



INGC COMPANY





COMPANY TODAY

Modern engineering and manufacturing company,
founded in 2010

Area of the production facility

150 000 m²

more than **500**
employees

- Development of design and engineering documentation, technical specifications
- Contract manufacturing. Production of products according to customer documentation
- Implementation of turnkey projects: design, manufacture, installation, commissioning
- Service, MRO. Reconstruction, reengineering
- Warranty service

PRODUCT LINE



**CENTRIFUGAL COMPRESSOR
UNITS**



**SCREW COMPRESSOR
UNITS**



PACKAGED EQUIPMENT



GAS TURBINE POWER UNITS



**RECIPROCATING
COMPRESSOR UNITS**



**MODULE COMPRESSOR
UNITS**

«IRTYSH» CENTRIFUGAL GAS COMPRESSOR UNITS

- Power range from 4 to 34 MW
- Different climatic categories
- New construction and modernization of existing compressor stations
- Booster, pipeline and injection applications
- Driver: gas or steam turbine, e-motor
- In-house design and manufacturing

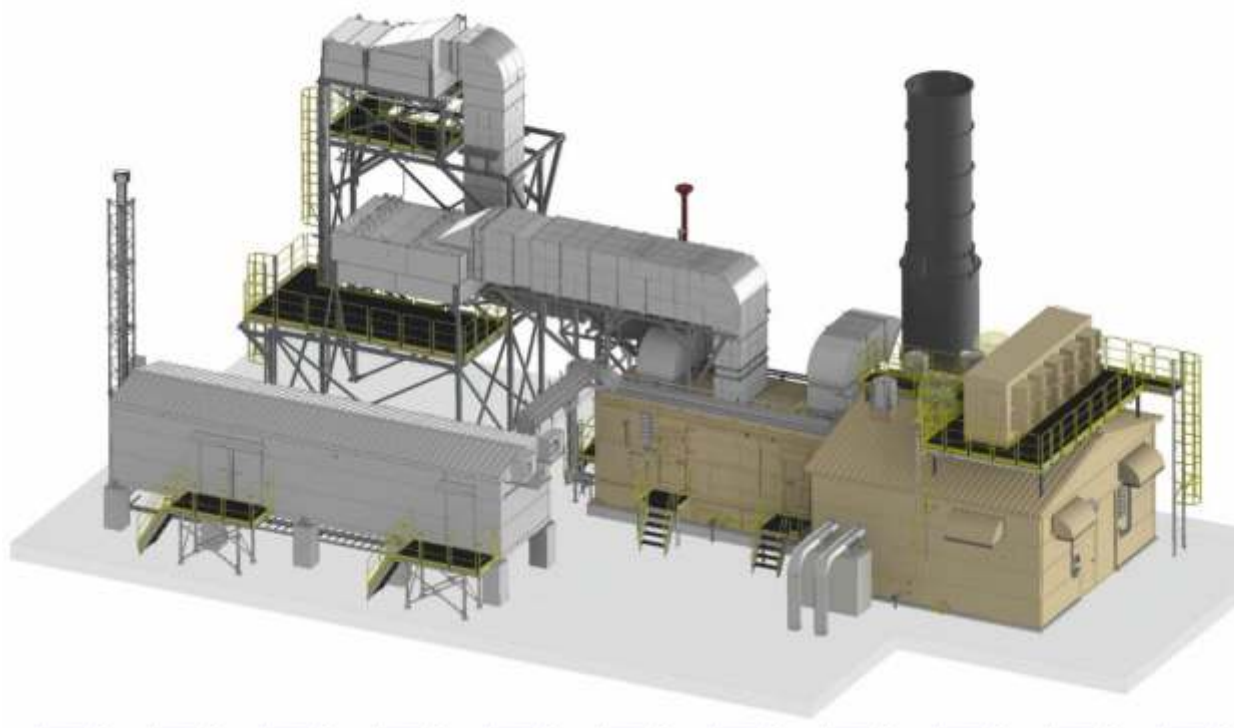
Totally delivered more
than

68 units

(with Iskra, Thermodyn, Nuovo Pignone, Siemens, Solar Turbines centrifugal compressors and ODK, KMPO, Baker Hughes, Solar Turbines, Motor Sich drivers)

