



TARGIN



# CATALOG

over 130 types  
of oilfield services

Targin Oilfield Services Company (formerly known as Bashneft Oilfield Services) unites nine service companies which operate in four areas — drilling, well servicing and workover, mechanical and energy services and transport.

## We perform

vertical, directional and horizontal drilling and also well upgrade operations including multihole horizontal drilling. Our drilling rigs are equipped with a four-stage fluid processing system produced both in Russia and abroad (MI Swaco). Some of the drilling rigs are equipped with top drive systems.

### Our resources in this area include:

4

drilling expeditions

42

drilling crews

2

well starting teams

53

drilling rigs



## We perform

a number of operations from well workover and well remedial work, to well suspension and abandonment. The crews which are equipped with coiled-tubing equipment can also perform high-tech operations, e.g.: drilling out of ports for arrangement of multistage hydraulic fracturing in horizontal wells. In 2014 the company will purchase a pumping plant and a nitrogen unit which will serve as the base for organizing the fleet for well completion using nitrogen on a turnkey basis.

### Our resources in this area include:

8

coiled-tubing crews

109

well workover crews

56

oil-well service crews

5 500

well servicing and workover operations are performed up to depth of up to 5,500 m

## We offer

our customers a comprehensive range of engineering work, manufacture and maintenance of equipment and tools for drilling, oilfields and power generation, including services which are unique to the Russian market. Our production facilities also manufacture a large number of our own products including: application of a polymeric anticorrosive coating on oil pipes of all diameters up to 324\*10 mm; coupling of pipelines without using welded joints during field operations by means of the Butler joint; tank cleaning from oil slime by means of the MegaMAX units.

1 500

items of well-control equipment

480

km of production tubing

120

items of automated group metering stations

1 200

km of cables

## We repair and service equipment every year

16 300

items of sucker rod pumping units

5 000

items of electrical centrifugal pumps

We use powerful and mobile special-purpose machinery, either produced in house or imported, to perform the entire range of technical, technological and transport operations at the facilities of operating companies for the transportation of multipurpose cargo and passengers, while our transport bases enable us to perform repair and overhaul work for components and assemblies, as well as the upgrade and maintenance of vehicles.

