichlorohydrine	10,000	Conser	EPCM

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1992	Supreme Petrochem	Mumbai	Polystyrene	60,000	ABB Lummus (Huntsman)	EPCM
1991	Tamilnadu Petroproducts	Chennai	LAB Front-end (Modification)	-	UOP	E (Detail Engg)
1991	Kanoria Chemicals & Industries	Ankleshwar	Formaldehyde (Duplication)	16,216	Formox AB	EPCM
1990	SPIC Fine Chemicals	Chennai	Synthetic Detergent	30,000	Henkel	EPCM
1989	McDowell & Co. -Polymers Division (Now LG Chemicals)	Vizag	Styrene	60,000	UOP	EPCM
1989	Tamilnadu Petroproducts	Chennai	LAB Back-end (Modification)	-	UOP	E (Detail Engg)
1989	Hindustan Organic Chemicals	Rasayani	Formaldehyde	33,000	Formox AB	EPCM
1989	McDowell & Co. -Polymers Division (Now LG Chemicals)	Vizag	Polystyrene	20,000	Atochem	EPCM
1989	Reliance Industries	Mumbai	LAB Front-end (n-Paraffin)	100,000	UOP	EPCM
1988	Kanoria Chemicals & Industries	Ankleshwar	Formaldehyde	16,216	Perstorp	EPCM
1988	Gujarat Alkalies and Chemicals	Baroda	Chloromethanes (Duplication)	10666 (total)	Shin-Etsu	EPCM
1987	Gujarat State Fertilizers & Chemicals	Baroda	Caprolactam (Phase I)	50,000	BASF/ Polservice	EPCM
1987	Tamilnadu Petroproducts	Chennai	Define unit and heavy n-Paraffin unit of LAB	-	UOP	EPCM
1987	Nan-Ya Plastics Corpn.	Taiwan	Bisphenol-A	20,000	Ciech Ico	E (Detail Engg)
1987	Vinyl Chemicals (India)	Mahad	Vinyl Acetate Monomer	10,000	Bayer	EPCM

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1987	UB Petroproducts	Chennai	Propylene Oxide	12,000	Montedipe / Pressindustria	EPCM
			Propylene Glycol	8,500		
			Polyols	8,000		
1987	McDowell & Co. -Polymers Division (Now LG Chemicals)	Vizag	Polystyrene (Modernisation)	7,400	Fordell	EPCM
1986	National Organic Chemical Industries	Thane	Ethylene Oxide Ethylene Glycol [Modernisation (Phase I)]	-	Shell	E (Detail Engg)
1985	Polyolefins Industries	Thane	Ethyl Vinyl Acetate (Relocation)	-	Johnson Matthey Catalysts	EPCM
1985	McDowell & Co. -Polymers Division (Now LG Chemicals)	Vizag	Expandable Polystyrene	2,000	Sunde Plastics	EPCM
1985	Polyolefins Industries	Thane	Prevulcanising Inhibitor	300	Monsanto	EPCM
1985	Cibatul	Atul	Formaldehyde	13,200	Perstorp	EPCM
1985	National Organic Chemical Industries	Mumbai	Ethylene Oxide reactor (Relocation)	-	Shell	E (Detail Engg), CS
1984	McDowell & Co. -Polymers Division (Now LG Chemicals)	Vizag	Ethylene (Modernisation)	3,000	Petrobras	EPCM
1984	Tamilnadu Petroproducts	Chennai	Linear Alkyl Benzene	50,000	UOP	EPCM
1983	Gujarat Alkalies and Chemicals	Baroda	Chloromethanes comprising Methyl Chloride Methylene Chloride Chloroform Carbon Tetrachloride	10666 (Total)	Shin-Etsu	EPCM
1982	McDowell & Co. -Polymers Division (Now LG Chemicals)	Vizag	Ethyl Benzene	15,000	UOP	EPCM
			Styrene (Modernisation)	15,000	CdF Chemie	
1981	National Organic Chemical Industries	Mumbai	Ethylene Oxide (Expansion and Modernisation)	3900 (after expn.)	Shell	E (Detail Engg), P, CS

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1980	Hindustan Organic Chemicals	Rasayani	Nitrotoluene	6,200	HOC	EPCM
1979	Polychem	Nira	Ethylene from Alcohol	2,600	Polychem	EPCM
			Vinyl Acetate Monomer	5,000	Bayer	
1977	Sahyadri Dyestuffs & Chemicals (Division of M.F.H.)	Dewas	Dimethyl Aniline	3,000	Sahyadri	EPCM

Abbreviations (Services Rendered)

E (Basic Engg), E (Detail Engg), P = Procurement, EPCM = Engineering, Procurement, Construction Management, PS = Proprietary Supplies, CS = Construction Supervision, COS = Commissioning Supervision, EPC-LSTK = Engineering Procurement Construction - Lumpsum Turnkey, FEED - Front End Engineering Design, PMC = Project Management Consultancy, DFR = Detailed Feasibility Report