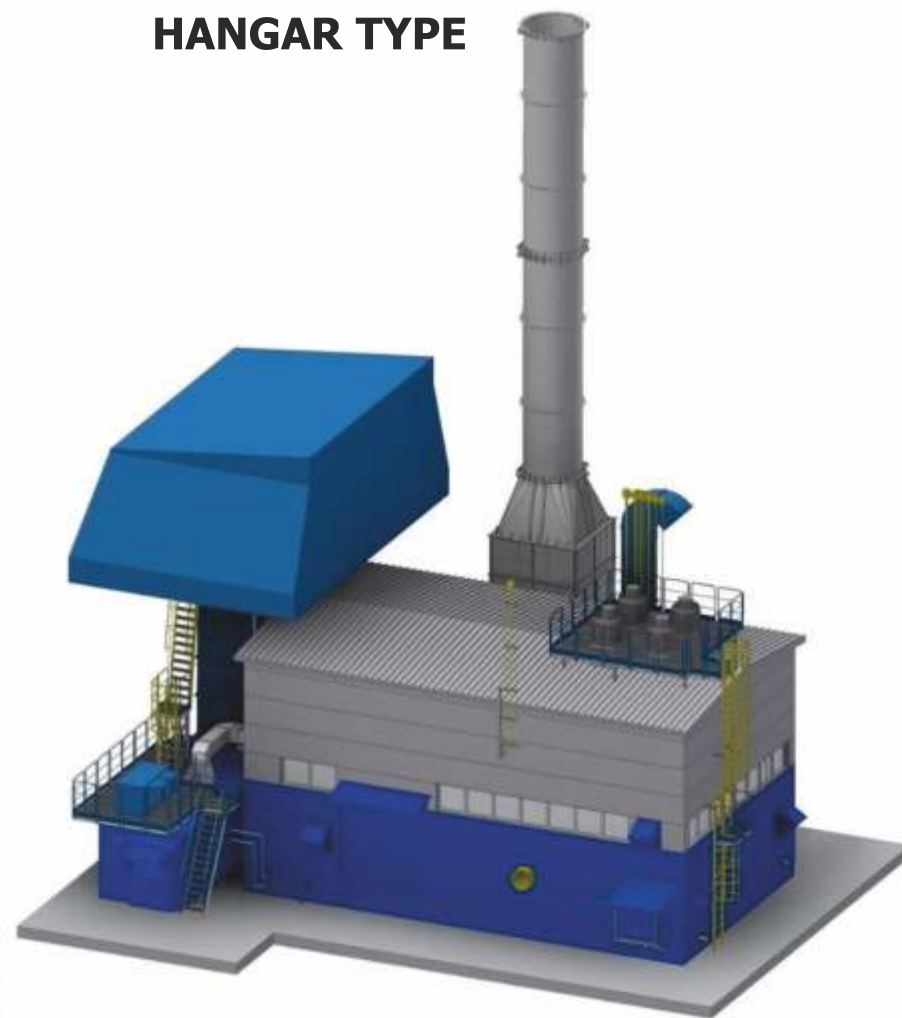


GAS COMPRESSOR UNITS DESIGN



MODULAR CONSTRUCTION

HANGAR TYPE



GAS TURBINE POWER UNITS

- Power range from 4 to 30 MW
- Current frequency is 50 -60 Hz
- Operation both in isolated networks having 6 kV or 10 kV voltage, and in parallel with the power system
- The quality of electrical energy at the terminals complies with GOST 31144-2013

Totally delivered
6 units



RECIPROCATING COMPRESSOR UNITS

- Power ranges from 30 kW to 4 MW
- Pressure is up to 60 MPa
- Drive: gas engine, electric motor and steam turbine
- In-house design and manufacturing of systems and components

Totally delivered more than

58 units

(with Ariel, Dresser-Rand, Nuovo Pignone, Cooper, Cameron, Burckhardt reciprocating compressors)



SCREW COMPRESSOR UNITS

- Power ranges up to 3 MW
- Pressure up to 75 bar
- Compressor compression ratio 2 to 5.8
- Compressor capacity regulation in the range from 10 to 100%

Totally delivered

16 units

(with Howden, Cooper, Kobelco, GEA GRASSO, Waukesha compressors)



MODULE COMPRESSOR UNITS

New type of modular compressor units for
The gas gathering at the remote fields

Our offer: Packaged modular compressor unit
based on the integrated centrifugal ICL motor-
compressor.

