deugro

The deugro Service Portfolio

Petrochemical Industry

Specialized Supplier

Family Enterprise Since 1924

Global Access 40+ Countries 70+ Offices

Trusted Partner

In-house Chartering Team

deugro's Petrochemical Expertise at a Glance

deugro specializes in end-to-end (E2E) supply chain management for the petrochemical industry. Major deugro competences lie in the management, engineering and operational delivery of complex logistics solutions on a global basis. This results in synergies that enable us to offer higher levels of safety as well as higher operational and commercial efficiencies.

From the beginning, the petrochemical industry has always been a key sector of success for deugro. As a result, we have built up an impressive and reliable reputation in executing projects of any magnitude for the petrochemical industry and other complex industrial sectors.

Thanks to our exceptional experience and expertise in a wide range of projects in different fields, we are able to capitalize on synergies and harness buying power, both of which are beneficial to our clients. In addition, we have excellent, long-term and proven relationships with various equipment suppliers in their countries of origin.

Within the petrochemical industry, we serve a multitude of different projects for fertilizer plants, polyethylene and ethane crackers, and specialty chemical plants. We understand the specific challenges faced by the petrochemical industry, such as short time schedules and tight maneuvering on job sites, or the difficulties involved in finding a reliable one-stop logistics partner.

deugro thrives in challenging environments, where operational constraints can take what would ordinarily be a "normal delivery" and transform it in to a complex operation. Within the petrochemical industry, this is especially prevalent on existing sites where restrictions in height due to pipe racks and cable trays, or restrictions in allowable loadings due to underground services, can prohibit transport, and the available space can limit crane operations for installation. This is where the experience and ability of deugro to engineer, assure and deliver all aspects of your logistical needs sets us apart from the competition.

Our general service offering

- Complex project logistics
- Tailor-made solutions for multimodal goods transportation
- Spot shipments
- Purchase order management
- Export packaging
- Customs clearance
- Flexible warehousing
- Distribution services
- Non-vessel operating common carrier (NVOCC)
- Full container load (FCL) capacity planning, time-bound solutions and rate management
- Less than container load (LCL) consolidation and deconsolidation services
- Documentation management

Lifting operation of equipment for the Tobolsk Project

Our Specific Project and Construction Logistics Services for the Petrochemical Industry

- Complete E2E logistics management
- Highly experienced engineering, project management and operational teams in all global regions
- Attuned to our clients' needs—with a focus on safety, operational and commercial efficiencies
- Experience gained, matured and harnessed since the company was established in 1924
- Highly adaptable and a chosen partner for critical plant shutdown operations
- A global player with local knowledge and industry-leading delivery

Tobolsk Project: Loading of butene column in Antwerp, Belgium

QHSES – Safety First!

Safety is deugro's top priority. At the core of our safety culture is where you will find our deugro group Life Saving Rules, which set the standard for all deugro group companies. We not only realize but unequivocally stand unified on the statement "Our people are our greatest asset," also regarding the people of the companies we work with in partnership, to safely deliver world-class service to our clients. As a company, we must ensure that we have resolute and safe systems of work in place to protect and preserve the health, safety and well-being of our employees.

For deugro—a company of the deugro group—we utilize the policies, system and standard operating procedures that have been developed and make up our ISO-accredited Integrated Management System (IMS) as our directive on how we manage and safely deliver quality service.

We have ISO-certified and accredited management systems in:
Quality
ISO 9001:2015
Environment
ISO 14001:2015
Occupational Health and Safety
ISO 45001:2018

This system is continuously reviewed, monitored and developed. Internal triggers allow us to quickly make any necessary adjustments and to ensure we meet both our company objectives and our project KPIs while fostering continuous improvement.

At deugro, we integrate quality, health, safety, environment and security (QHSES) into every aspect and phase of the client's project.

Our success at executing projects safely and meeting client's expectations starts with a risk-based approach. From the beginning, we utilize our very experienced and diverse workforce to collaboratively identify all hazards that can cause harm to a project and develop suitable control measures to either eliminate the risk or assuredly reduce the risk to an acceptable level.

This risk-based approach, along with working under our years-long, tried-and-tested Integrated Management System gives us direction in ensuring that we develop project-specific quality, environmental and safe systems of work.