### Our vehicle fleet consists of:



1 664

units of special vehicles



146

units of hoisting vehicles



1 029

buses



776

units of tractor vehicles



1 612

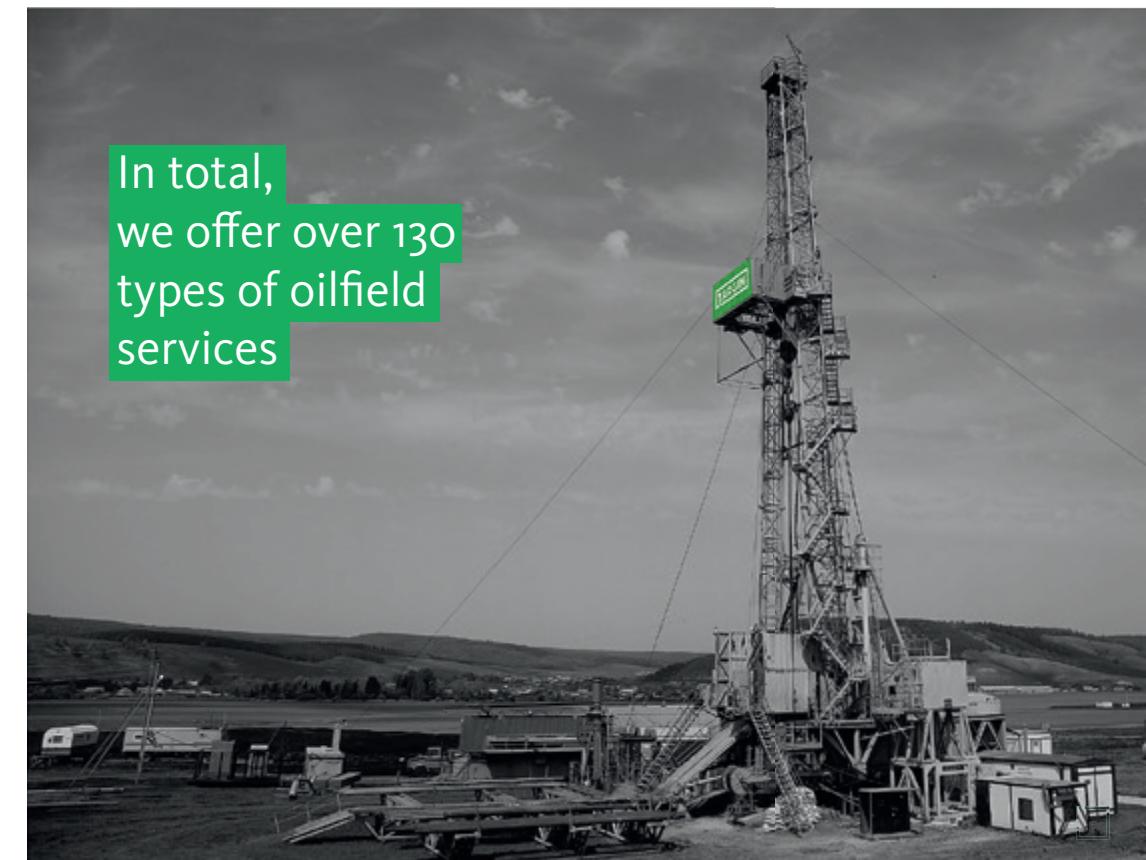
trucks



595

motor cars

In total,  
we offer over 130  
types of oilfield  
services



**TARGIN**

**6-9**  
Drilling, well  
servicing and  
workover

## Drilling of new wells

1. Straight-hole drilling and drilling of controlled directional wells.
2. Lateral drilling.
3. New well completion with coiled tubing.
4. New well completion with a cleaner for the downhole.

## Side-tracking

1. Preparation of a well for side-tracking.
2. Branching of a controlled directional sidetrack.
3. Branching of a horizontal sidetrack.
4. Well completion after side-tracking with coiled tubing.
5. Well completion after side-tracking with a cleaner for the downhole.
6. Carrying out of tests on the formations by means of KII-95 (test element kit).

## Hydraulic fracturing (HF)

1. Preparation of a well for implementation of HF:
  - 1.1. well killing;
  - 1.2. reaming of the production casing;
  - 1.3. HF packer seating;
  - 1.4. packer leakage test by means of a pressure test.
2. Well completion after implementation of HF with a cleaner for the downhole
  - 2.1. release of excess pressure from the well;
  - 2.2. HF packer separation and lifting;
  - 2.3. running-in of the cleaner for the downhole;
  - 2.4. activation of the cleaner for the downhole;
  - 2.5. tagging of the bottom hole;
  - 2.6. running-in of the submersible pumping equipment and launching of the well.
3. Well completion after implementation of HF with coiled tubing
  - 3.1. release of excess pressure from the well;
  - 3.2. HF packer separation and lifting;
  - 3.3. running-in of the coiled tubing;
  - 3.4. flushing-out of well;
  - 3.5. tagging of the bottom hole;
  - 3.6. running-in of the submersible pumping equipment and launching of the well.



## Transition to upper/lower beds

1. Study of the nature of saturation and productive formations working, updating of the geological section in the well.
2. Inclusion of an additional amount of formations by means of perforation of additional intervals for joint exploitation.
3. Carrying out of formation testing by means of KII-95 (КИИ-95).
4. Implementation of perforating-explosive operation (perforation and torpedoing, etc.).
5. Inclusion of formations by means of perforation of additional intervals for joint exploitation, with an increase in the diameter of the well or well depth.

## Optimization of the work modes for downhole pumping equipment: stimulation of oil production (SOP), planned preventive maintenance (PPM), optimization

