



**GENERAL  
ENGINEERING  
SERVICE  
ASSIGNMENTS**

CONTRACT #

9000000777

(2018 TO AUG'2021)



S.No	PROJECT	YEAR
1	PDH Plant Air Outlet Header Erosion Elimination	2018
2	Diversion of CGC condensate in EC plant	2018
3	Installation of chiller in CW circuit	2018
4	Stand by facility for Hot Boiling	2018
5	Stress analysis for evaluating PG Tapping Failures in Furnaces	2019
6	Stress analysis for FDF turbine HP inlet steam line	2019
7	Stress analysis for 48" GRP flue gas line	2019
8	DEP for bypass line from the spiral cooler 11E-1007 to BA Reactor	2019
9	DEP for Butanol waste liquid permanent transportation	2019
10	HVAC study in air circulation in manufacturing excellence cubicles	2019
11	Deputation of Instrumentation Engineers	2019
12	Recovery of Hexane from Niro Dryer	2019
13	Stress Analysis of fin fan inlet 20" LP steam header	2019
14	Stress Analysis of Fin fan LP steam condensate 10" outlet header	2019

**GENERAL  
ENGINEERING  
SERVICE  
ASSIGNMENTS**

CONTRACT # 9000000777  
(2018 TO AUG'2021)



S.No	PROJECT	YEAR
16	FEED for Installation of a standby 2nd flash vessel pump	2019
17	FEED for Installation of 6 new Nitrogen Buffer Vessels	2019
18	Study for improving the cooling fluid tracing of peroxide line	2019
19	Deputation of Mechanical Engineer	2019
20	CW header Simulation Studies	2019
21	Furnace-7 Stress Analysis in EC Plant	2019
22	Wastewater Line Stress Analysis	2019
23	Deputation of Instrument Engineer	2020
24	Deputation of CAD Engineer	2020
25	MAWP Calculations for Slip Blinds	2020
26	CFD Analysis on Reactor Air Outlet Header	2020
27	CFD Analysis of air inlet nozzle with injection gas sparger	2020
28	Deputation of resources for Turnaround	2021
29	Stress analysis for PP logistic silos blinding system	1905

**GENERAL  
ENGINEERING  
SERVICE  
ASSIGNMENTS**

**CONTRACT # CW6929  
(SEPT 2021 TO AUG 2024)**



S.No	PROJECT	YEAR
31	Installation of sample ports in AA Plant	2021
32	Study of Baffle Plate Relocation	2021
33	DEP for expansion of valve workshop in Maintenance Building	2021
34	Reactor Gas Injection Sparger Modification (CFD Case-7)	2021
35	Deputation of Engineers for site assistance	2021
36	DEP of new Coriolis FT for propane and propylene accounting in PDH plant	2021
37	DEP of new DP Type FT on wastewater discharge to Marafiq (PDH Plant)	2021
38	CFD analysis of air outlet heater with baffle plate and DEP (PDH Plant)	2021
39	Stress analysis study for PPX Silos Blending & Filling system	2021
40	DEP for new Pressure Control loop in Decanter (HDPE)	2021
41	Stress Analysis for 48" Off Gas Line in SAP Plant	2021
42	DEP for provision for new LT on interstage oil separator 6V-1210 (LDPE plant)	2021
43	Enhancement of Project procedures for Petrochemical Unit	2022

S.NO	PROJECT	YEAR
1	DEPUTATION OF SR.PROJECT ENGINEER FOR PP ENHANCEMENT PROJECT	2017
2	PHA REFRESHER FOR, PROPANE DEHYDRATION (PDH), POLY PROPYLENE PLANT (PP) AND UTILITIES PLANTS.	2017
3	PGD VESSEL UPGRADE & DEAERATOR STUDY	2017
4	STRESS ANALYSIS FOR PIPE WITH NEW FT	2018
5	ENGG STUDY SEPARATE CONVEYING LINE SUPPORT	2018
6	ENGINEERING STUDY OF PDH PROPYLENE COMPRESSOR VIBRATION STUDY	2019
7	MOTOR RE-ACCELERATION STUDY	2019
8	ADDITIONAL EXIT FORKLIFT DOOR	2019
9	TECHNICAL STUDY FOR PHA RECOMMENDATION IN PDH PLANT.	2019
10	FLOATING RING ENGINEERING STUDY	2019
11	ENGINEERING DESIGN CALCULATION FOR HIGHER CAPACITY NAOCL TANK FOUNDATION & 3D MODEL.	2019
12	ENGINEERING STUDY FOR INSTALLING 36" GATE VALVE IN PDH PLANT	2020
13	PCCD LC_250008_A1 VIBRATION ARREST ENGINEERING STUDY	2020
14	PSV STUDIES IN PDH PLANT	2020