Through proper planning and managed execution, through the implementation of identified control measures as well as the use of up, down and cross communication, and through the constant review and monitoring of our performance on all levels and implementation of corrective actions whenever necessary, we deliver all project QHSES KPIs while delivering the most important aspect of any project: the safety of all stakeholders.

Our approach to your project

Plan
Specific risk assessment, QHSES plans

Do
Job safety analysis, method statement, subcontractor vetting, training

Check
Auditing, workplace inspection, certifications

Act
Management review, preventative and corrective actions

Defining Logistics. Delivering Safety.

Our Compliance Standards

The deugro group compliance standards are reflected in various ways, and it is our philosophy to incorporate compliance at all levels of the group and in everything we do. Our corporate policies—the Code of Ethics and Compliance (CoEC) and the Anti-Corruption Compliance Policy (ACCP)—are proof of our commitment. These corporate regulations are mandatory for all deugro group companies worldwide, and employees and business partners are required to operate within their framework at all times. Our Compliance Management System (CMS) was designed to consider various international regulations and recognized standards, including the United States Foreign Corrupt Practices Act (FCPA), the UK Bribery Act 2010 (UKBA) and the OECD Guidelines for Multinational Enterprises. The CoEC and ACCP serve as the foundation for the CMS, and are reviewed, updated and acknowledged by all deugro group employees on a regular basis.

Furthermore, our Transport Management System (TMS) screens all shipments, specifically the names and addresses provided, on a 24/7 basis against all applicable international governmental sanction lists in order to scrutinize each business transaction.

To keep our employees involved in our efforts to live and maintain the highest standards of ethics and integrity, we also offer frequent compliance training. It is provided online and in face-to-face workshops, subject to individual risk assessments. Important announcements on the corporate intranet and local bulletin boards serve to raise ongoing awareness.

Local compliance ombudsmen are available in all of our offices. All compliance ombudsmen receive face-to-face training by the Head of Global Legal and Compliance.

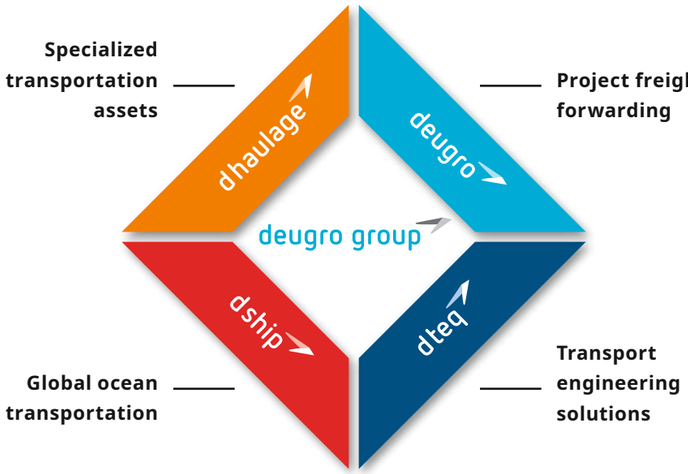
» A successful compliance program is not about focusing on the rules. It is about fostering a true culture of ethics and integrity. «

Jessica Kaplan, Head of Global Legal and Compliance

deugro group:
The Unique One-stop Shop

The deugro group originates from deugro, the first company founded in 1924 in Frankfurt am Main, Germany. Today, the deugro group continues to be a family-owned enterprise with a strong financial foundation. This global, flexible and diversified network with local knowledge and experience is redefining industry standards now more than ever.

The deugro group is comprised of four independent companies that offer far-reaching competence, experience and know-how in their fields of business:



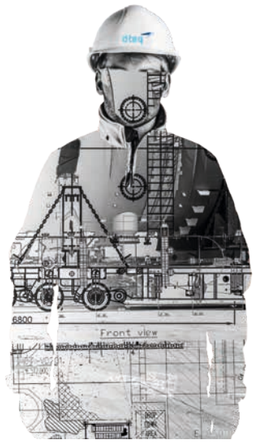
deugro

deugro is a highly specialized freight forwarder with a strong focus on turnkey logistics solutions for industrial projects. It has a proven track record in successfully executing projects of any magnitude, even under the most challenging conditions and requirements. deugro focuses wholly on identifying and solving clients' specific needs with unique tailor-made solutions to fulfill all requirements. To deliver the best in both cost and performance, deugro serves as an extension of its clients in their respective supply chains. It provides ocean and inland waterway freight services, road and rail transportation as well as air freight to almost any destination.

