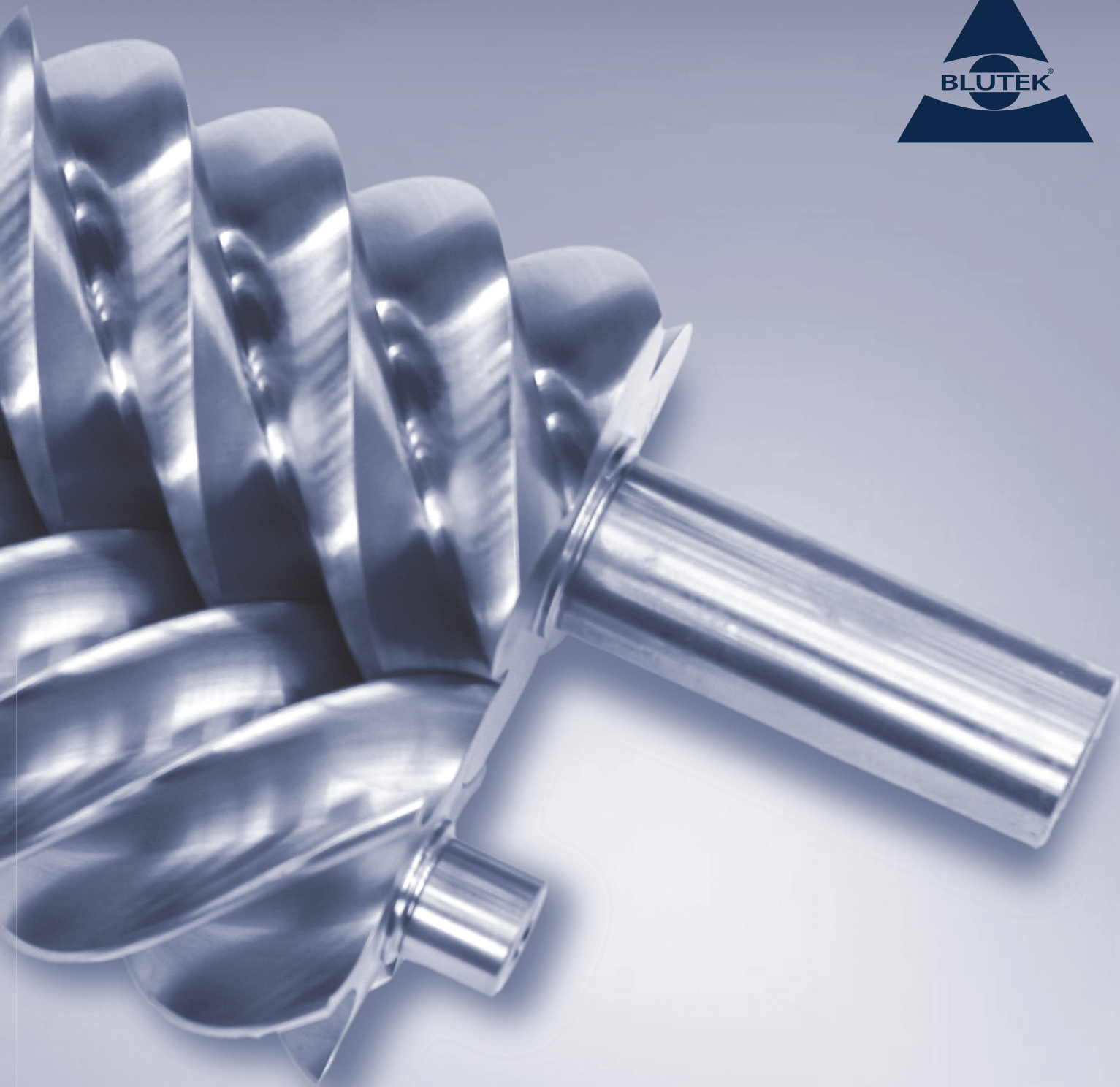


BLUTEK PRODUCTS CATALOG





- 01 The company
- 02 Skid mounted compressor packages designed for applications in extreme ambient conditions
- 03 Turn-key instrument air packages for applications in extreme ambient conditions
- 04 Engineered air compressors for offshore installation
- 05 Engineered dessicant air dryer heatless heated type
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Our History

BLUTEK is an independent ISO certified Italian Company specialized in the design and production of engineered turnkey Service/Plant Air, Instrument Air and Nitrogen Generation packages suitable for both Offshore and Onshore installation. Thanks to the consolidated experience and to the dynamic approach, BLUTEK is capable to understand the real needs of every customer and to design the most suitable and best efficient solution. In the years, BLUTEK became all around the world one the most important key partners in the Compressed Air and the Nitrogen Generation field, able to face the most adverse environmental conditions and to comply with all national and international safety regulations.



