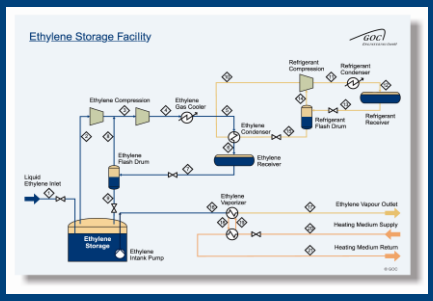
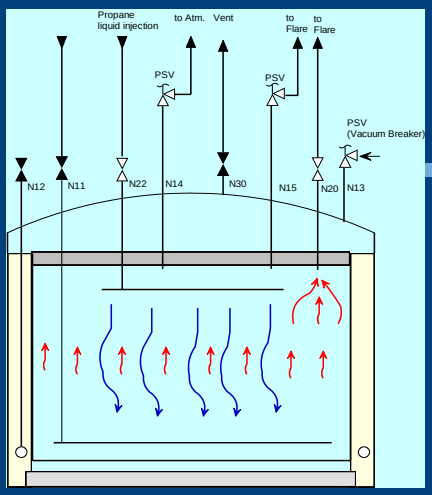
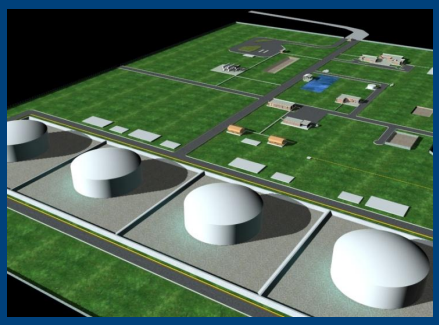
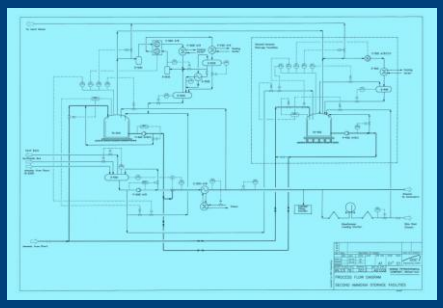
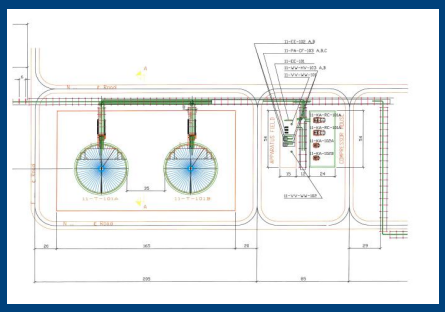
GOC ENGINEERING GMBH











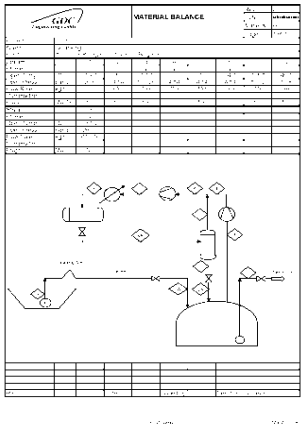
REFERENCES

ETHYLENE
PROPYLENE
LPG
AMMONIA

GOC Engineering GmbH
Bachovenstr. 8; 53489 Sinzig, Germany
Phone: + 49(0)2642 9939300
Info@goce.de; www.goce.de

Ethylene
Propylene
LPG
Ammonia

PROJECT	*Project name:* **Ammonia Storage Terminal** *Country:* Varna, Bulgaria *Client:* adapt for Oiltanking *Year:* 2000 *GOC project:* 7001



PROJECT DESCRIPTION	Terminal to import Ammonia by ships Marine unloading system @ 1500m³/h Refrigerated storage tanks @ 2 x 15,500 m³ Send out system including Discharge to production plant @ 37,5 to/h Rail tank car loading @ 61 to/h
PROJECT PHASES	Technical/commercial study
GOC DISCIPLINES	Process Mechanical & rotating equipment Commercial
GOC WORK SCOPE	Technical study costing of plant equipment