» We are redefining industry standards now more than ever. « Thomas C. Press, Co-CEO – deugro group

dhaulage

dhaulage provides an extensive and comprehensive range of heavy haul and heavy lift equipment for any kind of specialized or challenging project. The company owns and operates its own fleet of prime movers, heavy duty hydraulic trailers as well as other specialized conventional trailers, and installation equipment, which are available to our clients at any location worldwide. Furthermore, dhaulage owns a variety of supporting equipment, such as fenders, lifting equipment of various capacities, lighting towers, generators and a tailor-made fly-over bridge with a capacity of 300 metric tons.



dteq

dteq Transport Engineering Solutions provides tailor-made transport and marine engineering solutions, as well as port captain, surveying and supervision services, and project consulting. To solve and overcome all the challenges of moving oversized and heavy cargo, dteq's experts leverage decades of specialized engineering knowledge and experience. They do so with dedication, talent and an inventive spirit for every project phase.

dship

dship Carriers provides cost-effective tramp services for heavy lift and project cargo. Driven by service, dedication and high-quality workmanship, dship ensures that risk remains at a minimum and delivers solutions that exceed clients' expectations. A global provider of ocean transportation services, dship manages and owns a fleet of modern and reliable multi-purpose vessels. These are designed to support the specialized needs of breakbulk, heavy lift, dry bulk and project cargo clients in the oil and gas, wind energy and floating cargo industries—to name just a few.

Point of View:

Driving Forward Petrochemical Freight Projects

The continually changing petrochemicals market conditions require an experienced team that can handle projects professionally. Part of such a team is Lars Rudolph at deugro Hanau, who recently worked on the Tobolsk Project. Meet him and discover key insights.

Lars Rudolph, Head of Business Development

What was the most outstanding petrochemical project you worked on and what challenges made this project a special one?

This was a petrochemical plant that was shipped to the Middle East and contained two 820-metric-ton columns. They were transported on one single vessel, of which there were only a few available in the world at the time, and the vessel had to be booked on the spot. The outstanding thing about this project was that, back then, in the late 1990s, a large-scale transportation was arranged and we thought that it was the most complex job ever with the heaviest pieces that will ever be shipped. Reality and ongoing development has now showed us, though, that such shipments nowadays would probably not even be worth a press release in the local newspaper. This industry has developed that fast during the past 20 years.

Based on your experience, what is most essential trait that a project freight forwarder needs to have for this industry?

Empathy! Empathy for the cargo and its function, as well as for the client's needs. A heavy piece of cargo should not simply be considered a heavy piece of steel, but has a certain function that is vital for our clients. It starts with the proper timing of the transportation, continues with a safe and secure handling with no damages, and ends with the arrival at the right time in the right place and in the required sequence at the petrochemical site. This does not mean that you have to be a civil or mechanical engineer to arrange the shipment of petrochemical plant components, but you must be interested in how certain pieces, out of a volume of, say, 250 heavy pieces per plant, work and where they are needed. This helps a lot in understanding why transportations have to be arranged in the way they are.

» The petrochemical industry and its forwarders are highly susceptible to factors dependent on geopolitical influences—including oil prices, national currencies and other variables. «

Lars Rudolph, Head of Business Development

What are deugro's ambitions to further improve services for clients of the petrochemical industry?

- Regular staff trainings to remain up to date with the latest insights and innovations
- Regular working in-house at the petrochemical client's site to ensure a win–win situation (we help out the client and the client helps us to understand their needs)
- Development of technical skills and knowledge by trainings through, for example, dteq Transport Engineering Solutions

In your opinion, what is the main obstacle the industry will face in the future?

Even though we're currently facing an improvement in oil prices, the volatility of these is an ongoing factor that influences the Final Investment Decisions (FIDs) for petrochemical plants. At the same time, once an investment decision has been made, the construction of a petrochemical plant can take, depending on size, up to about five years to complete. Within this period, the economic efficiency of the plant may have to be reconsidered. In other words, the petrochemical industry and its forwarders are highly susceptible to factors dependent on geopolitical influences—including oil prices, national currencies and other variables—in both good times and bad.

Tobolsk Project: C3 Splitter lifted in Ulsan Port, Korea

Project Insight:

Liwa Plastics Industries Complex Project

The Liwa Plastics Industries Complex (LPIC) Project is a major capital investment project in Oman. deugro was awarded two of the main logistics packages: LPIC EPC1 Package (steam cracker unit and utilities) and LPIC EPC3 Package (natural gas liquids extraction plant).