Blutek Engineering

Service/Plant Air, Instrument Air and Nitrogen Generation packages design is entirely conducted by BLUTEK. Engineering Department is responsible for the whole design and assembly and our company adopted all state-of-the-art design softwares, including 3D design and Rendering. Packages components, whether not manufactured by BLUTEK, they are procured by our Purchasing Department through a consolidated and qualified network. In addition, customers have the opportunity to take advantage of our Engineering Department already at early design stages (FEED) in order to identify and implement in their projects the most effective solution for Compressed Air or Nitrogen requirements. BLUTEK design is often able to provide an increased efficiency in terms of power consumptions and running costs.



The Quality

BLUTEK is a ISO9001 certified Company with the highest commitments in terms of Health, Safety and preservation of the Environment. Every relevant activity, internal or external, is regulated by the Quality Manual and by dedicated project ITP. Quality procedures are defined at any step including commercial offers preparation, engineering phase, production phase, until final delivery and technical documents. The whole production is tested according to Norm ISO1217 and, whether required, performances are subjected to third party inspection and certification.

Full Service

BLUTEK service offers a fast and complete range of solutions for all BLUTEK compressor, dryers or nitrogen generation units worldwide. Main services include Installation Supervision, Commissioning, Maintenance and Training. Thanks to the global network BLUTEK resources will promptly respond customer needs. Service is normally provided in English language.



Worldwide Sales Network

▲ OFFICE/FACTORY ■ AGENT ● DISTRIBUTOR SERVICE

North America



South America



Africa



Europe

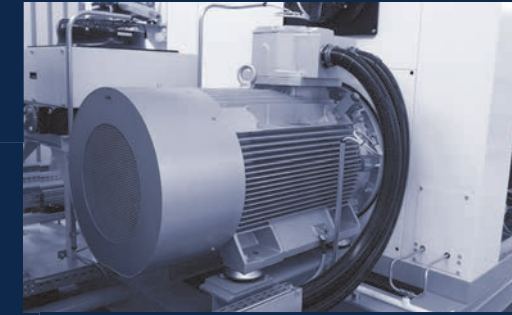


Asia

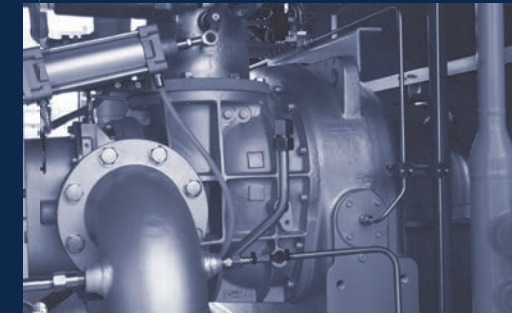


Australia





Electrical motors selected for highest intake air ambient temperature, pressure and density. Selection operated in compliance with installation area, protection level and hazard classification.



Screw type compressor packages, single stage or two stages, selected considering worst inlet conditions in order to ensure the flowrate required by the customer. Compressor packages could be oil-injected, water-injected or oil-free.



Cooling system could be air-cooled type, through SS316L heat exchangers, water-cooled type, through exchangers built in a variety of materials (depending on the water characteristics) and combined air/water-cooled type to ensure minimal water consumption.



Cases in which compressor working pressure is higher than 8 bar(g) and design ambient temperature higher than 55°C, Blutek realizes a combined closed-loop type cooling system provided with a dedicated chiller unit, also seized for extreme ambient conditions.