**ADVANCED  
PETROCHEMICALS  
COMPANY**

**CONTRACT #200873**



**المتقدمة  
Advanced**

S.NO	PROJECT	YEAR
1	DEPUTATION OF SR.PROJECT ENGINEER FOR PP ENHANCEMENT PROJECT	2017
2	PHA REFRESHER FOR, PROPANE DEHYDRATION (PDH), POLY PROPYLENE PLANT (PP) AND UTILITIES PLANTS.	2017
3	PGD VESSEL UPGRADE & DEAERATOR STUDY	2017
4	STRESS ANALYSIS FOR PIPE WITH NEW FT	2018
5	ENGG STUDY SEPARATE CONVEYING LINE SUPPORT	2018
6	ENGINEERING STUDY OF PDH PROPYLENE COMPRESSOR VIBRATION STUDY	2019
7	MOTOR RE-ACCELERATION STUDY	2019
8	ADDITIONAL EXIT FORKLIFT DOOR	2019
9	TECHNICAL STUDY FOR PHA RECOMMENDATION IN PDH PLANT.	2019
10	FLOATING RING ENGINEERING STUDY	2019
11	ENGINEERING DESIGN CALCULATION FOR HIGHER CAPACITY NAOCL TANK FOUNDATION & 3D MODEL.	2019
12	ENGINEERING STUDY FOR INSTALLING 36" GATE VALVE IN PDH PLANT	2020
13	PCCD LC_250008_A1 VIBRATION ARREST ENGINEERING STUDY	2020
14	PSV STUDIES IN PDH PLANT	2020

ADVANCED  
PETROCHEMICALS  
COMPANY

CONTRACT #200873



المتقدمة  
Advanced

**GENERAL  
ENGINEERING  
ASSIGNMENT  
FOR NATEPT  
(SAUDI ARABIA)**



S.No	PROJECT	YEAR
1	ETAP Transient stability analysis study	2023
2	ETAP Transient stability analysis study - Cost Estimate and IFC package for the execution work.	2023
3	PDH Plant Heaters failure report study	2023
4	DEP for underground to aboveground cooling water lines	2023
5	FEA report for piping of R1002 outlet to R1003 inlet including H1003	2023
6	Stress analysis of piping between PDH plant reactors and heaters	2023

## GRASS ROOT AMMONIA PLANT

CLIENT: PCL-INDIA  
EPC CONTR: TOYO-INDIA  
PROJECT COST: **600 MM\$**

## BRIEF SCOPE OF WORK

Review and Approve Engineering Deliverables  
Procurement Assistance, Project Control and Reporting  
Construction Management, Commissioning support

**MAJOR PMC JOB  
COMPLETED**





S.NO	PROJECT	YEAR
1	3D view Assembly drawings., Erection Drawings and Shop fabrication drawings for Cement Plant ( 65 MT) PO No# SP202106223-1	2022
2	Upgradation of 4.16 KV Motor Protection Relay for a Petrochemical Plant	2022
3	<p>Detail Civil &amp; Structural Engineering for Loading bays of Refinery PO No# 4530000183</p> <ul style="list-style-type: none"> <li>• Design of steel structure using ASME standards</li> <li>• Structural Fabrication Drawings ( ~1500 MT)</li> <li>• Foundation Drawings</li> <li>• Scanning Area mark up on drawings for Geo Technical Survey</li> <li>• Bill of Material</li> </ul>	2023
4	Detail Engineering for Installation of Rundown tank for NGU Compressor for SABIC Gas, Yanbu	2024
5	Structural Analysis for Motor and Transformer supports for Petrokemya - N	2024