1. Installation of an electric centrifugal pump:
  - 1.1. pump inspection and change of the pump;
  - 1.2. change of the pump for a pump with a higher flow rate (stimulation of oil production);
  - 1.3. change of the pump for a pump with a lower flow rate (optimization);
  - 1.4. change of the electric motor;
  - 1.5. cable fault clearance;
  - 1.6. inspection, change, leak repair on the production tubing;
  - 1.7. cleaning and steam cleaning of the production tubing;
  - 1.8. inspection, change of the wellhead equipment;
  - 1.9. other types of repair on an electric submersible centrifugal pump (lengthening of the cable at the wellhead, etc.).
2. Installation of an electric centrifugal pump:
  - 2.1. pump inspection and change of the pump;
  - 2.2. change of the pump for a pump with a higher flow rate (stimulation of oil production);
  - 2.3. change of the pump for a pump with a lower flow rate (optimization);
  - 2.4. elimination of parted rods;
  - 2.5. elimination of rods backed off;
  - 2.6. change of rods;
  - 2.7. change of the polished rod;
  - 2.8. change, pressure test and leak repair on the production tubing;
  - 2.9. cleaning and steam cleaning of the production tubing and rods;
  - 2.10. inspection, change of the wellhead equipment;
  - 2.11. other types of repair on a sucker rod pumping unit.
3. Installation of a high-pressure pump:
  - 3.1. pump inspection and change of the pump;
  - 3.2. change of the pump for a pump with a higher flow rate (stimulation of oil production);
  - 3.3. change of the pump for a pump with a lower flow rate (optimization).

## Bottom-hole formation zone treatment

### Transition to upper/lower beds

1. Well treatment using thermal-gas-chemical methods (thermal-gas-chemical treatment, powder generators of pressure, hydrochloric treatment, mud-acid treatment, foam-type mud-acid treatment, etc.).
2. Implementation of foam-acid formation treatment.
3. Flushing and impregnation of the bottom-hole formation zone with surfactant solutions.
4. Implementation of reactant clay cake removal in the bottom-hole formation zone.
5. Cleaning of the bottom hole by means of a cleaner for the downhole and its modifications.
6. Implementation of bottomhole treatment with the use of coiled tubing technologies.
7. Implementation of reperforation using acid solutions.



## Optimization of the work modes for injection wells

1. Well completion for water injection
2. Well completion for water injection with an electric submersible centrifugal pump
3. Levelling of the course of the hole or recovery of the well injection capacity
4. Changing of a packer in an injection well
5. Equipment of steam injection wells and air injection wells with sand screen devices
6. Sand plug washout in steam injection wells and air injection wells
7. Bottomhole flushing of water supply wells and artesian wells with a compressor
8. Water supply well repair with additional run-in-hole operation and flushing
9. Saltwater disposal well repair

## Remedial cementing (RC), fishing operations (FO)

1. Fixing production casing leaks:
  - 1.1. evaluation of the technical condition of the well (well inspection);
  - 1.2. leak repair by plugging-back;
  - 1.3. leak repair by cladding;
  - 1.4. leak repair by means of running-in of an additional casing string having a smaller diameter;
  - 1.5. leak repair by means of partial change of the production casing.
2. Elimination of circulation of liquid behind the casing:
  - 2.1. recovery of leak-proofness of the cement sheath;
  - 2.2. extension of the cement sheath beyond the production casing, intermediate string, conductor string;
  - 2.3. remedial cementing of the source of water troubles.
3. Fishing operations:
  - 3.1. withdrawal of the equipment from the well after an accident which occurred due to an error committed during the operation;
  - 3.2. bottom hole cleaning and borehole cleaning to eliminate foreign bodies;
  - 3.3. restoring the circulation with an electric submersible centrifugal pump unit run in hole / progressive cavity pump / electric diaphragm pump unit (washout of hydrate-wax plugs in the production casing and production tubing);
  - 3.4. flushing-out of the bottom hole.

## Well suspension, well abandonment

1. Well suspension.
2. Well re-entry.
3. Conversion of a well to industrial water production.
4. Conversion of a well to an inspection well, piezometric well, monitor well.
5. Well abandonment without adding of a cement sheath beyond the production string.
6. Well abandonment with adding of a cement sheath beyond the production string.
7. Well abandonment in the event of displacement of the production string.

## Dual completion of several formations

1. Introduction and repair of units of the dual completion type, of the dual injection type, of shut-off packers.
2. Introduction and repair of units of the systems and facilities for protection of the formation (type KZP-140, KZP-146, KZP-168, etc.).
3. Optimization of the work modes for electric submersible pump units with packer systems.
4. Major overhaul of electric submersible centrifugal pump units/electric submersible pump units for dual completion.
5. Maintenance work on electric submersible centrifugal pump units/electric submersible pump units for dual completion.
6. Provision of services related to servicing of electric submersible centrifugal pump units/electric submersible pump units for dual completion.
7. Provision of services according to the hire chart for electric submersible centrifugal pump units/electric submersible pump units for dual completion.