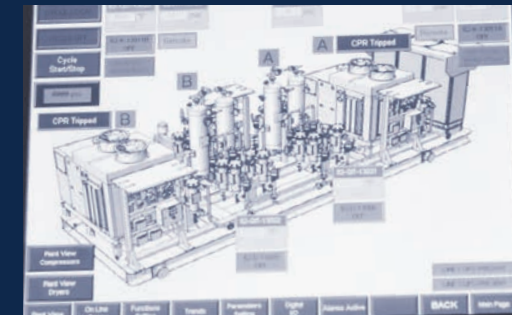
Typical Application

Example of Compressors Packages designed for applications in extreme ambient conditions installed on the desert : n2 packages with electrical motors, n2 packages with Diesel motor, provided with combined cooling system.





Screw type compressor packages, single stage or two stages, selected considering worst inlet conditions in order to ensure always the flowrate required by the customer. Compressor packages could be oil-injected, water-injected or oil-free.



Unit Control Panel, common for all equipment within the package, provided with single or redundant PLC (SIL2 or SIL3). A touch-screen panel displays all the package settings and working fluxes. Control software is realized by Blutek and customized for every single application.



Interconnecting piping in compliance with ASME or DIN regulations. Blutek design implements the insulation philosophy required by project specifications and applies components tags following the project numbering.