**ENGINEERING  
ASSIGNMENT FOR  
EXPERTISE  
(SAUDI ARABIA)**



**OTHER MAJOR  
DETAILED  
ENGINEERING &  
PROCUREMENT  
SERVICES  
ASSIGNMENTS**

<b>PROJECT</b>	<b>CLIENT</b>	<b>YEAR</b>	<b>LOCATION</b>	<b>MAN-HRS</b>
LIGHT KEROSENE STRIPPER PROJECT UNIT-102 PO No#8400001403 - I	FARABI	2022	YANBU	9100
BASIC ENGINEERING INCLUDING PROCESS SIMULATION MODEL AND DETAIL ENGG FOR EFFLUENT STRIPPING SYSTEM	INDORAMA	20-21	NIGERIA	6500
200 TPD BOITAMARI FORMALDEHYDE PLANT PROJECT	ATEC	20-21	INDIA	14000
DAP – I & 2 ENVIRONMENT ABETMENT PROJECT	INDORAMA	2019 -20	HALDIA	2,000
AMMONIA SCRUBBER SYSTEM AND WET SCRUBBER SYSTEM FOR DAP PLANT	INDORAMA	2019	HALDIA	3,500
NaOCI Tank	ADVANCED	2019	SAUDI ARABIA	1,100
ODISHA SOLVENT EXTRACTION PLANT	DUBEY PERFUMERS	2019	INDIA	2000
AMMONIUM NITRATE MELT EXPORT	DFPCL	2018	INDIA	2,400
MANCOZEB PLANT	IPL	2017-18	INDIA	8,000
PERFUME DISTILLATION PLANT	DUBEY PERFUMES	2017-18	INDIA	5,000

**OTHER MAJOR  
DETAILED  
ENGINEERING &  
PROCUREMENT  
SERVICES  
ASSIGNMENTS**

<b>PROJECT</b>	<b>CLIENT</b>	<b>YEAR</b>	<b>LOCATION</b>	<b>MAN-HRS</b>
REVIEW OF ENGINEERING DOCUMENTS FOR SSP PROJECT	Indorama Nigeria	2019-20	Kokand, Uzbekistan	3000
FOOD GRADE PHOS.ACID PLANT	GRASIM-ADITYABIRLA	2016-17	INDIA	20,000
AS BUILT ENGINEERING	COROMANDEL	2015-16	INDIA	15000
COPRODUCTION OF PROPINEB AND MANCOZEB	COROMANDEL	2015-16	INDIA	2800
FORMALDEHYDE/PNS/RESINS COMPLEX PO#ATEC/4.4.48/P09 I.PROC/EC/W.O.-01	ATEC-NCSP	2015-16	SAUDI ARABIA	24,000
SULPHONATED FORMALDEHYDE	ATEC-SPEARMISR	2014	EGYPT	8,500
METHANOL RECOVERY SYSTEM	SIPCHEM	2013	SAUDI ARABIA	12,000
PROPANE SPHERE MODIFICATION	NATPET	2011-12	SAUDI ARABIA	6,000

S.No	PROJECT	YEAR
1	Tank Fabrication Drawings Review and Stack Design	2019
2	Civil foundation Drawings Review	2019
3	Deputation of Planning Engineer	2019
4	Due Diligence for Soda Ash Plant	2019
5	Review of E&I Drawings, Cooling Tower Specs and Den Mixer Fabr Drgs	2019
6	Feasibility Study of Kungrad Soda Ash Plant (Leonardo Project)	2019
7	Project Rafael-Ammonia Uria Nitric Acid Plant Due Diligence	2020
8	SAP1 new WHRS & Non-integral steam/condensate system	2020
9	ASSP Stack CFD Study and Detail Engineering	2021

**INDORAMA****UZBEKISTAN****INDORAMA**

# INDORAMA HALDIA

S.No	PROJECT	YEAR
1	Ammonia scrubber Duct Modification	2019
2	Root cause Analysis for Ammonia Scrubber Fan Failure	2019
3	DEP of ALKALI SCRUBBING SYSTEM (SAP1&2)	2019
4	Constructability Study for STG project	2019
5	Venturi Scrubber Installation Engineering and DAP-1&2	2019
6	Failure Analysis of Pulveriser motor	2020
7	HAZOP study for WHRS & steam/condensate system	2020
8	ETAP Studies for Haldia Plant	2021
9	Testing of Relays, HT Breaker, CT, PT	2021

**INDORAMA  
NIGERIA**

S.No	PROJECT	YEAR
1	Design and engineering service for additional air intake room with louvers in Fluidization air fan suction	2018
2	Engineering and Procurement services for effluent stripper for fertilizer plant	2020
3	Engineering Services for Additional AIR INTAKE Louvers	2020
4	CFD & DEP of Air Washing Arrangement (Air Intake Louvers)	2022