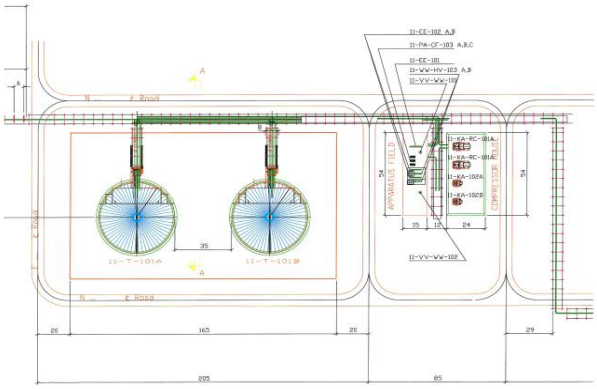
Ethylene
Propylene
LPG
Ammonia

PROJECT	*Project name:* **Ethylene Terminal** *Country:* Petroquimica Triunfo, Brazil *Client:* Whessoe Oil&Gas *Year:* 2000 *GOC project:* 7003 Source: KILGAS
PROJECT DESCRIPTION	Ethylene storage system as part of a production plant Refrigerated storage tank @ 1 x 7,100 m³ Ethylene BOG compressor Ethylene vaporizer Methanol Sysem Send out system including Discharge to production plant 25 m³/h @ -104 °C
PROJECT PHASES	Technical/commercial study
GOC DISCIPLINES	Process Mechanical & rotating equipment Commercial
GOC WORK SCOPE	Technical review Costing study

PROJECT	*Project name:* **Salalah Gas Pipeline** *Country:* Oman *Client:* ILF & Partners *Year:* 2000 *GOC project:* 7004
PROJECT DESCRIPTION	LPG extraction plant as part of the Salalah Gas Pipeline in Oman including Dehydration system Gas treatment unit Compression unit Cryogenic gas processing unit Fractionation system Product storage Loading unit
PROJECT PHASES	Technical study
GOC DISCIPLINES	Process Mechanical & rotating equipment Commercial
GOC WORK SCOPE	Technical review of outline documents Site selection review

Ethylene
Propylene
LPG
Ammonia

PROJECT	*Project name:* **LPG Terminal DMCC** *Country:* India *Client:* Whessoe Oil&Gas *Year:* 2001 *GOC project:* 7006



PROJECT DESCRIPTION	LPG import terminal in India to import Propane or Butane Marine unloading system , desing flow rate 1000 t/h Refrigerated storage tanks , 2 x 25,000 m³ BOG Reliquefaction system LPG blending system LPG Heater system Safety System Instrumentation & control Pipng & valves Utility system Flare System
PROJECT PHASES	Tender phase
GOC DISCIPLINES	Process Mechanical & rotating equipment Electrical & instrumentation Commercial Tanks Piping & valves
GOC WORK SCOPE	Pre-bid assistance Process design Process description Layout Costing of equipment

Ethylene
Propylene
LPG
Ammonia

GOC ENGINEERING GMBH

PROJECT

Project name:

LPG Recovery Plant

Country:

Poland

Client:

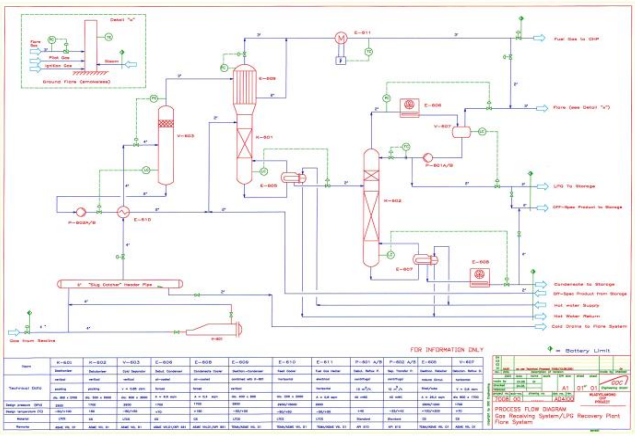
ILF

Year:

2001

GOC project:

7008



PROJECT DESCRIPTION

LPG Recovery Plant for Wladyslawowo CHP Project
Slug catcher
Deethanizer
Debutanizer
Cold separator
Condenser
Feed cooler
Reflux pumps
Transfer pumps
Reboiler
Flare System