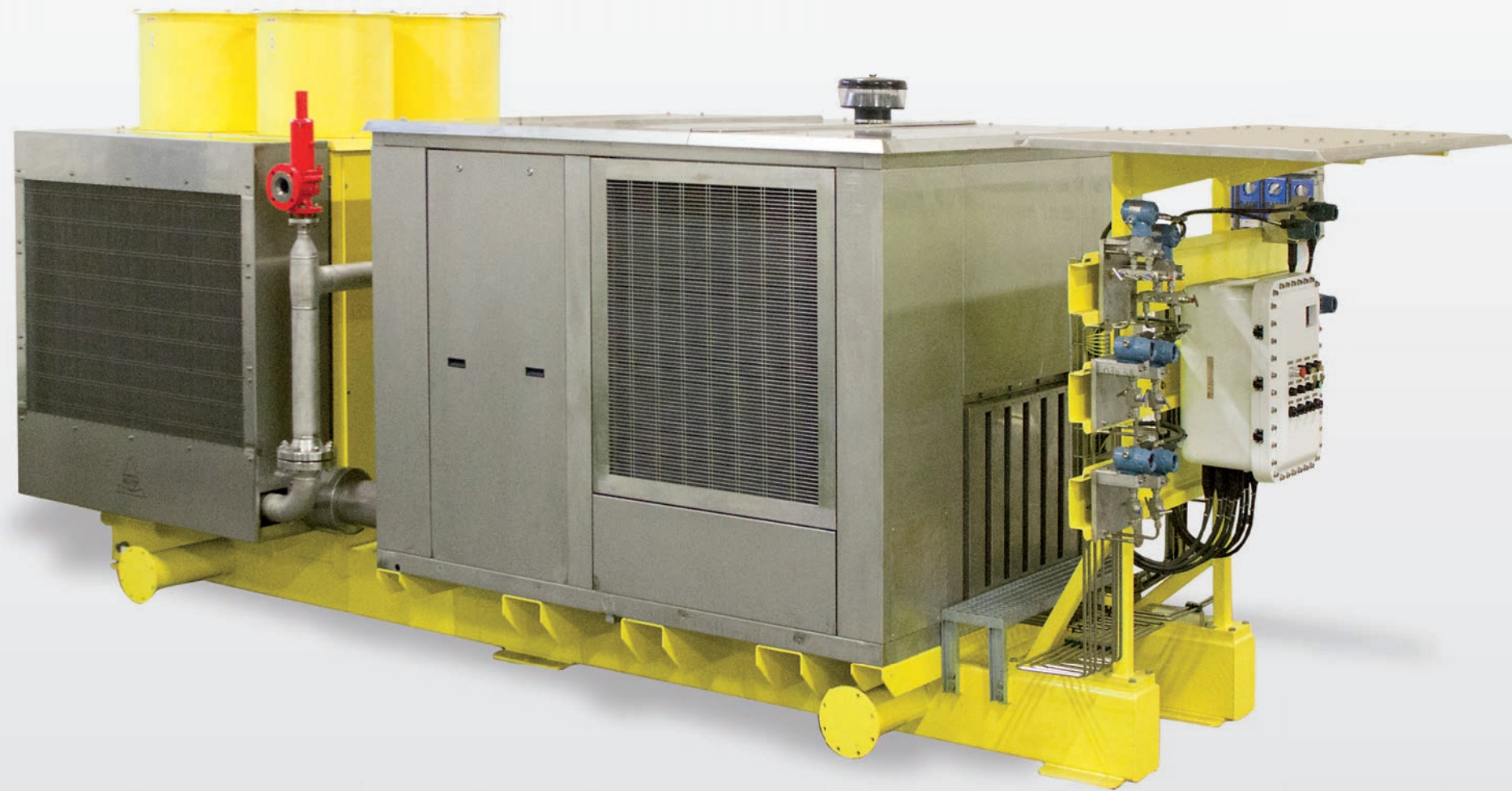


Whether required on-skid, Blutek designs, realizes and installs electrical power control unit for Low or Medium voltage (LV, MV). Starters could be D.O.L. type, Star-Delta, Soft-Start or provided with VFD.

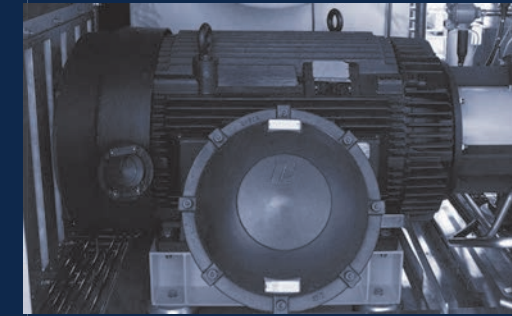
Typical Application

Example of Instrument and Service Air Package for Application in Extreme Ambient Conditions: Instrument Air Package installed in desert area with 58°C ambient temperature. Place of installation: Oman.





All compressors for marine environment made in high quality materials to resist wear and corrosion. Radiators, piping, moisture separators and the compressor noise-hood built in Stainless Steel SS316L.



Electrical motors for marine environment or offshore applications always undergo a specific treatment in order to prevent corrosion and degradation of thermal insulation.



Control panel assembled in SS316L, IP66 cabinets and in compliance with installation area classification. Instruments, cable trays, cable glands realized in SS316L.



Interconnecting piping and components in contact with lubrication oil or compressed air all made in Stainless Steel SS316L and painted with C5M cycle whether required.

Typical Application

Example of Customized Air Compressor Packages for Offshore Installation: Oil free compressor installed on oil rig Place of installation: Mexico Gulf.





All equipment for marine environment (compressor, dryers) made in high quality materials to resist wear and corrosion. Radiators, piping, moisture separators, filters all built in Stainless Steel SS316L.



Although control system is realized enhancing service quality and to reduce as much as possible operators interventions on the equipment, package design always considers spaces necessary for ordinary maintenance with ladders or access platform.



Instruments selected according to client technical specifications, environmental conditions and area classification. Instrument positions designed in order to ensure always visibility and accessibility to operators for ordinary maintenance.

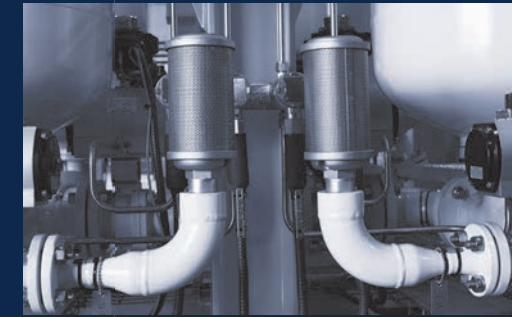


Packages equipped with PLC based control panel and dedicated control software realized by Blutek. Panels assembled in different materials according to project technical specifications and in compliance with area classification.

Typical Application

Example of Customized Turn-Key Instrument and Service Air Package for Offshore Installation: Blutek Compressed air treatment package installed on an offshore oil rig. Place of installation: Vietnam.

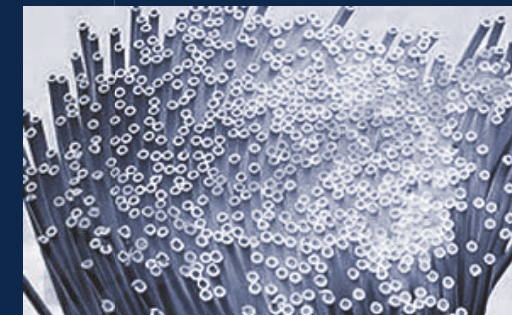




Package components selection according to customer technical specifications, designed to achieve longest service duration and minimize ordinary maintenance interventions.