**10-19**  
Oil and gas  
production  
equipment

**TARGIN**

# 1

**Types of services related to maintenance work,  
major overhaul and service maintenance of the  
equipment of electric submersible centrifugal pump  
units, electric submersible pump units:**

- 1.1. major overhaul of electric submersible motors with a rating of 16 to 125 kW, voltage: 500 to 2000 V:
  - 1.1.1. replacement of the stator winding;
  - 1.1.2. replacement of the stator metal parts (de-stacking, stacking, burnishing by mandrel);
  - 1.1.3. replacement of the rotor packs, bearings, oil;
  - 1.1.4. shaft repair (leveling, cutting of splines);
  - 1.1.5. rework and repair of the head, the base, all the threaded holes;
  - 1.1.6. rework and repair of the stator frame (leveling);
  - 1.1.7. unning-in and testing with registration of the electrical characteristics;
- 1.2. maintenance repair of electric submersible motors with a rating of 16 to 125 kW, voltage: 500 to 2000 V:
  - 1.2.1. rework and repair of the stator frame (leveling);
  - 1.2.2. shaft repair (leveling);
  - 1.2.3. rework and repair of all the assembly components and threaded holes;
  - 1.2.4. replacement of the rotor packs, bearings, oil;
  - 1.2.5. running-in and testing with registration of the electrical characteristics;
- 1.3. maintenance repair of electric submersible centrifugal multistage pumps EtsNM 5, EtsNM 5A having a flow rate of 18 to 500 m<sup>3</sup>/day:
  - 1.3.1. washing of the outer surface and parts;
  - 1.3.2. sand blast cleaning of parts;
  - 1.3.3. defect identification in parts;
  - 1.3.4. manufacture and restoration of spare parts;
  - 1.3.5. alignment of frames and shafts;
  - 1.3.6. running-in and testing with registration of the head-capacity characteristics;
- 1.4. major overhaul of UEDN 5 (electric diaphragm pump unit) having a flow rate of 4 to 20 m<sup>3</sup>/day:
  - 1.4.1. washing of the outer surface and parts;
  - 1.4.2. replacement of the stator winding with impregnation with varnish;
  - 1.4.3. repair of assembly units;
  - 1.4.4. vacuum treatment;
  - 1.4.5. running-in and testing with registration of the head-capacity and electrical characteristics;
- 1.5. maintenance repair of UEDN 5 (electric diaphragm pump unit) having a flow rate of 4 to 20 m<sup>3</sup>/day:
  - 1.5.1. washing of the outer surface and parts;
  - 1.5.2. repair of assembly units;
  - 1.5.3. vacuum treatment;
  - 1.5.4. running-in and testing with registration of the head-capacity and electrical characteristics;
- 1.6. maintenance repair of the protector for electric submersible motors 1G-51, MG-51, MG-52, MG-54, P92D, PB92, 2PB92, GZNK-92, P92DPT, 1G-57, 2G-57, 3PB92:
  - 1.6.1. washing of the outer surface and parts;
  - 1.6.2. sand blast cleaning of parts;
  - 1.6.3. defect identification in parts;
  - 1.6.4. checking and alignment of shafts;
  - 1.6.5. grinding-in and testing of end seals;
  - 1.6.6. running-in and testing of protectors;
  - 1.6.7. testing of the seal section as an element of the electric submersible centrifugal multistage pump units for water;
- 1.7. manufacture of electric submersible centrifugal pump units for water with a flow rate of 18 to 500 m<sup>3</sup>/day, pump head: up to 150 m:

- 1.7.1. manufacture of spare parts;
- 1.7.2. stacking of a stator;
- 1.7.3. stator winding of a submersible water-filled electric motor;
- 1.7.4. assembly of submersible water-filled electric motors and electric submersible centrifugal pumps for water;
- 1.7.5. running-in and testing of electric submersible centrifugal pump units for water with;registration of the head-capacity and electrical characteristics;
- 1.8. repair of electric submersible centrifugal pump units for water:
  - 1.8.1. washing of the outer surface and parts;
  - 1.8.2. replacement of the stator winding in submersible water-filled electric motors;
  - 1.8.3. manufacture and restoration of spare parts for submersible water-filled electric motors and electric submersible centrifugal pump units for water;
  - 1.8.4. assembly of submersible water-filled electric motors and electric submersible centrifugal pump units for water;
  - 1.8.5. running-in and testing of electric submersible centrifugal pump units for water with registration of the head-capacity and electrical characteristics;
- 1.9. other types of services:
  - 1.9.1. producing and repair of cable lines KPBP 3x10, 3x16; KPpBP 100-10, 100-16, 120-10, 120-16; SSKU 301-90-10, 301-90-16; SSKU 301-120-10, 301-120-16;
  - 1.9.2. producing of cable extensions KPBP 3x10; KPpBP 100-10, 120-10; KESBP-160; KISSBP-200;
  - 1.9.3. producing of cable coupling sleeves K46.020 SB; NZNO 03.171.00.000 — steel;
  - 1.10. NB 95.206.00.000 — polyethylene;

# 2

**Types of services related to oilfield  
equipment repair:**

- 2.1. major overhaul of circulating pump stations:
  - 2.1.1. replacement of the shaft, impellers, balancing wheel, shaft jackets, liners, seal rings;
  - 2.1.2. restoration of sliding bearings;
  - 2.1.3. static balancing of impellers;
  - 2.1.4. dynamic balancing of the rotor assembly;
  - 2.1.5. running-in and registration of the head-capacity characteristics;
  - 2.1.6. installation of end seals upon the customer's request;
- 2.2. major overhaul of gearboxes Ts2NSh-450, Ts2NSh-750 A, 750 B, Ts2N-750, RN-1350, RN-2300, RN-4000, R-35, PshGN:
  - 2.2.1. restoration of the driven shaft and the driven shaft gear, the countershaft gear, the cover and the reduction gear casing;
  - 2.2.2. restoration or replacement of the countershaft, drive shaft, nuts, shaft covers, bolts, oil reflectors, drain plugs;
  - 2.2.3. replacement of the bearings, sleeves (seals);
  - 2.2.4. running-in and load testing;
- 2.3. major overhaul of dosing pumps ND 10/100:
  - 2.3.1. replacement of the worm gear, worm shaft, cover, bearings, connecting rod, rubber sleeves;
  - 2.3.2. restoration of the connecting-rod bearing;
  - 2.3.3. running-in and testing;
- 2.4. major overhaul of gaging gas separator 'Sputnik':
  - 2.4.1. repair of skim pile, flanges, pressure relief valve;
  - 2.4.2. repair of the multi-stream switching manifold (shaft, body of the multi-stream switching manifold, rubber rings);
  - 2.4.3. repair of the meter TOR 1-50;
  - 2.4.4. repair of gate valves Du80-Ru40;
  - 2.4.5. repair of the process room and restoring of the bottom;
  - 2.4.6. replacement of the processing line (pipeline), the flow control unit;

2.4.7. replacement of the hydraulic drive GP-1M, sliding valve, check valve;  
2.4.8. electrical installation work;

2.5. major overhaul of automated modular unit 'BR-10' for preparation and dosing of deemulsifying agents and corrosion inhibitors:

- 2.5.1. repair of the process room;
- 2.5.2. replacement of the dosing pump NDU-10;
- 2.5.3. replacement of the gear pump NSh-100;
- 2.5.4. manufacture of a tank;

2.6. major overhaul of independent modular unit BIUS 40-50:

- 2.6.1. repair of the skim pile, gate valves, flanges, the meter TOR 1-50;
- 2.6.2. repair of the process room and restoring of the bottom;
- 2.6.3. replacement of the processing line, the pressure relief valve;
- 2.6.4. replacement of the flow control unit, the check valve;
- 2.6.5. electrical installation work;

### Types of services related to oilfield tool repair:

3.1. major overhaul of elevator EShN-5, EShN-10:

- 3.1.1. replacement of screws, bush insert, liner, handle, handle axis;