Scope of work and project execution

The challenging scope of work included transporting over 1 million freight tons of general cargo and heavy lift project equipment from vendors' worldwide facilities, and delivering it safely to the job sites in Oman. This end-to-end logistics solution was delivered through a carefully developed logistics plan, involving over 150 deugro people managing all aspects of the logistics supply chain.

Congestion at the Port of Sohar presented a major risk. The high volumes of both container and heavy lift cargo required careful scheduling and management of port facilities and resources. Regular project planning and forecasting meetings were held to identify logistics bottlenecks at the ports and provide contingency solutions to ensure delays and congestion were kept to a minimum.

Throughout the whole execution, our teams remained focused on maintaining a highly safe, secure and healthy environment for our staff and all parties involved in the Liwa Plastics Industries Complex Project. All heavy cargo at the Sohar Port was supervised by deugro personnel, and we ensured that our contractors complied with transport design and strict HSE requirements at all times. To successfully accomplish road transportation, deugro, in cooperation with dteq, carried out multiple infrastructure studies and consulted with the Department of Transport, the Royal Omani Police and various construction contractors.

Location

The project was split over multiple locations within Oman. The EPC1 package was destined for the job site in the proximity of Sohar. With the EPC3 package, inland distances and the associated transport challenges were much greater. The site location was some 450 kilometers from the Port of Sohar and 600 kilometers from the Port of Duqm – both of which were utilized for inbound cargo discharge. deugro operations and management teams were positioned strategically dependent on project demands and freight thru-flow.

Innovation and unique techniques

Innovation and unique techniques Throughout the delivery of the project, deugro collaborated with the clients in identifying innovative cost saving initiatives and changing procurement terms in their global sourcing. One example was the unbundling of three 330-metrictonne time-critical boiler modules. deugro worked together with the client to safely provide precarriage, loading and lashing on board the vessel in Italy. This reduced costs by 60 percent and improved permit times, while increasing control and assurance for this technically challenging heavy lift operation. This same principal was leveraged in numerous other circumstances and proved to be highly successful throughout the project.

Max. Heavy Lift
535 MT, length up to 53 m

650+ Heavy Transportation Loads
to project sites

Zero LTIs and Exemplary QHSES Performance

Project Insight:

NKNK03 Olefin Project

In close collaboration, the deugro Hanau and deugro Moscow teams executed the NKNK03 Olefin Project on behalf of Linde Engineering. After intensive planning and engineering, deugro moved nearly 90,000 freight tons of heavy lift and oversized cargo from various origins in the Far East and Europe to a remote job site in Nizhnekamsk, Republic of Tatarstan, Russia.

The cargo consisted of more than 300 heavy and oversized units of valuable refining and processing equipment, including a 724-metric-ton primary fractionator measuring 78 x 9.8 x 9 meters and a C3 splitter weighing 525 metric tons and measuring 96 x 7 x 6.9 meters. deugro developed a tailormade transport solution for this challenging petrochemical project.

The solution considered the complex logistics schedule with short navigational periods and the challenging passing of the winding Don River and Volga-Don Canal to reach the remote location of the Naphta Cracker in Nizhnekamsk.

Ocean transportation

deugro chartered and coordinated a total of nine full-charter vessels for the ocean transportation. The heavy lifts and overdimensional cargo items were shipped from various international ports in South Korea, Turkey, Germany, Italy and China to Nizhnekamsk (dry dock and Transkama Port) in the Russian Federation.

Strategic transshipment in Romania

After the cargo arrived at the Port of Constanta, Romania the biggest and heaviest units were unloaded from the oceangoing vessels directly onto a total of 11 barges. All of the cargo units were positioned onto stools on the deck. This resulted in the cargo being elevated, enabling the Self-Propelled Modular Transporters (SPMTs) to drive underneath the cargo for load-in at the dry dock. deugro engineered, designed, procured and delivered over 200 of such stools, 100 of which were fabricated especially for this project in Germany and transported to Constanta.

After stowage of the cargo, the barges and sea river vessels departed the Port of Constanta.