Easy Accesses for adsorbent materials replacement, loading and unloading operations.



Membrane technology nitrogen generator supports made with different materials: Aluminium, FRP, Carbon Steel, Stainless Steel, in compliance with project specifications, process requirements, environmental conditions and area classification.

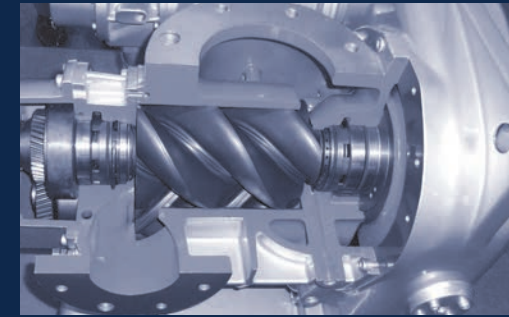
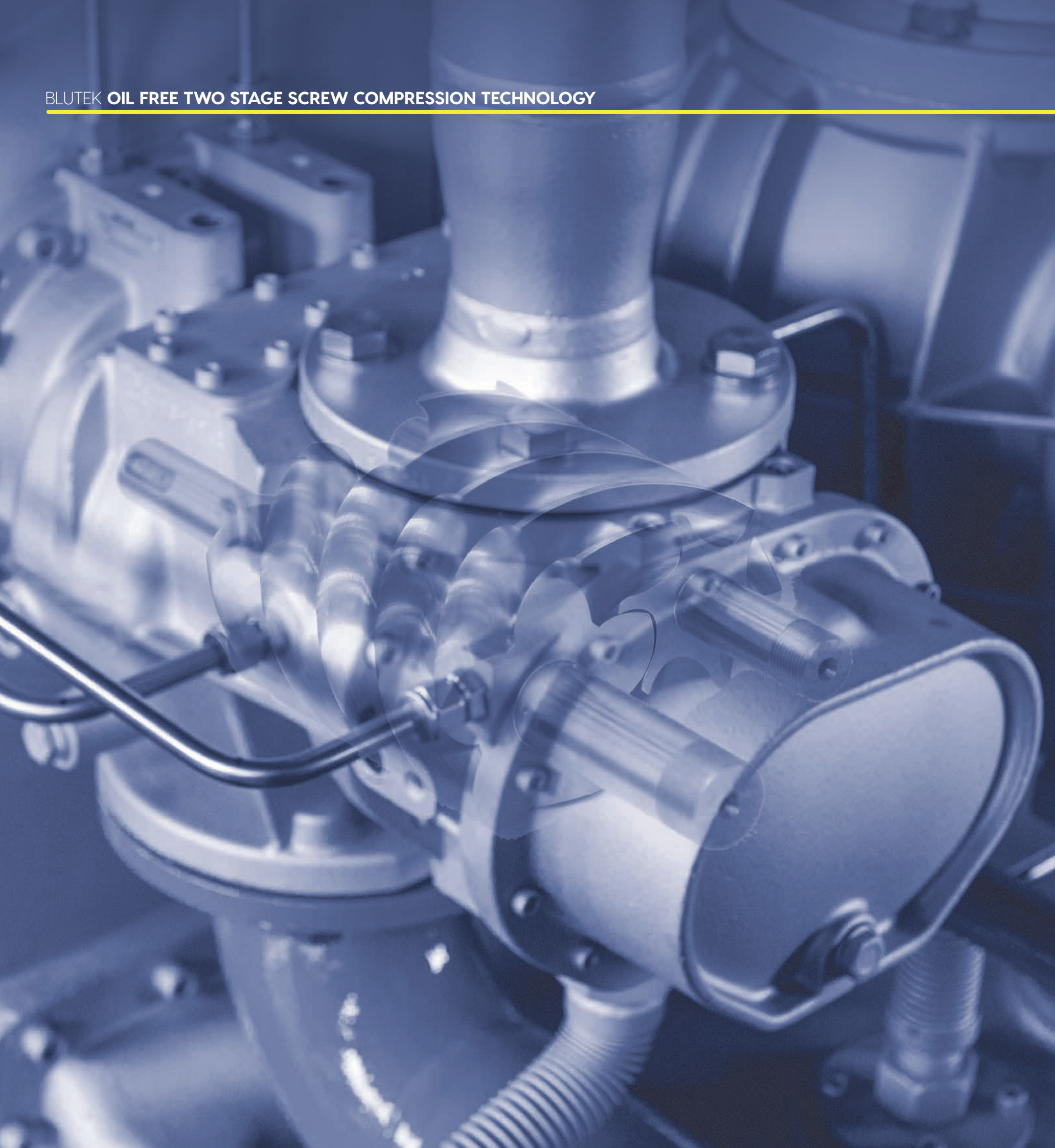


