



DELION

## Modular plant

Mitigating construction risk by  
minimizing on-site labor hours



We will convert your technology into a modular plant

## Partnership

Leveraging our extensive expertise in plant engineering and operation, we convert your technology into a modular plant. Our plant can be quickly assembled and put into operation anywhere in the world.





## Addressing the current challenges in market

Modularization helps to mitigate the schedule delay and the construction risks through reduction of site manhours. Our expertise and know-how cover all aspects of modularization from design to onsite integration. We assist our clients in defining the strategy that best fits their project needs, offering extensive experience in working with yards.



Modular design for improvements in time efficiency, cost savings, and reliability.

Building on our experience in engineering and operation, we can convert your technology to the modular plants to meet your today's challenges. These plants provide the best solution for our clients' varied needs, offering:

- Quick time-to-solution achieved through extensive prefabrication and pre-testing.
- Streamlined on-site logistics and reduced CAPEX due to modular design.
- Expedited equipment fabrication and delivery.
- Cutting-edge technology and design for dependable operation.
- Simplified maintenance for reduced OPEX.
- Comprehensive support services, from consulting to commissioning and start-up.
- Confidence assured by our strong commitment to and proven excellence in quality, health, safety, and environmental (QHSE) protection.

## Design and fabrication of modules

As a contractor and modularization specialist, we take turnkey responsibility for delivery of process plants using a wide range of modules or skids. Each project is unique and no matter its size, a tailor-made cost-effective modular solution is available to our clients.

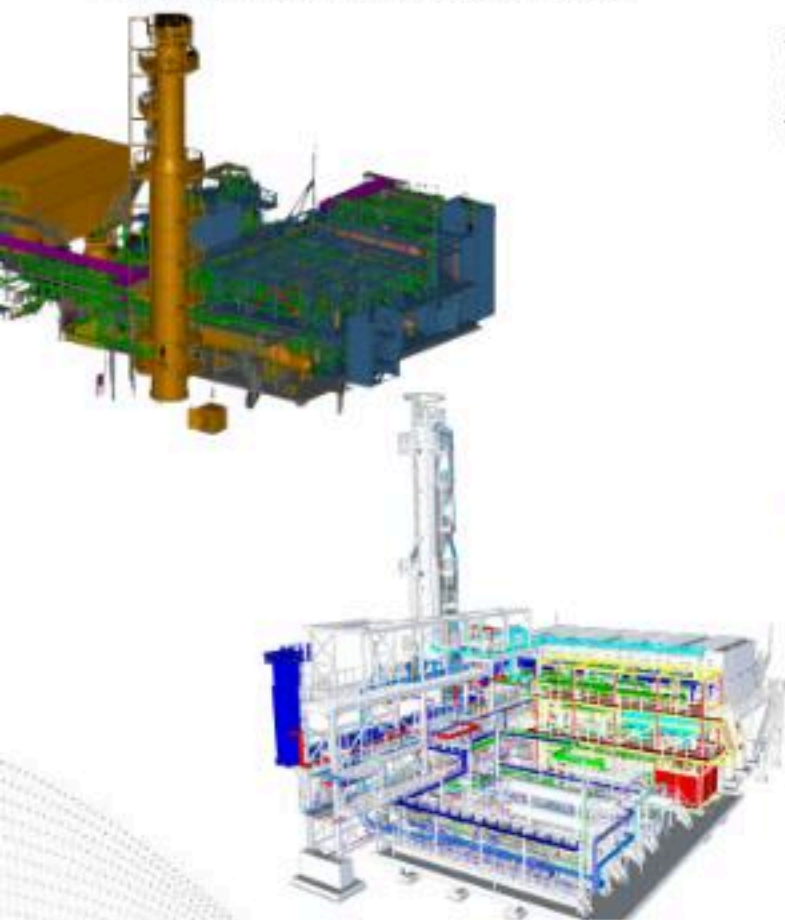
The types of modules range from skids to packages, buildings, process and utilities.

### Why modularize?

Modularization is a strategy for industrial plant construction that relies on the portioning of a facility into prefabricated sub-units assembled in well-equipped and well-located fabrication yards to be then transported to often remote construction sites where modules are interconnected.