Main characteristics:

- Power range 300 kW to 18 MW
- Module design
- Ready-to-operate
- Short commissioning time
- 5 years interval between major service
- No oil system
- No oil trace in the compressed gas





DESIGN BUREAU

- Development of design and engineering documentation, technical specifications
- Design of technological equipment and life support systems
- Strength, gas-dynamic, hydraulic, thermal, acoustic calculations
- 3D modeling

Own Design Bureau more than 120 persons

- Design of automation and power supply systems, lighting, power equipment, and instrumentation equipment
- Application of modern and innovative technical solutions, technologies, materials in the course of work on the project
- Development of engineering documentation in accordance with: GOST, ESKD, SPDS, and with the requirements of API, ISO, ASTM and ASME standards;
- Processing of foreign documents for compliance with GOST, ESKD for the production localization;
- Designer supervision in all cycles of project implementation

SOFTWARE:

INVENTOR

AUTOCAD LT

MECHANICAL PRO

ANSYS

КОМПАС



DESIGN BUREAU

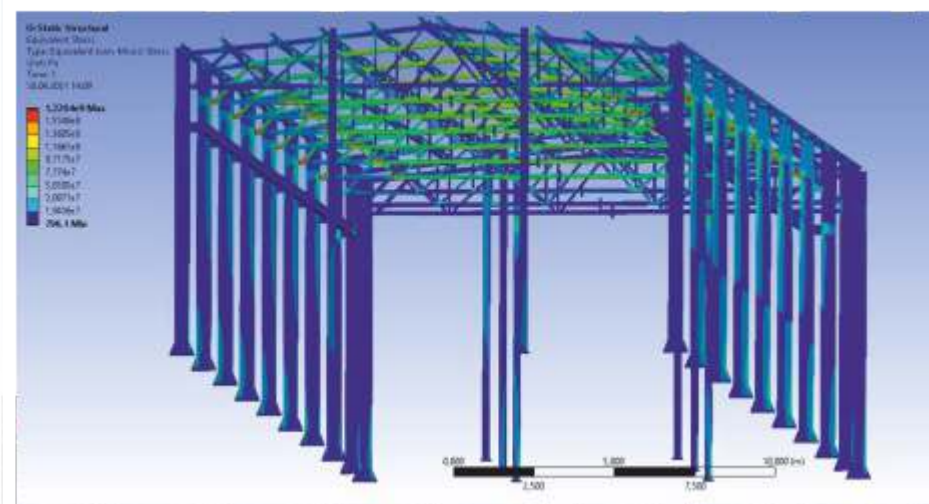
Creative, innovative approach to design can be confirmed by the patents for invention and utility models

There are **24** patents for the protection of unique technical solutions for «Irtysh» GCU.

PLC and software

development based on any hardware components using the controller equipment of any vendor and considering the Customer's preferences.

Sirius information and control system of in-house design for the compressor units control.



PRODUCTION FACILITIES

92, Novo-Gayvinskaya Str., Perm

- Total area of the production base is 65 000 m²
- Assembly workshop is 5 000 m²
- Painting and packaging workshop is 1 500 m²
- Administrative building is 2 500 m²

up to **12** | Reciprocating units
simultaneously

up to **20** | Centrifugal units
annually



PRODUCTION FACILITIES

115, Brodovsky trakt, Perm

- Total area of the production base is 84 000 m²
- Machining workshop is 14 877 m²
- Warehouse is 3 613 m²
- Administrative building is 2 014 m²

Cranes load capacity from 10 to 80t

Cargo gate 10 x 10 m

Ability to test products



PRODUCTION POTENTIAL



Full-cycle production of compressor units and gas compressor units is performed at INGC facilities in the following sections:

1. **Blank preparation section** (metal cutting and plasma cutting, lathe, milling and drilling operations)
2. **Welding and assembly section** (welding, mocking-up, assembly of steel structures and process equipment)
3. **Machine assembly section** (packaging of the systems, installation of the process equipment and argon arc welding)
4. **Electrical section** (assembly of the switchboard equipment and performance of electrical work package)
5. **Section of the vessel equipment automatic submerged-arc welding**
6. **Packing section**
7. **Finished products storage area.** Storage and shipment area.

Organized the construction of a new workshop, which will allow us to double our volumes production and expand our competencies.

QUALITY SYSTEM

INGC products have all necessary certificates of conformity and other authorization documentation.