# FORMALDEHYDE AND ITS DERIVATIVE PROJECTS

## **SNF Plant for SPREA MISR, EGYPT**

- a) Extended Basic engineering
- b) Detailed Engineering services –Piping and equipment layout, Electrical and Civil
- c) Procurement assistance
- d) 3D model in AVEVA E3D
- e) Field Engineering services
- f) Project scheduling and progress reports

## **Formaldehyde and its derivatives project for NCSP, KSA**

- a) Extended Basic engineering
- b) Detailed Engineering services for Equipment, Piping, Electrical and Structural and Coordination for Civil and Instrumentation by customer.
- c) Design and Fabrication drawings for storage tanks
- d) 3D model in AVEVA E3D
- e) Procurement Services
- f) Field Engineering services
- g) Project scheduling and Progress reports



**SIPCHEM**

## 1. **METHANOL RECOVERY SYSTEM FROM OFFGASES (9,500 MHRs)**

- a) Preparation of BED by Simulation
- b) Extended Basic Engineering and Detailed Engineering
- c) 3D Model
- d) Procurement Services
- e) Supply of Column Internals
- f) Project scheduling and Progress reporting

## 2. **Engineering for Installing new Hydrogenation Reactor (4,500 MHRs)**

- a) Extended Basic Engineering and Detailed Engineering
- b) 3D Model
- c) Procurement services
- d) Project scheduling and Progress reporting



- 1. Engineering of QRA studies recommendations by LRS for Visakhapatnam, Ennore and Kakinada Plants (2500 man hours)**
- 2. Revamp Study for Pesticide complex, Gujarat(14,000 MHrs)**
  - a) Preparation of As-Built PFDs and P&IDs
  - b) Preparation of As-Built Single line Diagrams
  - c) NDT for Equipment
  - d) NDT for Concrete and Structural Building
  - e) Project scheduling and Progress reports
  - f) HAZOP Chairman
- 3. Mancozeb Plant at Dahej, Gujarat (8,000 MHrs)**
  - a) Extended basic engineering
  - b) Detailed Engineering services including Equipment, Piping, instrumentation, electrical and civil
  - c) 3D model in AVEVA E3D
  - d) Procurement Services
  - e) Field Engineering services
  - f) Project scheduling and progress reports
  - g) HAZOP Chairman

## Food Grade P2O5 plant at Dahej for Aditya Birla Group (20,000 Man hours)

- Extended Basic Engineering
- Detailed Engineering services- Plot plan, equipment layout, Piping engineering, Supports engineering, Electrical and Instrumentation engineering and Civil & Structural load data and Guide drawings
- Design and Fabrication drawings for storage tanks
- 3D model in AVEVA E3D
- Procurement Services-ITB, Bid evaluation, PO specifications, Vendor drawing review and inspection
- Field Engineering services
- Project scheduling and Progress reports
- Participation in HAZOP

**ADITYA BIRLA  
CHEMICALS**

**GRASIM, VILAYAT**



**DUE DILIGENCE  
PROJECTS  
&  
DPRS**

Customized fertilizer plant  
in Myanmar

Ammonia plant relocation  
from Taloja to Paradip for  
DFPCL

Due diligence for  
acquisition of a Soda ash  
plant in Uzbekistan

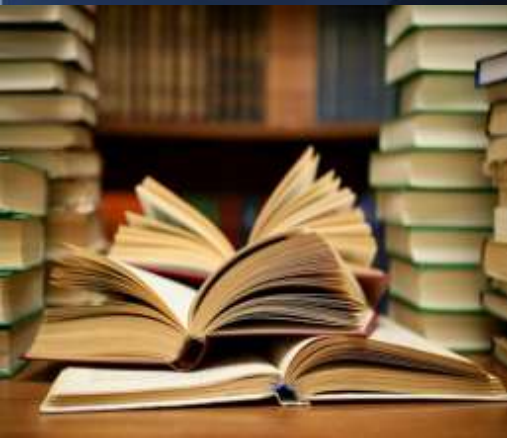
Feasibility studies for Soda  
ash, Sodium bi-carbonate,  
Edible salt, HCL and Caustic  
soda plant