We have successfully executed projects using many types of modules from truckable skids to complete process units.





## Our modularized technologies

- 1 Air Separation Unit
- 2 Nitrogen Generation Unit
- 3 LNG
- 4 Acid gas removal
- 5 Dehydration
- 6 Fractionation
- Your technology

High  
quality

Shorter  
terms

Lower  
risks



## Modularization expertise

Our modularization expertise starts from the early project phases.



### Modularization advantages:

#### 1. Construction:

- Requirement of skilled /costly manpower on site will be reduced
- Mitigate harsh climatic conditions
- Controlled fabrication environment
- Limit interfaces
- Reduce site congestion
- Reduced construction team

#### 2. Reduced site cost:

- Construction manhours
- Flatten peak manpower
- construction equipment
- Site supervision
- Decreased camp size and other associated facilities.

#### 3. Quality:

- Reliable QHSE management
- Higher and better controlled productivity
- Easier monitoring of progress and work fronts
- Module precommissioning





## According to local needs

### Best solutions

A modular design standardizes all key plant components, ensuring maximum cost efficiency and ease of deployment. Our modules are pre-fabricated at our partners workshops to the maximum possible extent. The successful combination of our engineering excellence and our production capabilities gives you the best results.

### Advanced technology

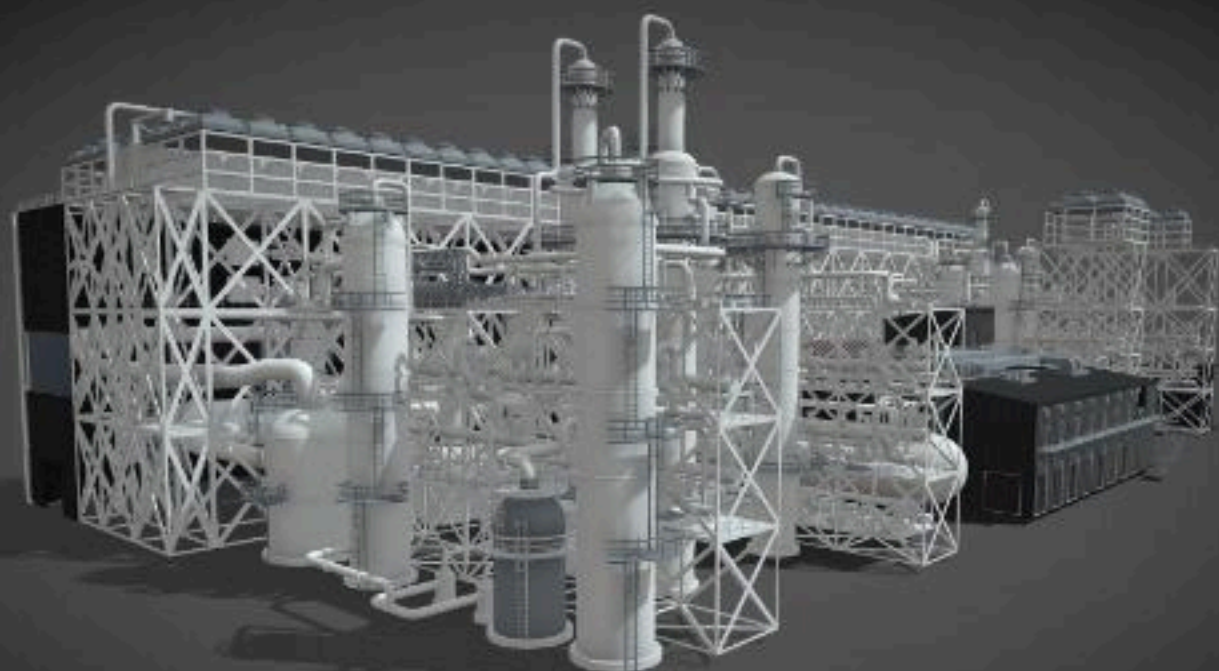
Plant designs are developed using advanced process simulation and sophisticated engineering design tools. A proven control concept, enhanced by cutting-edge software, ensures reliable, convenient, and economical plant operation. The control equipment is housed in a container for easy installation.