PROJECT PHASES

Tender phase

GOC DISCIPLINES

Process
Mechanical & rotating equipment
Piping & valves
Electrical & instrumentation
Commercial

GOC WORK SCOPE

Pre-bid assistance
Process design
Process flow diagram
Sizing of equipment
Costing of equipment

Ethylene
Propylene
LPG
Ammonia

GOC ENGINEERING GMBH

PROJECT

Project name:

Ammonia Storage Facillty

Country:

Middle East

Client:

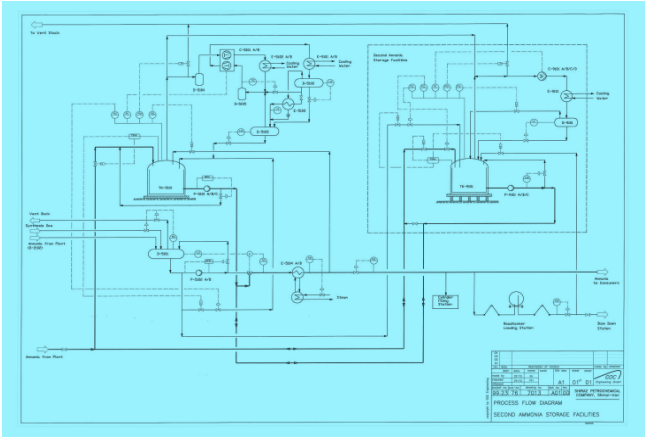
UK

Year:

2001

GOC project:

7009/7013/7014



PROJECT DESCRIPTION

New Ammonia storage facility within a existing production plant
Refrigerated storage tank , 5000 mt
Reliquefaction system
Send out system
Safety System
Instrumentation & control
Pipng & valves
Utility system
Interface with existing system

PROJECT PHASES

Tender phase

GOC DISCIPLINES

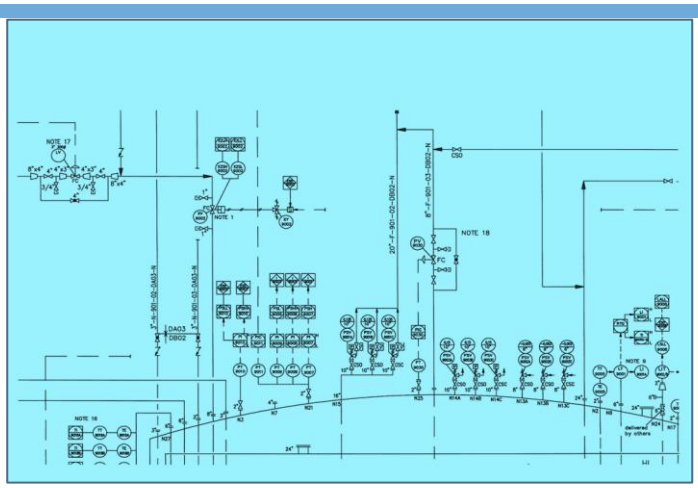
Process
Mechanical & rotating equipment
Electrical & instrumentation
Commercial
Tanks
Piping & valves

GOC WORK SCOPE

Pre-bid assistance
Process design
Process flow diagram
Sizing of equipment
Costing of equipment

Ethylene
Propylene
LPG
Ammonia

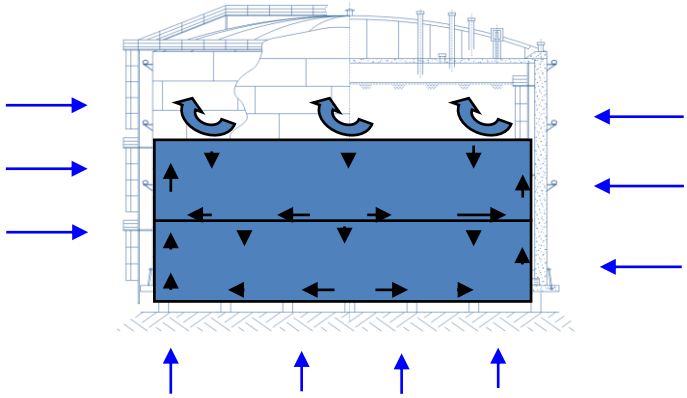
PROJECT	*Project name:* **PPC Off-site Facilities** *Country:* Middle East *Client:* adapt for Intecsa-Uhde *Year:* 2003-2004 *GOC project:* 7031/7037/7057