Due diligence for  
acquisition of  
Ammonia/Urea/HNO<sub>3</sub>/AN  
complex

Relocation of Ammonia and  
Urea plant from Kuwait to  
Nigeria



# FEASIBILITY & TECHNICAL STUDIES



PROJECT	CLIENT	YEAR	LOCATION
FEASIBILITY STUDY FOR GREEN AMMONIA PLANT (150MTPD)	GREENKO	2022	TALOJA
PRE-FEASIBILITY STUDY FOR GREEN AMMONIA PROJECT (1500MTPD)	GREENKO	2021	TALOJA
FEASIBILITY STUDY FOR 50 TE PER DAY ABC PLANT	DFPCL	2021	TALOJA
FEA ANALYSIS FOR PULVERIZER MOTOR FAILURE IN DAP PLANT	INDORAMA	2020	HALDIA
TECHNICAL DUE DILIGENCE FOR AMMONIA/UREA/HNO3/AN COMPLEX	INDORAMA	2020	UZBEKISTAN
TECHNICAL DUE DILIGENCE FOR A SODA ASH PLANT	INDORAMA	2020	UZBEKISTAN
CONSTRUCTIBILITY REVIEW FOR SAP-1, SAP-2 AND STG REVAMP	INDORAMA	2019	HALDIA
PROCESS DYNAMIC SIMULATION OF CO2 COMPRESSORS FOR UREA PLANT	HITACHI	2019	JAPAN
PRE-FEASIBILITY AND FEASIBILITY STUDIES FOR SODA ASH, SODIUM BI-CARBONATE EDIBLE SALT, HCL AND CAUSTIC SODA PLANT	INDORAMA	2019/2020	UZBEKISTAN
RCA FOR AMMONIA SCRUBBER FAN FAILURE IN DAP PLANT	INDORAMA	2019	HALDIA, INDIA

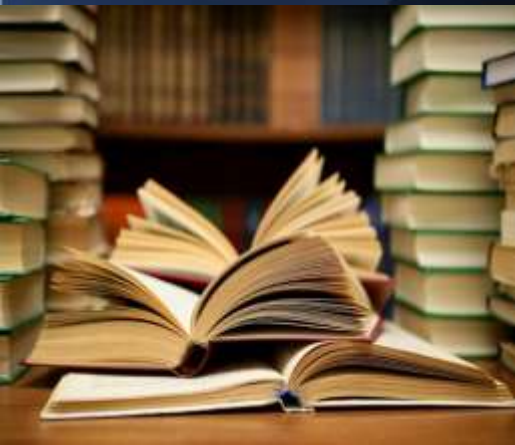
# FEASIBILITY & TECHNICAL STUDIES



PROJECT	CLIENT	YEAR	LOCATION
CONSTRUCTABILITY STUDY FOR BOILER/STG PROJECT	INDORAMA	2020	HALDIA-INDIA
DEAEARATOR AND PGD VESSEL STUDIES	APC	2017	SAUDI ARABIA
ASSESSMENT STUDY OF AMMONIA UREA COMPLEX OF PIC, KUWAIT	NIGERIA	2017	KUWAIT
PROCESS DYNAMIC SIMULATION OF COMPRESSOR SYSTEM	HITACHI	2017	UAE/EGYPT
AMMONIA/UREA PLANT UPGRADE FEASIBILITY STUDY	ADVENTZ/ZUARI	2016	INDIA
HEAT EXCHANGER DESIGN AND DETAILING	PLE	2015	INDIA
PLANT INTEGRITY STUDIES FOR BUILDINGS AND STRUCTURES	COROMANDEL	2014	INDIA
VIBRATION STUDIES OF PIPING/STRUCTURES	SIPCHEM	2014	SAUDI ARABIA
STRESS/DYNAMIC ANALYSIS OF CRITICAL PIPING	NFCL/KREST	2014	INDIA/QATAR
FEA STUDIES AND DESIGN OF PRESSURE VESSEL	SNEC	2013	CHINA
MTO FOR FERTILIZER COMPLEX FOR OPEN BOOK ESTIMATES	OLAM INTL	2012	GABON

**FEASIBILITY &  
TECHNICAL  
STUDIES**

PROJECT	CLIENT	YEAR	LOCATION
FEASIBILITY STUDY FOR AMMONIA PLANT REVAMP	DEEPAK FERTILIZERS	2019	INDIA
DPR FOR CUSTOMIZED FERTILIZER PLANT	ADVENTZ/ZUARI	2018	MYANMAR
AMMONIA PLANT RELOCATION FEASIBILITY STUDY	DFPCL	2018	INDIA
CUSTOMIZED FERTILIZER PLANT FEASIBILITY STUDY	ADVENTZ/ZUARI	2017-18	MYANMAR



