

Liao-Yang petrochemical complex

Publication de 19xx ETHYLENE - TECHNIP - KTI - TECHNIPETROL

Buyer : China National Technical Import Corporation, CNTIC.

Location : Liao-Yang Liaoning area North East of Peking. People's Republic of China.

Type : grass roots petrochemical complex including a nylon chain and a polyester chain with, in all, 21 different units.
Completion : 1978/1979

Capacities : 80,000 t/yr ethylene, 87,000 t/yr polyester and 46,000 t/yr of nylon using a petroleum feedstock.

Contract : Technip associated with Speichim. Both partner provide :

- complete design and engineering services
- equipment : 45,000 tons. 4400 equipment items.
- assistance to construction and start-up.
- training of 230 Chinese technicians on a worldwide basis.

A 2 BILLION FRANCS CONTRACT

The contract with Technip in partnership with Speichin, signed with the China National Technical Import Corporation, CNTIC, is the biggest ever concluded between France and the People's Republic of China. It covers studies and equipments for a grass roots complex planned to produce 87,000 tons/year of polyester and 46,000 tons/years of nylon from petroleum products. It also provides for technical assistance from both French companies in the construction and start-up of the facilities;

A key feature is the complete integration of the production chain from the base products to the finished products. The throughput fixed for the finished products determines the throughput of all the upstream units.

For this reason, the capacity of the upstream units (petroleum units) and the intermediate storage is relatively small. Inlet and outlet streams of the intermediate products are reduced as much as possible and the majority of the byproduct are used in the complex.

Main sections :

Catalytic reforming
Hydrogen production
Steam cracker
(ethylene production)
Gasoline Hydrogenation
Ethylene oxide production

Ethylene glycol production

Aromatic extraction

Polyester chain :
Paraxylene production

Dimethylteraphthalate
Polyester production

Nylon Chain :

Nitric Acid
Cyclohexane
Cyclohexanone
Adipic Acid
Adiponitril
Hexamethylenediamine
Nylon crystallization

Process and Technologies

IFP
Technip
IFP / FW Furnaces

IFP
Chemische Werkes
Hüls

Chemische Werkes
Hüls
IFP

Atlantic Richfield
Engelhard

Dynamit Nobel
Rhône Poulenc Textiles

Rhône Progil

IFP

SUCRP

SUCRP

SUCRP

SUCRP

SUCRP