PSA technology nitrogen columns filled high quality CM260/300 with enhanced mechanical resistance and reduced pulverization.

Typical Application

Example of Engineered Nitrogen Generator Package PSA type: Nitrogen generation package on an oil rig. Place of installation: Mexico.





First stage compression characterized by bigger rotors with asymmetric profile, made in high quality Stainless Steel. Rotors and body treated with ULTRACOAT coating procedure with the aim to reduce wear and corrosion.



Second stage compression characterized by smaller dimension rotors with asymmetric profile, realized in X13Cr18 Steel. Also for the second stage, rotors and body treated with ULTRACOAT special coating procedure.



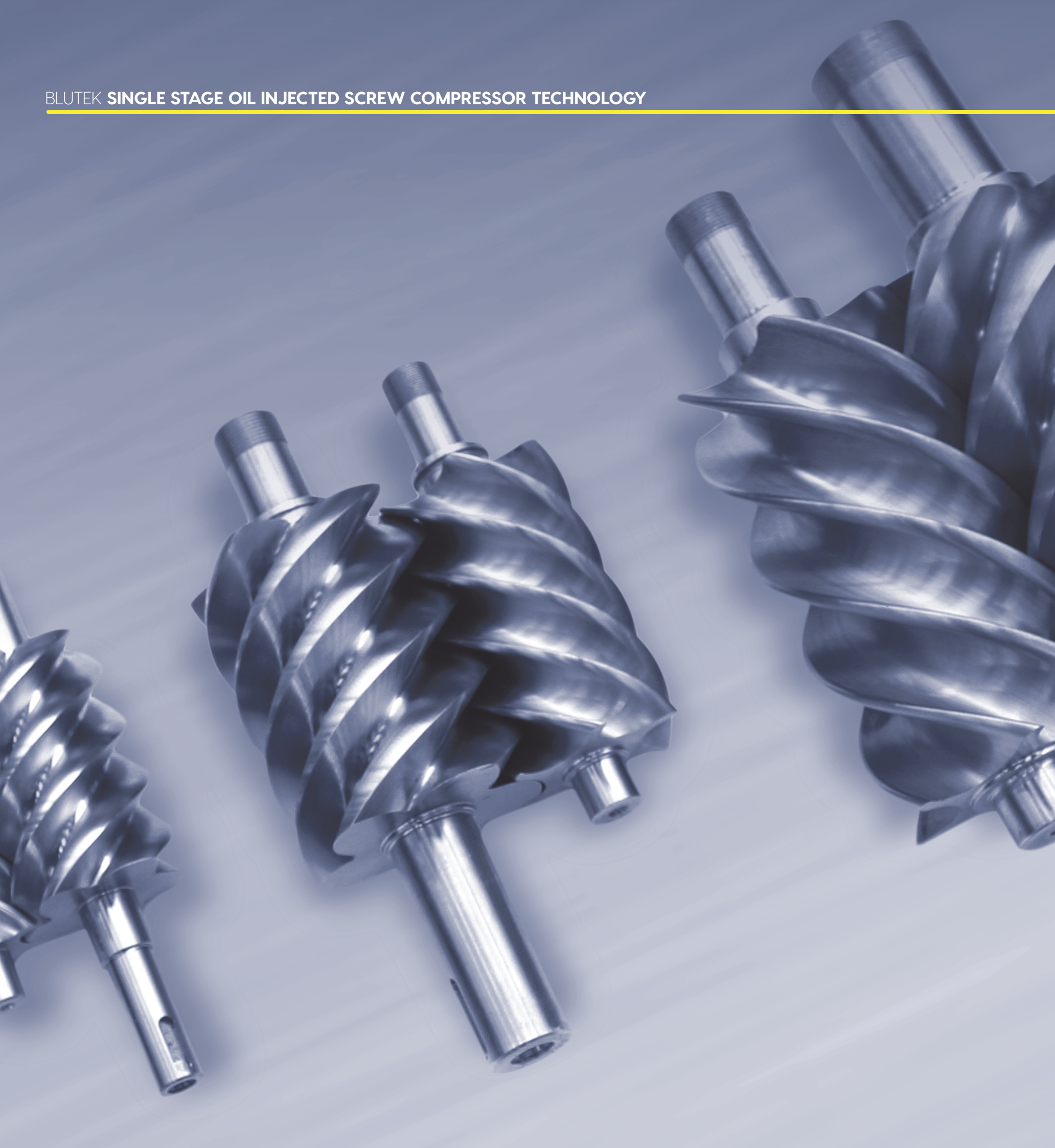
Rotors mounted keeping an extremely reduced distance through a high precision synchronism coupling gear.