INGC has a Certificate of compliance of the company's quality management system (QMS) with the requirements of GOST R ISO 9001-2015, as well as ISO 9001-2015

ASME certification of INGC production

Accreditation INGC as a supplier of compressor equipment for Abu Dhabi National Oil Company (**ADNOC**) projects

Certificates of conformity of QMS and STP were received in INTERGAZCERT for GPA series «Irtys»

Certificates for conformity of the occupational health and safety management system were issued in accordance with GOST R 54934-2012 (OHSAS 18001: 2007)

Received the Certificate of conformity of the environmental management system GOST R ISO 14001-2016 (ISO 14001: 2015)



TECHNICAL SUPPORT AND SERVICE

- Erection supervision work
- Commissioning and start-up
- Maintenance service
- Delivery of spare parts
- Equipment modernization

Specialists of the company have valid certificates and accreditation for performing work on the equipment of Caterpillar, Cooper, Ariel, Howden, Nuovo Pignone, John Crane, Eagle Burgmann, Thermodyn, GE, Baker Hughes, Solar Turbines, etc.

For the operation of the equipment supplied by INGC, spare parts and consumables are supplied, warranty and post-warranty service are provided.



MAINTENANCE OVERHAUL

EQUIPMENT

- Centrifugal gas compressor units
- Reciprocating / Screw compressor units
- Gas or steam turbines
- Turbo-expanders
- Automation and control systems

SERVICES

- Engineering and documentation development
- Production and supply of spare parts and accessories
- Regular Service
- Emergency service
- Overhaul of turbines, incl. GENERAL ELECTRIC, BAKER HUGHES, SIEMENS, SOLAR, RUSTON, ALSTOM, ETC.
- Commissioning of imported equipment



PROJECTS

YUZHNO-RUSSKOYE OIL, GAS AND CONDENSATE FIELD (PHASE 1,2,3)

14 GCU-16

for operation of the booster compressor shop
1-2, in terms of extension of CGTP of Yuzhno-
Russkoye oil and gas field.

Drive: gas turbine GTU-16P,

Compressor: Centrifugal NC-16 DCS-02 «Ural»

Capacity: 16 MW

Discharge pressure: 7,4 MPa (g)

Production rate: 25,1 billion nm³ / year

Severneftegazprom LLC (2012-2020)
(PJSC Gazprom)

Works on site:

Installation and commissioning of GCU with a
drive, compressor and hangar.
Replacement of the compressor bundles.



AKYRTOBE BOOSTER COMPRESSOR STATION

3 GCU-18

in individual shelters for boosting compressor station «Akyrtobe», Kazakhstan

Drive: Gas turbine NK-16-18STD «KMPO», OJSC (Kazan)

Compressor: Centrifugal BCL356/A Thermodyn S.A.S (GE Oil & Gas)

Capacity: 18 MW

Discharge pressure: 9,8 MPa (abs)

Production rate: 1,986 billion nm³ / year

KazTransGaz JSC (2016-2018)

Works on site:

Erection supervision and commissioning of GCU with a drive, compressor and hangar shelter.



MODERNIZATION OF URENGOY GAS TREATMENT PLANT

2 GCU-10 and one GCU-6
in the common shelter

Drive: PS-90GP and D-30EU-6
Delivered by UEC Aviadvigatel JSC (Perm)

Compressors: centrifugal,
STC-SV series by Siemens AG, FRG

Capacity: 10 and 6 MW

Discharge pressure: 7,3/7,3 MPa

Production rate: 170276 and
76494 m³/h

Gazprom Pererabotka LLC
(2017-2018, PJSC Gazprom)

Works on site:

Erections supervision, installation and
commissioning of GCU with a drive,
compressor and hangar shelter.



ICHEDINSKOYE FIELD

2 GTEA-6

complete gas turbine electric
units of block-modular execution.