PROJECT DESCRIPTION	LPG storage facility within a grassroot petrochemical complex Refrigerated storage tank for Propane , 120,000 m³ Refrigerated storage tank for Butane, 60,000 m³ Tank instrumentation Tank safety valves
PROJECT PHASES	Engineering
GOC DISCIPLINES	Process Electrical & instrumentation Safety
GOC WORK SCOPE	Sizing of tank safety valves Design, engineering for tank instrumentation Inquiry specification for instrumentation and valves

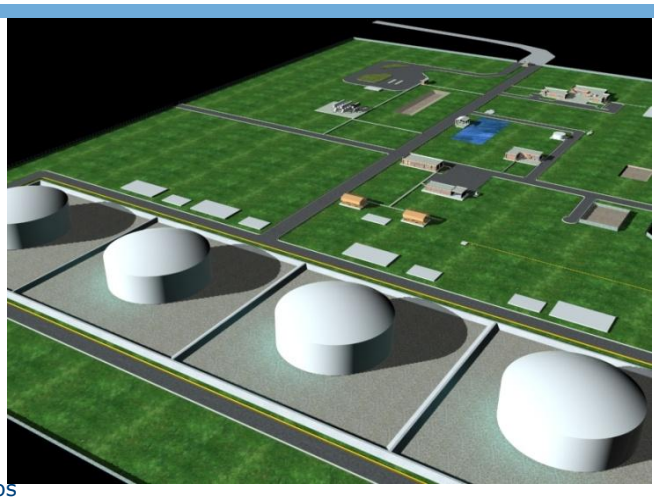
Ethylene
Propylene
LPG
Ammonia

PROJECT	*Project name:* **PPC Off-site Facilities** *Country:* Middle East *Client:* adapt for Intecsa-Uhde *Year:* 2004 *GOC project:* 7037



PROJECT DESCRIPTION	LPG storage facility within a grassroot petrochemical complex Refrigerated storage tank for Propane , 120,000 m³ Refrigerated storage tank for Butane, 60,000 m³ Tank instrumentation Tank safety valves
PROJECT PHASES	Engineering
GOC DISCIPLINES	Process Electrical & instrumentation Safety
GOC WORK SCOPE	Roll- over Study

PROJECT	*Project name:* **LPG Terminal, La Libertad** *Country:* Ecuador *Client:* adapt for Dragados *Year:* 2005 *GOC project:* 7045

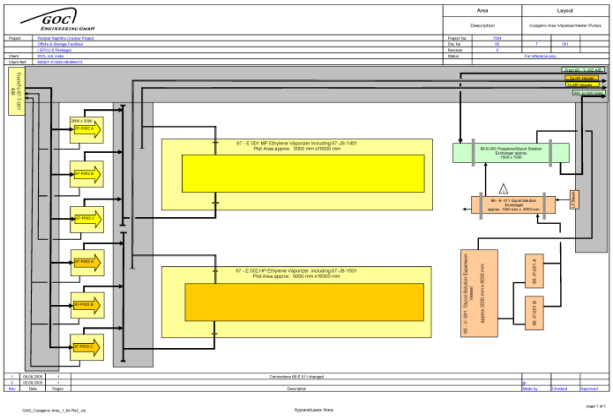


Source: Dragados

PROJECT DESCRIPTION	Propane and Butane unloading and storage Marine unloading facilities 1 x 21,000 m³ DWST single containment tank fore Propane 1 x 47,000 m³ DWST single containment tank for Butane BOG handling Send out pumps LPG Send out system with static mixer , LPG Heater and LPG booster pumps Flare system Instrumentation and control Utility system
PROJECT PHASES	Tender
GOC DISCIPLINES	Process Electrical & instrumentation Safety
GOC WORK SCOPE	Functional technical specification Costing study