# HAZOP STUDIES



PROJECT	CLIENT	YEAR	LOCATION
HAZOP STUDY FOR AN COMPLEX	STL	2021	SRIKAKULAM
HAZOP STUDY FOR STG PROJECT	INDORAMA	2020	HALDIA-INDIA
HAZOP STUDY FOR DAP 1 & 2 ENVIRONMENT ABETMENT	INDORAMA	2019-20	HALDIA-INDIA
HAZOP STUDY FOR AMMONIA SCRUBBING SYSTEM	INDORAMA	2019	HALDIA-INDIA
HAZOP STUDY FOR PROCESS AIR COMPRESSOR FOR SPIC, INDIA	HITACHI	2019	INDIA
HAZOP STUDY FOR CO2 COMPRESSOR SYSTEM IN KRIBHCO PLANT	HITACHI	2019	INDIA
HAZOP STUDY FOR MTBE/PP/UTILITIES COMPLEX	APC	2017-18	SAUDI ARABIA
AMMONIUM NITRATE MELT EXPORT FACILITY	DFPCL	2018	INDIA
CO2 / NG COMPRESSOR PACKAGES FOR KIMA EGYPT	HITACHI	2016	INDIA
SYNGAS / AMMONIA COMPRESSOR PACKAGES FOR ETI BAKIR, TURKEY	HITACHI	2016	INDIA
FOOD GRADE PHOSPHORIC ACID PLANT, VILAYAT	GRASIM	2016	INDIA

# HAZOP STUDIES

PROJECT	CLIENT	YEAR	LOCATION
TV COMPRESSOR PACKAGE FOR KOC, KUWAIT	HITACHI	2016	DUBAI
PESTICIDE COMPLEX, DAHEJ	COROMANDEL	2015	INDIA
PESTICIDE COMPLEX, SARIGAM (For whole complex and for coproduction project)	COROMANDEL	2015	INDIA
AMMONIA VAPOR LINES MODIFICATION, KAKINADA	COROMANDEL	2015	INDIA
ADDITIONAL REACTOR FOR METHANOL RECOVERY	SIPCHEM	2015	SAUDI ARABIA
FORMALDEHYDE COMPLEX, NCSP	ATEC	2015	SAUDI ARABIA
ADDITIVES COMPLEX	GSI	2014	SAUDI ARABIA
PROPANE SPHERE MODIFICATION PO No# 4500005297	NATPET	2012	SAUDI ARABIA





PROJECT	CLIENT	YEAR	LOCATION
DEPUTATION OF ENGINEERS (6 No) FOR TURNAROUND	TASNEE	2021	SAUDI ARABIA
HT/LT BREAKER AND RELAY TESTING SERVICES	INDORAMA	2021	HALDIA
DEPUTATION OF INSTRUMENT ENGINEER & PIPING ENGINEER	TASNEE	2021 (TILL DATE)	SAUDI ARABIA
DEPUTATION OF PLANNING ENGINEER	INDORAMA	2019 (One year)	UZBEKISTAN
DEPUTATION OF FOUR INSTRUMENT ENGINEERS	TASNEE	MARCH TO MAY 19	KSA
DEPUTATION OF RESIDENT CONSTRUCTION MANAGER	DFPCL	MARCH 18 TO DEC 18	DAHEJ, INDIA
DEPUTATION OF 4 nos. INSTRUMENT ENGINEERS & 4 nos. MECHANICAL SUPERVISORS	TASNEE	MAY'22 TO JUNE'22	SAUDI ARABIA

**SITE SERVICES**



**SITE SERVICES**



PROJECT	CLIENT	YEAR	LOCATION
DEPUTATION OF RESIDENT ENGINEER FOR CONSTRUCTION	GRASIM	2017-18 (12 MONTHS)	INDIA
DEPUTATION OF ENGG. SPECIALIST FOR FIELD ENGG SUPPORT	ATEC/NCSP	2017	SAUDI ARABIA
SPECIALIST SERVICES FOR FAT OF COMPRESSOR CONTROL SYSTEM	HITACHI	2015 (2 weeks)	DUBAI
SPECIALIST SERVICES FOR COMMISSIONING OF COMPRESSOR CONTROL SYSTEM	HITACHI	20117 (ONE MONTH)	OMAN
DEPUTATION OF ENGINEERS FOR AS-BUILT DRAWINGS	COROMANDEL	2016 (24 MAN MONTHS)	INDIA
DEPUTATION OF ELECTRICAL ENGINEER FOR DETAILED ENGG.	LINDE	2014 (3 MAN MONTHS)	INDIA

**THANK YOU**