

**A SHORT REPORT
ON
THE INDUSTRIAL VISIT
TO
NUMALIGARH REFINERY LIMITED
Assam, India**



**By Mechanical Engineering Department
Jorhat Engineering College
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Introduction

It was a great exposure to us to have an industrial visit to the Numaligarh Refinery Limited (NRL), located at Morangi, Golaghat district, Assam. During this industrial visit to NRL, we have learnt how the industry works and what are the production rates and capacity of various units of NRL.



What have we learnt?

During this industrial visit, we have been shown the various units working under NRL. These are as follows:

1. Crude Distillation Unit (CDU)
2. Vacuum Distillation Unit (VDU)
3. Delayed Coker Unit (DCU)
4. Hydrocracker Unit (HCU)
5. Sulphur Recovery Block (SRB)
6. Coke Calcination Unit (CCU)
7. Motor Spirit Unit (MSU)

A brief overview of the above-mentioned units is given in the next few pages.

BRIEF OVERVIEW OF NUMALIGARH REFINERY LIMITED

Major Units



Crude & Vacuum Distillation		
CDU Capacity	::	3.0 MMTPA
Designed By	::	Engineers India Limited
Commissioned	::	April'1999

VDU Capacity	::	1.32 MMTPA
Designed By	::	Engineers India Limited
Commissioned	::	April'1999

Delayed Coker Unit		
Capacity	::	0.306 MMTPA
Designed By	::	Engineers India Limited
Commissioned	::	Sept'1999





Hydrogen Unit		
Capacity	::	48600 TPA
Licensor	::	HALDOR TOPSOE, Denmark
Commissioned	::	Feb'2000

Hydrocracker Unit		
Capacity	::	1.45 MMTPA
Licensor	::	CHEVRON,USA
Commissioned	::	June'2000



Sulfur Recovery Block		
Capacity	::	4000 TPA
Designed By	::	Engineers India Limited
Commissioned	::	July' 2000

Coke Calcination Unit		
Capacity	::	0.104 MMTPA
Licensor	::	SVEDALA,USA
Commissioned	::	May 2004

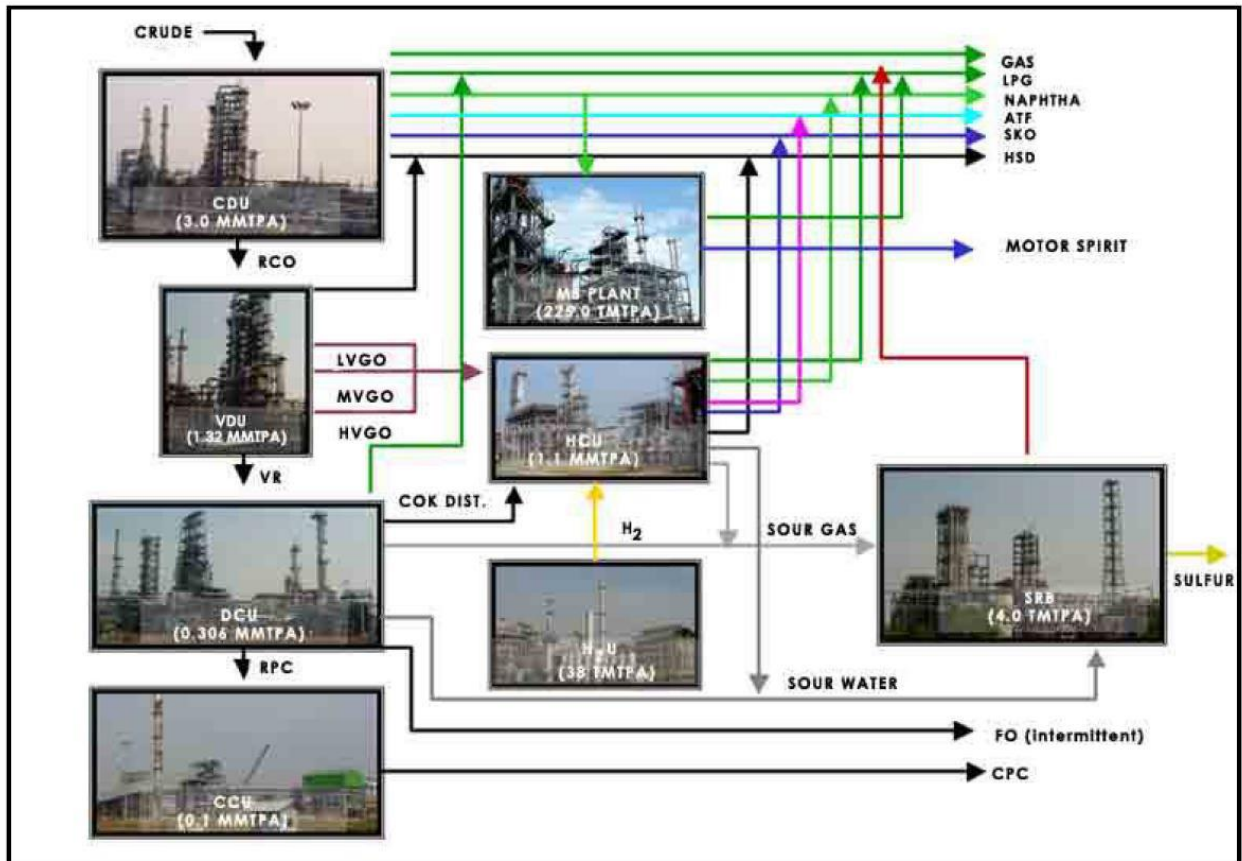




Motor Spirit Plant		
Capacity	::	225 TMTPA
Process licensor	::	M/s AXENS France
Consultant	::	Toyo Engineering (I) Ltd.
Commissioned	::	Naptha Hydrotreating unit : June 2006 Catalytic Reforming unit : July 2006

CENTRAL CONTROL ROOM

Process Flow Diagram



Photos of the Visit