Ethylene
Propylene
LPG
Ammonia

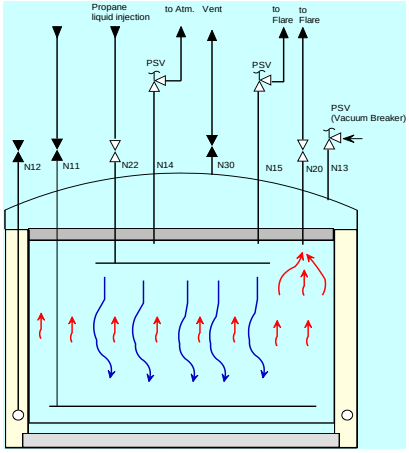
PROJECT	*Project name:* **Panipat Naphta Cracker** *Country:* India *Client:* Larsen & Toubro Ltd. for IOCL *Year:* 2005 *GOC project:* 7054



PROJECT DESCRIPTION	Ethylene storage and transfer system including 2 x 21,600 m³ full containment tank for Ethylene Ethylene BOG compression system Ethylene emergency vaporisation system Ethylene pumping system Propylene storage and transfer system including 2 x 15,3600 m³ full containment tank for Propylene Propylene BOG compression system Propylene heating system
PROJECT PHASES	Pre- Bid assistance
GOC DISCIPLINES	Process Mechanical & rotating eqipment Electrical & instrumentation Safety Tanks
GOC WORK SCOPE	Process engineering Tank engineering Costing study

Ethylene
Propylene
LPG
Ammonia

PROJECT	*Project name:* **PPC Off-site Facilities** *Country:* Middle East *Client:* adapt for Intecsa-Uhde *Year:* 2005 *GOC project:* 7057

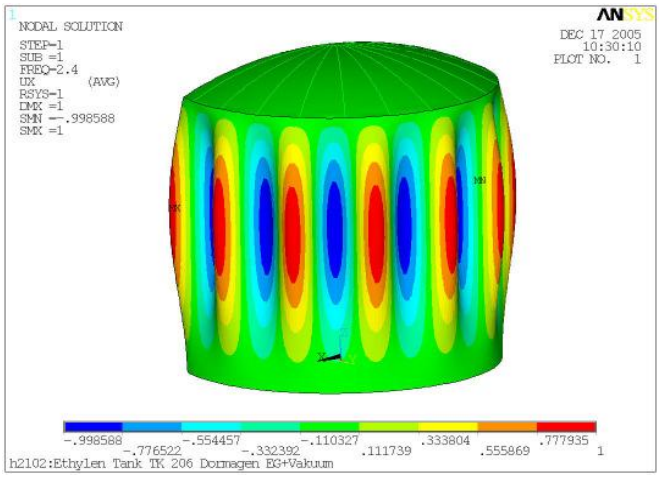


PROJECT DESCRIPTION	LPG storage facility within a grassroot petrochemical complex Refrigerated storage tank for Propane , 120,000 m³ Refrigerated storage tank for Butane, 60,000 m³ Tank instrumentation Tank safety valves
PROJECT PHASES	Engineering
GOC DISCIPLINES	Process Electrical & instrumentation Safety
GOC WORK SCOPE	Purge and cool-down procedure for refrigerated tanks

Ethylene
Propylene
LPG
Ammonia

GOC ENGINEERING GMBH

PROJECT	*Project name:* **Ethylene storage tank** *Country:* Germany *Client:* Ineos *Year:* 2005/2006 *GOC project:* 7056



PROJECT DESCRIPTION	Existing Ethylene storage tank within a Ethylene production plant 1 x 4,000 m³ single containment tank for Ethylene Ethylene send out system with Ethylene pumps installed in a pump cellar below gound level. Ethylene vaporizer system
PROJECT PHASES	Technical and commercial study
GOC DISCIPLINES	Process Mechanical & rotating eqipment Electrical & instrumentation Safety Tanks
GOC WORK SCOPE	Detailed study to upgrade the safety level of the Ethylene tank. Process engineering Tank engineering Process engineering Tank engineering Costing study