Last-mile transport

After arrival of the barges in Nizhnekamsk, they were positioned at the dry dock with tugboats. Following the closure of the dry dock, the water level inside the dock was increased until the necessary level was reached for roll-off; then the cargo was unsecured by the welders. The SPMTs were moved under the cargo to jack it up from the stools using a hydraulic system. Together, the SPMTs and cargo measured over 10 meters in height.

A challenging 21-kilometer journey to the job site commenced. A year before the project execution started, infrastructure work was undertaken due to its several obstacles.

Project Insight:

Irkutsk Polymer Plant (IPP) Project

In cooperation between the offices in Japan, Russia and South Korea, deugro transported 35,541 freight tons of cargo simultaneously on two fully chartered heavy lift vessels for an ethylene and polypropylene plant from Masan, South Korea via Tiksi in the Arctic Ocean to Ust-Kut, Russia. The vessels were accompanied by the nuclear ice breaker Yamal for the Northern Sea Route (NSR) passage to ensure a safe delivery at the Port of Tiksi. The total distance from Masan to Tiksi and the subsequent barge transport across the Lena River to Ust-Kut was over 6,450 nautical miles.

The cargo contained 45 oversized and heavy lift (OSHL) pieces, including a 597-metric-ton reactor and an 81.93-meter-long, 357-metric-ton ethylene fractionator. Due to the transport via the NSR and critical draft conditions of the Lena River, the navigation period was limited to a maximum of three months and required precise timing and coordination.

Loading in Masan, South Korea

According to the sea voyage via the NSR, two vessels with ice class 1A were chartered and motion response analyses were conducted to determine the effects of any accelerations on the cargo during the voyage.

To avoid any unnecessary double-handling of the cargo and to save costs, 17 OSHL units from China and Japan were loaded onto the same heavy lift vessel to Masan, which had already been chartered. Stowage plans and loading sequences were decided well in advance according to the barge stowage and discharging sequence onto the barges at Tiksi.

Transloading in Tiksi, Russia

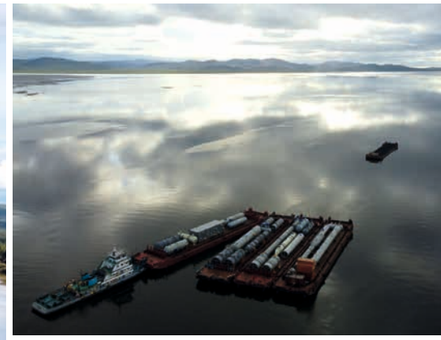
After 4,500 nautical miles, both heavy lift vessels arrived punctually at the anchorage points in Tiksi. Due to the shallow draft in the port of Tiksi, the transfer from the ships to nine separate barges was executed within six days outside the port area.

The sensitive cargo units were discharged simultaneously from the heavy lift vessels by using on-board cranes with a combined lifting capacity of up to 800 metric tons.

River transportation

After arrival at the Ust-Kut jetty, which was designed in accordance with deugro's technical solutions and constructed by the project owner, the discharge operations started.

All units with a length of over 40 meters or a weight of over 220 metric tons were unloaded in tandem lift by two crawler cranes with a combined lifting capacity of up to 1,500 metric tons.



Barges on their river voyage to the Ust-Kut jetty and cargo unloading operation

On-carriage to the job site

Once the loading of the vehicles was completed, daily convoys from one to three road trains started their journey early in the morning during daylight, accompanied by escort cars and cars of the traffic police.

The distance up to the job site was about nine kilometers, including about two kilometers on the Viluy federal highway. The rest of the distance was covered on a separate road especially built for this purpose in accordance with the technical requirements and under the control of deugro.

To ensure smooth road transportation, the road was prepared according to the requirements of the cargo, based on the extraordinary dimensions and weights of the 81.93-meter-long ethylene fractionator and the 597-metric-ton reactor.

Once the convoy arrived at the construction site, the unloading of the SPMTs was performed by jack-down of the cargo onto elephant legs without using cranes, and the unloading of the THPs and semi-trailers with the use of mobile cranes by the project owner.