### Modularized design for rapid delivery and start-up

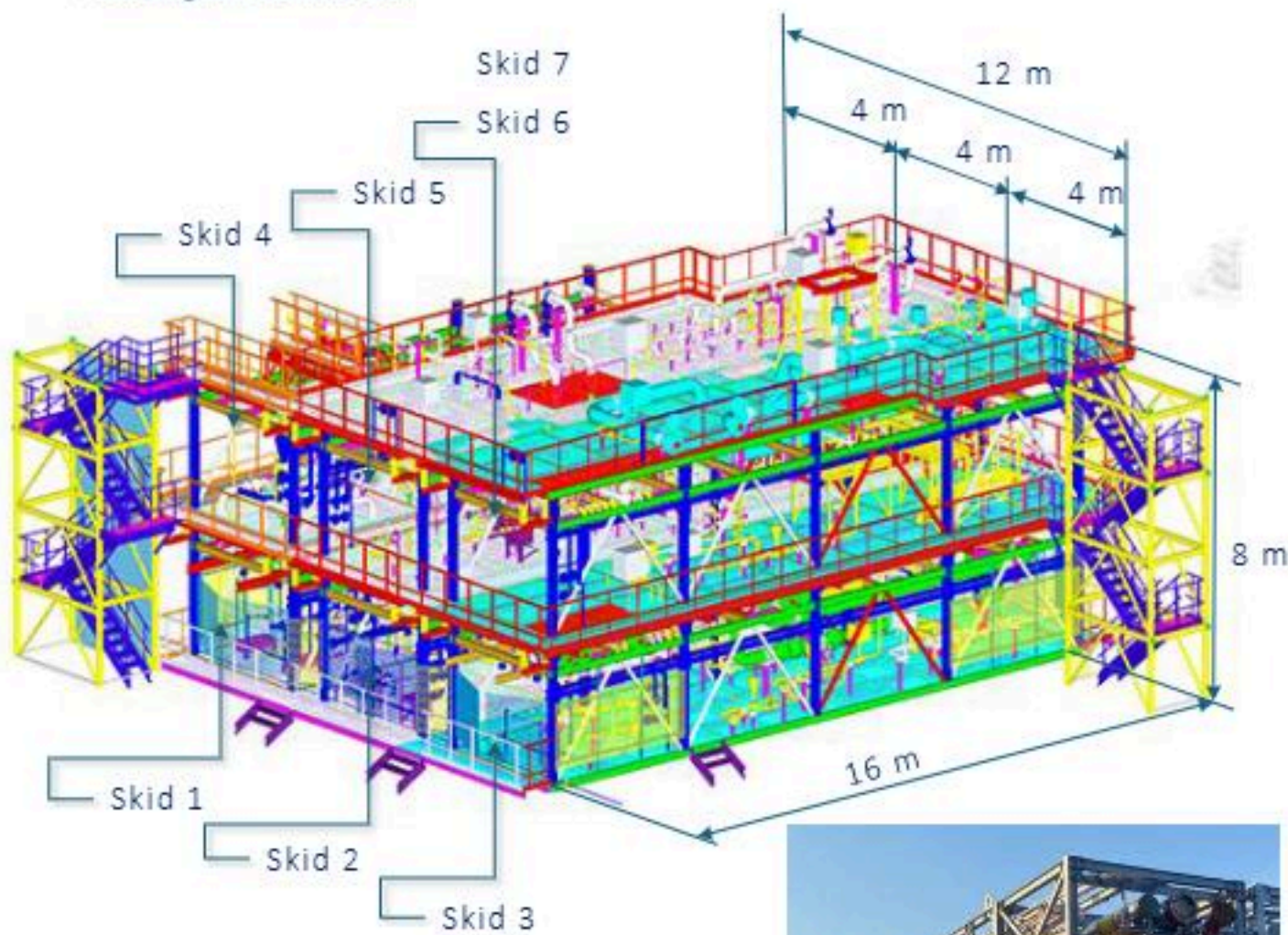
Key components such as the air compressor, molecular sieve valves, turbine and cold-box are delivered completely pre-packaged and tested.

All equipment and systems are assembled on skids and can be delivered and assembled without the use of special machinery.