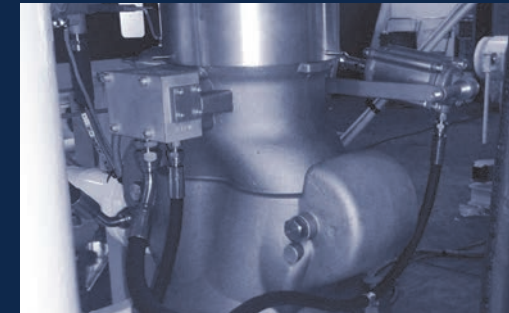
Both edges of the driveshaft equipped with a series of floating seals providing compression chamber insulation from bearing lubrication system.



Each stage can be easily disassembled and shipped to shop for inspection. A stock of compressor stages is always available for a prompt replacement.



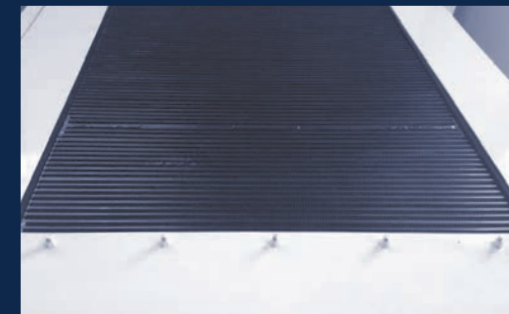
Lubricated rotors characterized by a state-of-the-art asymmetric profile 5/6 and realized with a grinding procedure. This ensures a high precision and a perfect interchangeability of the parts.



Intake butterfly regulator with blow-off valve integrated. In feed air applications for nitrogen generation packages, regulator is set for proportional 70-100% adjusting of the ideal flow rate.



Air filters designed and assembled by Blutek, seized for 150% of the nominal flowrate and made in Stainless Steel SS316L with silencer.

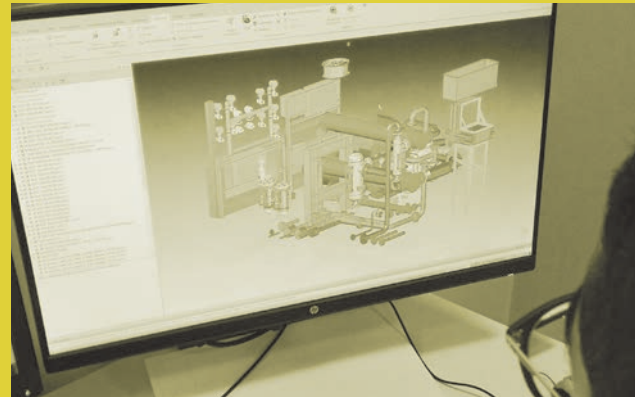


Aluminium or SS316L coolers suitable for 60°C temperature in desert environment.



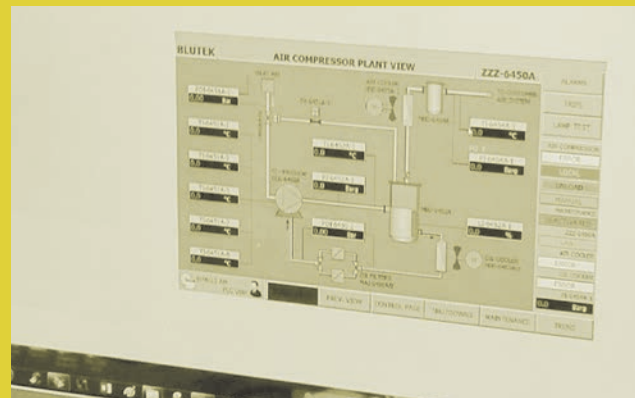
Flexible coupling wrap design allows onsite replacement with no need to disassemble the electrical motor or the compressor stage.