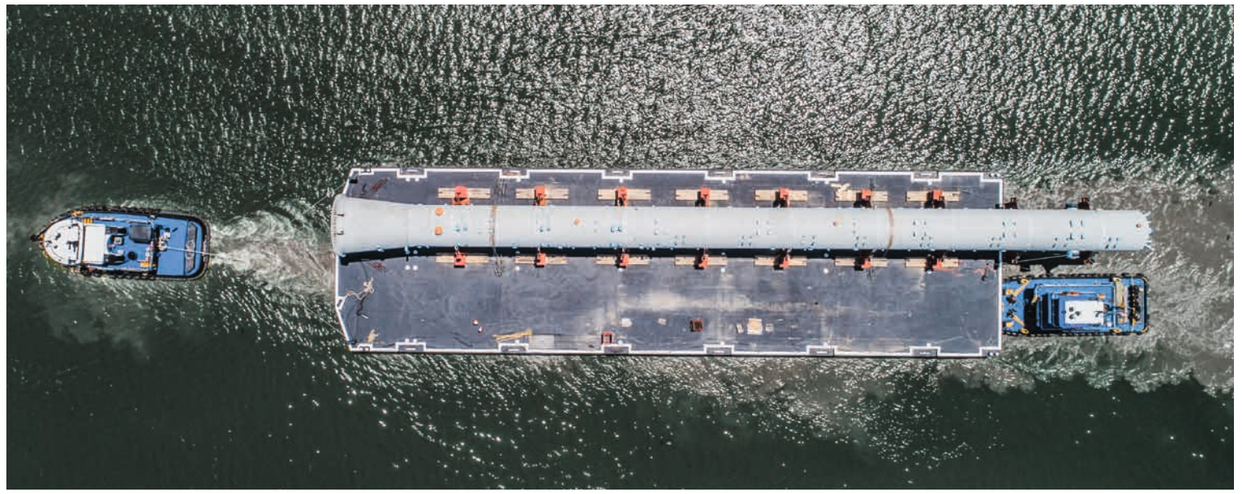
Project challenges

- 45 OSHL pieces, including a 597 MT reactor and an 81.93 m, 357 MT ethylene fractionator
- The transport via the Northern Sea Route and the critical conditions of navigation on the Lena River, with a limited navigation period of max. three months, required precise timing.
- The high number of interfaces, barge voyages and overland trips required precise coordination.

Project Insight:

Chemical Expansion Project

For an expansion project of a chemical refinery, deugro moved a C6 column, lights tower, and primary fractionator by vessel and barges from Ulsan, South Korea to Houston, Texas, USA.



Extraordinary cargo dimensions of up to 91.9 meters in length and unit weights of over 485 metric tons required sophisticated engineering and professional project management.

Months prior to loading and in close cooperation with the client, deugro's project experts and the transport engineers from dteq, a company of the deugro group, prepared method statements to meet the requirements of the project and to ensure compliance with all industry safety standards.

Loading operation

The journey started at the Port of Ulsan, South Korea, where the overdimensional modules were received by trailer alongside the MV BBC Coral.

Coordinated by deugro and under supervision of the surveyor, the direct loading operation onto the vessel was executed in a tandem lifting operation using the vessel's cranes.

After all the cargo was loaded, lashed and secured to the satisfaction of the chief officer, the master of the vessel, the port captain and the surveyor, the vessel set sail to the Port of Houston.

Unloading operation

After 9,641 nautical miles, the 967 metric tons of industrial cargo arrived punctually at Houston City Docks. deugro's project experts and dteq's transport engineers were on site to coordinate and monitor the unloading and lifting operations from the vessel to the deck barges, ensuring all operations were in line with standard operation procedures and the highest QHSES standards.

When the barge was brought alongside the vessel and secured in place, two tugboats assisted the barge in staying in a specified offloading position during the discharge operation. The 91.9-meter-long and 485-metric-ton C6 column was lifted directly onto stools on the deck barge by the vessel's cranes in a tandem lifting operation.

A component of this size requires thorough analysis of all the various tasks and steps in the handling process to ensure a safe execution and delivery. This includes analysis of vessel outreach, component support points, barge stability, lashing applications, etc.

While the cargo was slowly lifted off the vessel, ballasting was used to maintain the vessel's stability. During this step, multiple clearance checks were made as part of the safety protocol.

Once the final position was approved by deugro, cranes slowly released the cargo until it was safely in place and ready for securing and inspection. Because the C6 column hung over the barge's stern by approximately 20 meters, it needed to be placed strategically on the barge to ensure lashing according to engineered plans and to achieve proper load distribution on the structure of the barge. At the same time, a safe working space for the crew was ensured. All of this took place without having to double-handle the column with the vessel's crane.