Drive: Gas turbine Taurus 60-7901
(Solar Turbines)

Generator unit: Solar Taurus 60

Capacity: 5,74 MW

Rated voltage: 6,3 kV

Irkutsk Oil Company LLC
(2018)

Works on site:

Erection supervision and commissioning of
GCU with a drive and generator



BOVANENKOVSKOE GAS FIELD

2 GTEA-12

complete gas turbine electric
units of block-modular execution for the
Power plant of own needs

Drive: GTU-12ПГ-2

(ODK - Permskiye motory)

Generator unit: TC-12-2РУХЛЗ

(Elektrotyazhmash-Privod)

Capacity: 12 MW

Gazprom dobycha Nadym LLC
(2022)

Works on site:

Erection supervision and commissioning of
GCU with a drive and generator



SAMANTEPE COMPRESSOR STATION

2 GCU-8

Further development of Semantepe field with BCS extension in Yuzhny Urto bulok field (ENTER Engineering)

Drive: Solar Taurus 70 (Solar Turbines)

Compressor: 2BCL 406 (DHGE (Thermodyn SAS))

Capacity: 7,8 MW

Discharge pressure: 5,5 MPa

Production rate: 70375 to 383250 m³/h

Enter Engineering Pte Ltd (2019)
(Uzbekneftegaz JSC)

Works on site:

Erections supervision and commissioning of GCU with a drive.



ALAN / ZEVARDY CS (UZBEKISTAN)

4 GCU-8 «Irtysh» in block of the maximum factory readiness.

Drive: GTU-8 on AI-336-2-8
(Motor Sich JSC)

Compressor: PCL504 («Baker Hughes»)

Capacity: 8 MW

Discharge pressure: 1,7 – 0,9 MPa

Production rate: 9,14 – 2,09 mln m³/d

Enter Engineering Pte Ltd (2019)
(Uzbekneftegaz JSC)

Works on site:

Erections supervision and commissioning of GCU with a drive.



DENGIZKUL CS (UZBEKISTAN)

2 GCU-16 «Irtysh» in block of the maximum factory readiness.

Drive: GTU-16 Nova 16LT
(Baker Huges)

Compressor: 2BCL608 («Baker Huges»)

Capacity: 16 MW

Discharge pressure: 1,83 - 0,5 MPa

Production rate: 5,17-1,52 mln m3/d

Enter Engineering Pte Ltd (2022)
(Uzbekneftegaz JSC)

Works on site:

Erections supervision and commissioning of GCU with a drive.



POVKHOVSKOYE FIELD

3 electrically driven gas compressor units in a block design for the project «Reconstruction of a gas compressor station at the Povkhovskoye field». GPU for APG compression in composition of the GCS.

Drive: ET900V2 Nidec ASI S.p.A. Motors and Generators Monfalcone (GO), Italy

Compressor: 2BCL457 Baker Hughes, Nuovo Pignone

Capacity: 4 MW

Discharge pressure: 3,02 MPa (g)

Production rate: 20001 nm³/h

Lukoil PJSC (2021)



VOLGOGRAD OIL REFINERY PLANT

1 electrically driven gas compressor unit
in frame.

Drive: El-motor Siemens

Compressor: Thermodyn BCL304
(General Electric)