Package components study and design conducted using state-of-the-art 3D modelling, fluid dynamics and FEM simulation systems.



Blutek provides all accessories for packages lifting and installation onsite.

Blutek designs and realizes the software used in packages control and management system, PLC based (Rockwell or Siemens), for each single project.



Before shipping, all equipment is seaworthy packed in wooden boxes with vacuum bags, filled with adsorbent materials for humidity.

During project development, Blutek Quality Assurance Department follows all production stages, including shop tests, conducted within both the company and vendors.



Logistics for packages transport until site of installation (INCOTERMS 2010) is operated through proven experience forwarders to every place of the world.

Every package of whichever dimension, is subjected to a functional performance test, including parameters measurement, to verify the compliance with values indicated in the contract performance guarantee.



Blutek Engineers conduct site supervision during installation activities and coordinate pre-commissioning, commissioning and start-up operations until the release of the final acceptance certificate that constitutes the closing point of every project.

Blutek is an important player in the introduction of new ideas in the compressed air and nitrogen generation, for the main components and the complete package. During the years, some of those have become milestones and are now part of the actual State of the Art worldwide.

As Blutek is always looking for innovative technical solutions, the acquired knowledge is in continuous evolution, that's why 'Dynamic know-how' defines the Blutek team passion in giving to customer the best product ever.



Customer **Shell**

Site of installation
North Sea

Type
Oil free screw Safe area

Power
200 Kw

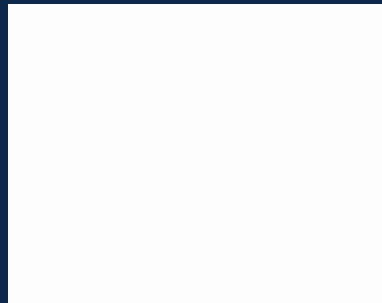


Customer **Coolong**

Site of installation
China Sea

Type
Dessicant dryer for Zone 2

Flow
2500 Nm³/h



Customer **Pemex**

Site of installation
Gulf of Mexico

Type
Oil free screw for Zone 2

Power
200 Kw



Customer **Sonatrach**

Site of installation
Bir Seba Algeria

Type
Oil free screw for Zone 2

Power
400 Kw



Customer **ENI**

Site of installation
Adriatic Sea

Type
Oil flooded screw

Power
22 Kw



Customer **Abu Quir Petroleum**

Site of installation
Mediterran Sea

Type
Dryer for Zone 2

Flow
300 Nm³/h

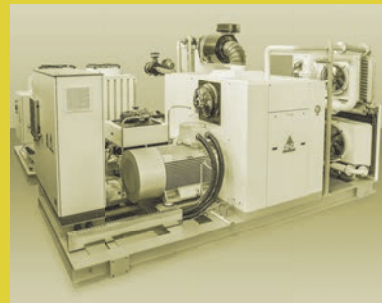


Customer **MDOC**

Site of installation
Bagdad Refinery

Type
Mobile oil free screw

Power
480 Kw



Customer **MDOC**

Site of installation
Bagdad Refinery

Type
Oil free screw close loop cooling

Power
355 Kw



Customer **OXY**

Site of installation
Oman OXY Mukazina

Type
Instrument air skid

Power
132 Kw



Customer **OXY**

Site of installation
Oman OXY Sahafa

Type
Instrument air skid

Power
30 Kw



Customer **ONGC**

Site of installation
Indian Sea

Type
Oil free screw for Zone 2

Power
132 Kw



Customer **Kuwait Energy**

Site of installation
Siba Iraq

Type
Instrument air package for Zone 2

Power
200 Kw



Customer **ENI**

Site of installation
Congo Sea

Type
Instrument air package for Zone 2

Power
37 Kw



Customer **Sonatrach**

Site of installation
Bir Seba Algeria

Type
Black start Oil free screw for Zone 2

Power
415 Kw