3.2. major overhaul of pipe tongs KTGU (horizontal reinforced pipe tongs):

- 3.2.1. replacement of the ring, spring-type screws, dies;
- 3.2.2. restoration or replacement of a jaw, flappers, handle;

3.3. major overhaul of elevator ETA-50:

- 3.3.1. replacement of pins, handle, spring, balls, guides, lever;
- 3.3.2. restoration of the housing, replacement of an eye ring, catchers;
- 3.3.3. testing;

3.4. major overhaul of KMU-50:

- 3.4.1. replacement of the stopping device, bearings, covers;
- 3.4.2. restoration of the seating mating surfaces of the housing and the cover;
- 3.4.3. restoration or replacement of a C-ring, cam gear, bolts;
- 3.4.4. testing;

3.5. major overhaul of APR-2VB:

- 3.5.1. restoration of the housing;
- 3.5.2. restoration or replacement of the worm-and-worm pair, fasteners, reinforced sleeves;
- 3.5.3. testing;

3.6. major overhaul of hook 1KPSH-10:

- 3.6.1. replacement of a nut, clip, pin, hood, spring;
- 3.6.2. restoration of the housing;
- 3.6.3. restoration or replacement of connecting links, hook arm;
- 3.6.4. manufacture of a connecting link;
- 3.6.5. testing.

### Types of services related to repair of power-generation facilities:

4.1. major overhaul of squirrel-cage induction motors with a phase-wound rotor with a rating of 0.1 to 100 kW, voltage: up to 660 V:

- 4.1.1. replacement of the windings of the stator and the rotor;
- 4.1.2. replacement of the bearings and the lubricant;
- 4.1.3. restoration of the stator metal parts, electric motor coils, end shields, all threaded holes;
- 4.1.4. repair of the shaft (building-up welding, boring, grinding), manufacture of a new shaft;
- 4.1.5. static and dynamic balancing of rotors with a weight of 10 to 1000 kg;
- 4.1.6. replacement of brushes and contact rings;
- 4.1.7. testing with registration of the electrical characteristics;

4.2. major overhaul of explosion-proof asynchronous electric motors with a rating of 0.1 to 100 kW, voltage: up to 660 V:

- 4.2.1. replacement of the stator winding, bearings and the lubricant;
  - 4.2.2. restoration of the stator metal parts, electric motor frame, end shields, all threaded holes;
  - 4.2.3. repair of the shaft (building-up welding, boring, grinding), manufacture of a new shaft;
  - 4.2.4. hydraulic testing of all the parts and components of the electric motor;
  - 4.2.5. grinding of the seating surfaces;
  - 4.2.6. replacement of the output pins, bolts and rubber gaskets;
  - 4.2.7. static and dynamic balancing of rotors with a weight of 10 to 1000 kg;
  - 4.2.8. testing with registration of the electrical characteristics;
- 4.3. major overhaul of explosion-proof asynchronous electric motors and synchronous electric motors of the general purpose industrial version with a rating of over 100 kW, voltage: over 10 000 V:
- 4.3.1. replacement of sections of the windings of the stator and the rotor;
  - 4.3.2. soldering of rotors;
  - 4.3.3. filling and boring of sliding bearings;
  - 4.3.4. change of the lubricant, replacement of anti-friction bearings;
  - 4.3.5. building-up welding, boring, of the rotor shaft;
  - 4.3.6. dynamic balancing of a rotor with a weight of up to 1000 kg;
  - 4.3.7. replacement of brushes and contact rings;
  - 4.3.8. testing with registration of the electrical characteristics;
- 4.4. major overhaul of crane current generators:
- 4.4.1. replacement of the windings of the stator and the rotor;
  - 4.4.2. replacement of the bearings and the lubricant;
  - 4.4.3. repair of the rotor shaft (building-up welding, boring);
  - 4.4.4. replacement of brushes and contact rings;
  - 4.4.5. repair of switching of secondary circuits;
  - 4.4.6. dynamic balancing;
- 4.5. major overhaul of DC motors:
- 4.5.1. replacement of the windings of the stator and the rotor;
  - 4.5.2. replacement of the bearings and the lubricant;
  - 4.5.3. repair of the shaft;
  - 4.5.4. dynamic balancing;
  - 4.5.5. replacement of brushes;
  - 4.5.6. boring and grinding of the commutator;
- 4.6. major overhaul of lift electric motors:
- 4.6.1. replacement of the winding;
  - 4.6.2. replacement of the bearings and the lubricant;
  - 4.6.3. restoration of the stator metal parts, electric motor frame, end shields, shaft, all threaded holes;
  - 4.6.4. static and dynamic balancing of the rotor;
- 4.7. major overhaul of automotive-tractor generators and starters:
- 4.7.1. replacement of the windings of the stator and the rotor;
  - 4.7.2. repair or replacement of the shaft;
  - 4.7.3. replacement of the bearings and the lubricant;
  - 4.7.4. replacement of brushes;
  - 4.7.5. replacement of diodes;
- 4.8. major overhaul of oil-type power transformers of the TM series with a power of 25 to 630 kVA, voltage: 6/0.4 kV; 10/0.4 kV; oil-type measuring transformers of the NTMI series, voltage: 6/0.1 kV; 10/0.1 kV:
- 4.8.1. replacement of the windings, insulation gaskets, transformer oil, rubber gaskets, silica-gel;
  - 4.8.2. replacement of insulators, output pins;
  - 4.8.3. restoration of the housing, expansion tank;
  - 4.8.4. repair or replacement of the switch;
  - 4.8.5. repair of the magnetic core;
  - 4.8.6. testing with registration of the electrical characteristics;
- 4.9. major overhaul of oil-type power transformers of the TMPN series (for submersible pumps) with a power of 63 to 250 kVA:



TARGIN

- 4.9.1. replacement of the windings, insulation gaskets, transformer oil, rubber gaskets, silica-gel;
- 4.9.2. replacement of insulators, output pins;
- 4.9.3. repair of the magnetic core;
- 4.9.4. restoration of the housing, expansion tank;
- 4.9.5. repair or replacement of the switch;
- 4.9.6. testing with registration of the electrical characteristics;
- 4.10. major overhaul of step-down transformers, magnetic coils, coils of magnetic starters, contactors and relays:
  - 4.10.1. manufacture of coil bobbins;
  - 4.10.2. replacement of the winding;
  - 4.10.3. testing with registration of the electrical characteristics;
- 4.11. major overhaul of DC and AC welding generators:
  - 4.11.1. repair of the windings of the stator and the rotor;
  - 4.11.2. replacement of the bearings and the lubricant;
  - 4.11.3. repair of the shaft;
  - 4.11.4. replacement of brushes;
  - 4.11.5. repair of the commutator and contact rings;
  - 4.11.6. restoration of end shields;
  - 4.11.7. repair of circuits of secondary control wiring;
  - 4.11.8. dynamic balancing;
  - 4.11.9. testing with registration of the electrical characteristics;
- 4.12. major overhaul of welding transformers and rectifiers:
  - 4.12.1. replacement of the primary and secondary windings;
  - 4.12.2. repair of the magnetic core;
  - 4.12.3. repair of switching elements;
  - 4.12.4. fan repair;
  - 4.12.5. restoration of the housing, power supply circuit;
  - 4.12.6. testing with registration of the electrical characteristics;
- 4.13. repair of control stations of the ShGS type for submersible pumps:
  - 4.13.1. replacement of burned parts of the control units;
  - 4.13.2. restoration of the circuit;
  - 4.13.3. painting;
- 4.14. technical upgrade of control stations of the ShGS-5805 type for submersible units with replacement of the monitor and control units by the KSU TsVlYa 468332024 controllers.

## **5** Types of services related to expert inspection and engineering certification of hazardous industrial facilities:

- 5.1. technical diagnosis of boiler inspection facilities:
  - 5.1.1. steam boilers and water heating boilers and related metalware;
  - 5.1.2. steam pipelines and hot water pipelines of categories III and IV;
  - 5.1.3. mobile steam units;
  - 5.1.4. pressure vessels;
- 5.2. technical diagnosis of oil and gas industry facilities:
  - 5.2.1. technical equipment for oil and gas extraction works;
  - 5.2.2. fluid pumps and vacuum pump units, air compressors and gas compressors, parts for these;
  - 5.2.3. pipes and parts for pipelines made of steel, non-ferrous metals and alloys, non-metallic materials;
  - 5.2.4. drilling-rig machinery;
  - 5.2.5. hoisting equipment for well repair work;