Electrical and instrumentation equipment is delivered in plug-and-play containers. The plant control system together with the operator station(s) and analysis equipment come in an air-conditioned container, ready cabled and shop-tested, with the DCS preconfigured for rapid start-up. A separate shop-assembled container is supplied for all electrical medium-voltage switchgear, transformers and low-voltage switchgear, including VFDs for pumps and other electrical equipment. All of these modules and skids are equipped with remote I/O modules for easy bus connection. This pre-assembled, packaged design minimizes on-site erection timelines.



# Acid gas removal



## Characteristic

Unit size: 12x16x8 m

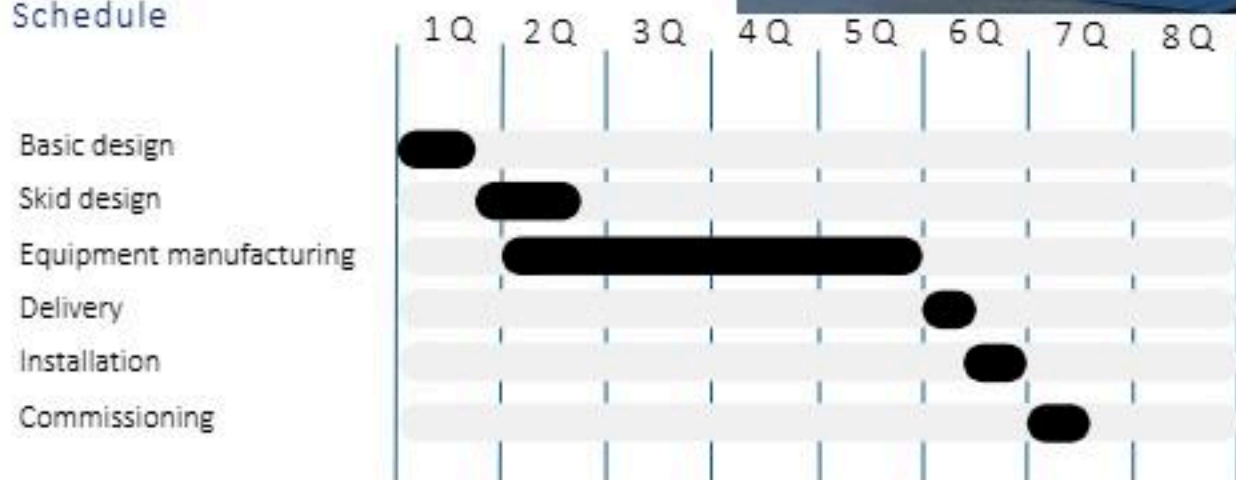
Unit weight: ~ 350 t

Skid size: 4x16 m

Skid weight: ~ 40 - 60 t



## Schedule



\*) The above schedules are typical and will be adjusted depending on the Customer's requirements.





# Our Services

## Engineering

The engineering services provided include the following:

- Basic design
- Equipment Design
- Skid Design

## Procurement

The procurement services provided include the following:

- Supplier management
- Production quality control
- Acceptance testing
- Certification

## Site Services

The site services provided include the following:

- Installation advising
- Commissioning training
- Staff training

## Remote Support

Remote support for a ASU involves providing expert technical assistance, monitoring, and troubleshooting from a remote location, ensuring continuous and efficient plant operations. Key aspects include:

**Real-Time Monitoring:** Utilizing advanced software and sensors to remotely monitor plant performance, including key parameters like pressure, temperature, flow rates, and equipment status.

**Troubleshooting and Diagnostics:** Offering immediate technical support to diagnose and resolve issues, minimizing downtime by addressing problems as they arise without the need for on-site personnel.

**Process Optimization:** Providing ongoing remote analysis and recommendations to optimize plant processes, improve efficiency, and reduce operational costs based on real-time data.

**Preventive Maintenance:** Monitoring equipment health remotely and scheduling preventive maintenance activities to avoid unplanned shutdowns and extend the lifespan of critical components.

**Emergency Response:** Providing 24/7 remote support to quickly respond to emergencies, coordinating with on-site teams to manage incidents and mitigate risks.



## Our major partners

### Dynamic equipment



### Valves



### Control systems



### Workshop