Capacity: 1,7 MW

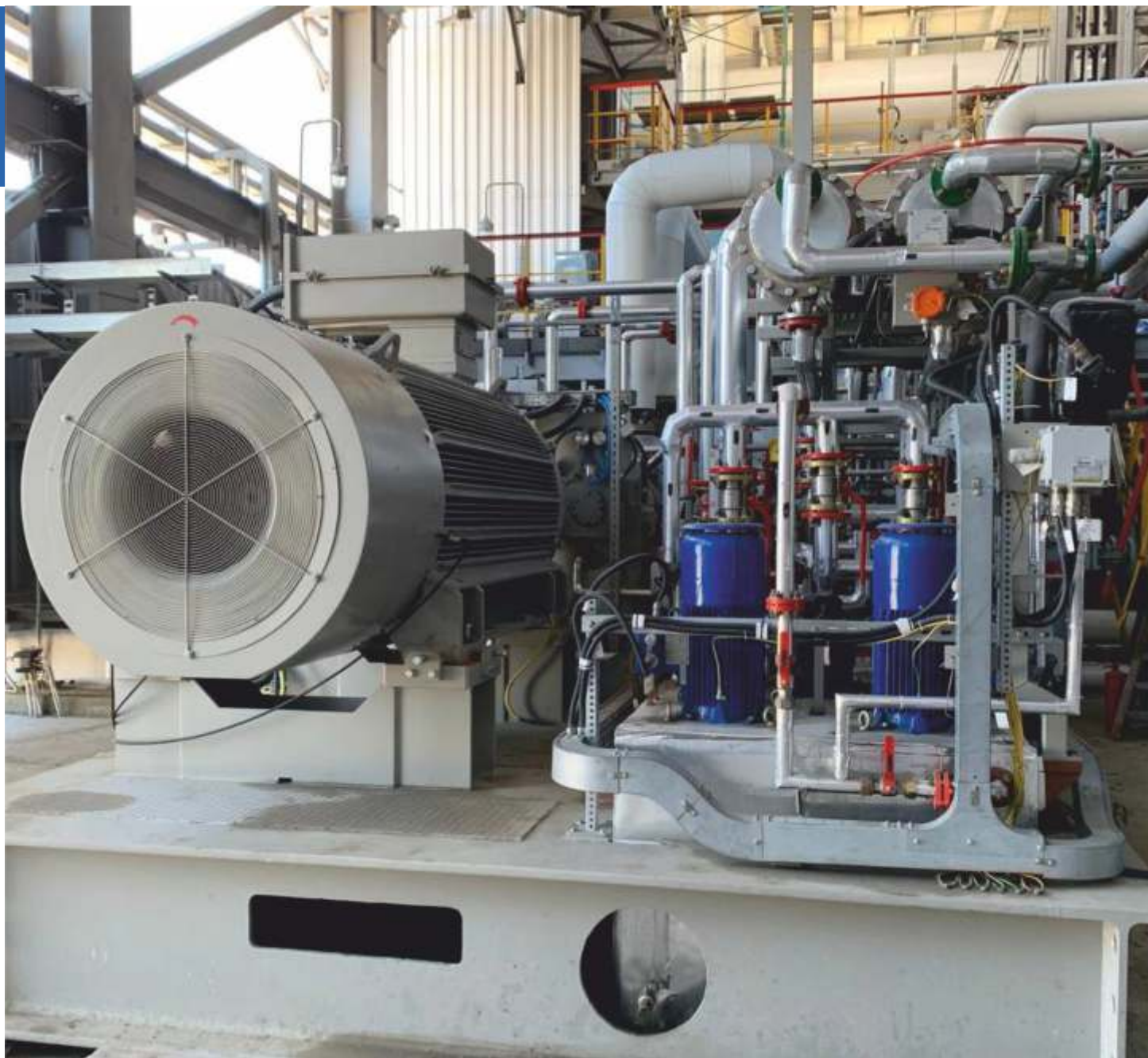
Discharge pressure: 2,1 MPa (g)

Production rate: 20560 nm³/h

Lukoil PJSC (2021)

Works on site:

Installation supervision and commissioning



NOYABRSKIY AREA

1 Packaged modular compressor unit
based on the integrated centrifugal ICL
motor-compressor.

Drive: El-motor Konvertim

Compressor: ICL (Thermodyn)

Capacity: 0,33 MW

Discharge pressure: 0,81 MPa (g)

Production rate: 1903 nm³/h

Gazprom Neft PJSC (2021)

Works on site:

Installation supervision and commissioning



HYDROGEN PRODUCTION UNIT

3 reciprocating Cus

steam-turbine-driven, a part of hydrogen production unit.

Drive: steam turbine GE Nuovo Pignone SC1-6

Compressor: GE Nuovo Pignone 2HG/2

Capacity: 4 MW

Discharge pressure: 9,3 MPa (g)

Production rate: 55000 nm³/h

Angarsky Petrochemical Plant (2013)
(OJSC NK Rosneft)

Works on site:

Installation and assembly of steam turbine units, compressor, condensing unit, lubrication and cooling units.
Regular representation.



KOVYKTINSKOYE OGCF

1 Reciprocating CU

ready-to-operate, of modular construction.

Drive: LOHER

Compressor: Ariel JGJ/4

Capacity: 0,25 MW

Discharge pressure: 9,8 MPa (g.)

Production rate: 1000 nm³/h

Gazprom dobycha Irkutsk LLC (2012)
(PJSC Gazprom)

Works on site:

Installation of CU unit and air-cooling unit of
gas with piping.
Commissioning and putting into operation.
Routine maintenance.



YURUBCHENO- TOKHOMSKOYE FIELD

12 reciprocating CUs

in the individual shelters for oil-associated gas compression and further injection into formation.

Drive: Caterpillar G3616 LE

Compressor: Ariel KBU/6

Capacity: 3,7 MW

Discharge pressure: 28,0 MPa (g.)