The 61-meter-long lights tower and the primary fractionator with a length of 49.9 meters, although smaller compared to the C6 column, still required the same attention to detail and careful systems integration from deugro and dteq.

During detailed toolbox talks, lashing and ballasting plans were reviewed with the crew before lashing and securing took place for the inland voyage. This was executed by stevedores and verified by deugro and dteq as well as a marine warranty surveyor.

Attending deugro and dteq experts ensured that each step of the operation was precisely executed in accordance with the method statement and the lifting and rigging plans prepared.

On-carriage

With all components safely lashed and secured, the barges began their 20-nautical-mile and five-hour voyage through Buffalo Bayou to Scott Bay.

With the barge at the dock, deugro and dteq successfully executed another engineered transport. It consisted of one of the most critical components for the project.

All the planning, attention to detail, and flexibility were key to managing this challenging and complex project move.

Project challenges

- Because the C6 column hung over the barge's stern by approximately 20 m, the trunnions to be lashed were above water.
- Cargo dimensions of up to 91.9 m in length and unit weights of over 485 MT
- Strict QHSES regulations in times of COVID-19

Project Insight:

Tobolsk Project

deugro was awarded two contracts from major EPCs to deliver equipment to a petrochemical complex in the remote location of Tobolsk, Russia.

Due to intense weather conditions, deliveries are very difficult to perform. Both scopes were successfully executed by the centralized project control tower in Hanau, Germany alongside deugro Moscow (onshore coordination office) for all local Russian coordination.

Transshipment onto barges in the remote area of Kirkenes, Norway

Ethylene cracker plant

Because of the short navigational time frame, the scope was divided into two movements of approximately 63,000 FRT in 2016 and 68,000 FRT in 2017. The scope included only heavy and oversized cargo that could not be transported by road, including extremely heavy items with lengths of up to 106 meters and weights of up to 920 metric tons per unit.

Highlights
The first shipment involved a full charter of MV *Happy Sky* carrying about 30,000 FRT in one single voyage. The reason for choosing this state-of-the-art heavy lift vessel, which is equipped with two x 900 SWL cranes, was due to the weight and complexity of the cargo originating from Ulsan, South Korea.

During the 2017 navigational period, a record number of 25 barge trips were executed on the Ob/Irtysh River between Sabetta and the Tobolsk jetty. Although the freight volume for 2017 was similar to the volume shipped in 2016, the quantity of items nearly doubled. In addition, the cargo was sourced from more vendors and loading ports.

» A record number of 25 barge trips were executed on the Ob/Irtysh River between Sabetta and the Tobolsk jetty. «

Project Data
Ethylene Cracker Plant
- Client: German EPC
- Cargo: Heavy lift and oversized equipment
- Cargo highlight: 2 C3 splitter units (106 x 8.5 x 9 m / 920 MT each)
- Navigational period: 2016 to 2017
- Total volume: 131,000 FRT

Discharge of overdimensional cargo at anchorage at Novy Port

Polyethylene processing plant

This contract included not only heavy lift and oversized cargo, but also general cargo, full container loads, trucking and multimodal movements from origins around the world to the Tobolsk job site in Russia. Among the most difficult tasks for the project team at deugro Hanau was the dispatch of more than 1,500 truckloads from free carrier (FCA) vendor premises all over Europe and Asia to the final job site.

Parallel to the ongoing general cargo shipments shipped by rail and truck, the navigational period in summer 2017 was also used to deliver the heavy and oversized plant equipment via the Northern Sea Route. To avoid the congestion at the Port of Sabetta, it was decided to conduct the transshipment operation (on anchorage) at the arctic area of Novy Port.

In total, deugro chartered three ocean-going vessels for this scope, with all of these discharged at Novy Port onto a total of 13 barges for the onward journey via the Ob/Irtysh River system to the Tobolsk jetty.

Highlights
The remote Novy Port is located approximately 300 nautical miles south of Sabetta within the Gulf of Ob and does not have any landside infrastructure. All cargo needed to be discharged on anchorage while facing the harsh local weather and hostile environment.

For more information, please visit: deugro.com/cases

Project Data
Polyethylene Processing Plant
- Client: French EPC
- Cargo: All equipment relating to a polyethylene plant
- Cargo highlight: 2 polymerization reactors, 340 MT each
- Navigational period: 2017, with general cargo shipped in 2016, 2017 and 2018
- Total volume: 130,000 FRT over all transportation modes

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a company of the deugro group