Production rate: 23000 nm³/h

Vostsibneftegaz JSC (2016)
(OJSC NK Rosneft)

Works on site:

Erection supervision of the helter, CU units, air-cooling unit of gas and engines, exhaust system, low-voltage package module and ACS. Regular reconsevation



CHINAREVSKOYE GCF (KAZAKHSTAN)

3 reciprocating CUs

of modular construction, ready-to-operate.
Reinforcement block and air-cooling units of
gas with piping are installed outside.

Drive: Siemens, 1150 kW, 960 kV,

Capacity: 0,96 MW

Compressor: Ariel JGJ/6 (2 stages)

Discharge pressure: 4,2 MPa (g.)

Production rate: 12000 std m³/h

Zhaikmunai LLC (2018)

Works on site:

Erection supervision of CU units, air-cooling
units of gas with piping, commissioning and
putting into operation.



PYREINOYE BOOSTER COMPRESSOR STATION

1 Ready-to-operate in-frame reciprocating compressor unit

located in the enclosure of hangar type.

Drive: Caterpillar G3612

Compressor: Ariel KBZ/4

Capacity: 2,64 MW

Discharge pressure: 11,20 MPa (g)

Production rate: 260,42 thous. Sm³/hr

Sibneftegaz LLC (2018)
(OJSC NK Rosneft)

Works on site:

Erection supervision of the compressor units, gas air cooler with piping, adjustment and start-up.



CAMEROON REPUBLIC

2 Ready-to-operate in-frame reciprocating compressor units

Drive: El-motor Nidec CT 500 Y6

Compressor: COOPER CFH64

Capacity: 1,4 MW

Discharge pressure: 8,5 MPa (g)

Production rate: 9,417 thous. Sm³/hr

The first compressor unit for INGC manufactured to meet all the requirements of the Maritime Register for the operation of equipment on the sea shelf.

Perenco Rep S.A.R.L. (France) 2021



EVO-YAHINSKOYE FIELD

2 reciprocating CUs

of modular construction, ready-to-operate.

Drive: E-drive Siemens BAO-560-905-4ДУ2

Compressor: Ariel JGJ/6

Capacity: 1 MW

Discharge pressure: 2,8 MPa (g.)

Production rate: 36000 std m3/h

Novatek-Yurkharovneftegaz LLC (2022)

Works on site:

Erection supervision of CU units,
commissioning and putting into operation.



POVKHOVSKOYE FIELD

1 Packaged screw CU

of modular construction, ready-to-operate.
Air-cooling unit of gas with piping is installed
outside on the frame integral with the unit.

Drive: Ruselprom, 6 kV, 3000 rpm

Compressor: GEA Grasso VP-V36S

Capacity: 0,16 MW

Discharge pressure: 0,32 MPa (g.)

Production rate: 1500 st m3/h

LUKOIL-West Siberia LLC (2019)
(PJSC Lukoil)

Works on site:

Unit erection supervision and commissioning



CONGO REPUBLIC

1 Packaged screw CU

on the frame. Outdoor design.

Air-cooling unit of gas with piping is installed outside on the frame integral with the unit.

Drive: ABB M3GP, 3000 rpm

Compressor: HOWDEN WRVi 255-110 38

Capacity: 0,45 MW

Discharge pressure: 1,69...1,80 MPa (g.)

Production rate: 4228 St m³/hr



Perenco Rep S.A.R.L. (France) 2019

AMURSKY GCC

1 Packaged screw CU

on the frame. Outdoor design.

Drive: El-motor ABB

Compressor: Kobelco KS25LX

Capacity: 0,32 MW

Discharge pressure: 1,04 MPa (g.)

Production rate: 3 398 St m³/hr

Linde GmbH for SIBUR Holding (2022)



VOSTOCHNO- KAPITONOVSKOE FIELD

5 screw CU

low and medium pressure on the frame.

SCU-005/1

Drive: El-motor ASA 280M-2

Compressor: HOWDEN WRV 204-110 58

Capacity: 0,09 MW

Discharge pressure: 0,7 MPa (g.)

Production rate: 551,25 St m³/hr

SCU-005/1

Drive: Waukesha VGF H24SE

Compressor: HOWDEN WRVi 255-110 30

Capacity: 0,39 MW

Discharge pressure: 2,8 MPa (g.)

Production rate: 3725 St m³/hr

Orenburgneft JSC (2022r).



FOR NOTES

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FOR NOTES

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