- 5.3. technical diagnosis of lifting devices:
  - 5.3.1. loading bridges of all types;
  - 5.3.2. tower cranes;
  - 5.3.3. jib-type cranes;
  - 5.3.4. gantry cranes;
  - 5.3.5. column jib cranes;
  - 5.3.6. pipe-layer cranes;
  - 5.3.7. loader cranes;
  - 5.3.8. hoisting machines (towers);
  - 5.3.9. electrical trolleys which move along the ground rail tracks together with the control cab;
  - 5.3.10. crane runway;
  - 5.3.11. load-handling devices and fixtures (hooks, automatic grabs, cargo-lifting electromagnets, tongs type grabs, slings, grip holders, lifting beams);
  - 5.3.12. containers, with the exception of special containers used in metallurgical production;
  - 5.3.13. replacement of brushes and contact rings;
  - 5.3.14. testing with registration of the electrical characteristics;
- 5.4. expert inspection of the technical diagnosis of the lifting devices provided by the Center of Industrial Safety Expertise (TsEPB):
  - 5.4.1. experimental testing of the structural strength of hoisting facilities made of metal;
  - 5.4.2. diagnostics of metal structure (instrumental monitoring);
  - 5.4.3. approval of service life extension for hoisting facilities with indication of the date for carrying out the next expert inspection;
  - 5.4.4. assessment of the remaining life of the hoisting facilities with account taken of their actual condition;
- 5.5. repair and assembly of boiler inspection facilities, lifting devices, gas supply and gas consumption of the Center of Industrial Safety Expertise with the use of welding:
  - 5.5.1. repair of loading bridges with a hoisting capacity of up to 50 tons, jib-type cranes, pipe-layer cranes, loader cranes, hoisting machines (towers);
  - 5.5.2. repair of steam boilers with an output capacity of up to 40 tons per hour and an operating pressure of up to 4 MPa;
  - 5.5.3. repair of water heating boilers with a heating efficiency of up to 50 Gcal/h;
  - 5.5.4. repair of steam pipelines and hot water pipelines of categories III and IV;
  - 5.5.5. repair of pressure vessels of group 4;
  - 5.5.6. repair of gas supply facilities and gas consumption facilities;
  - 5.5.7. repair of oilfield equipment.

## **6** Types of services related to laboratory investigations and analysis:

- 6.1. quality control for the raw material, materials and products:
  - 6.1.1. identification of the grades of ferrous and non-ferrous metals and alloys;
  - 6.1.2. study of mechanical properties of metals;
  - 6.1.3. metallographic examinations;
  - 6.1.4. petroleum products quality control;
  - 6.1.5. quality control for oxygen gas (industrial type and medical type);
  - 6.1.6. quality control for polymers;
  - 6.1.7. quality control for pipes made of polymers, including pipes made of polyethylene for gas pipelines;
  - 6.1.8. quality control for rubber;
  - 6.1.9. quality control for paint materials, including polymeric paints;



6.1.10. manufacture of metal plates;

6.2. health, safety and environment:

6.2.1. detection of harmful substances in the air of the working space using the chemical and express methods;

6.2.2. identification of the parameters of the microclimate;

6.2.3. noise level rating;

6.2.4. identification of the illumination intensity;

6.2.5. evaluation of the non-ionizing electromagnetic fields and emissions;

6.2.6. wastewater analysis;

6.2.7. determination of the aerodynamical parameters of air ducts;

6.2.8. determination of the efficiency of the dust-collecting units;

6.2.9. industrial waste analysis.

**7**  
Types of services related to major  
overhaul of production tubing:

7.1. major overhaul of steel production tubing which has been in operation and used in oil and gas wells operation, including the following operations:

7.1.1. washing;

7.1.2. convection drying;

7.1.3. gaging;

7.1.4. defect detection;

7.1.5. marking of the defective areas;

7.1.6. lathe work;

7.1.7. screwing-on of sleeves;

7.1.8. hydrotesting with simultaneous gaging;

7.1.9. measuring of the pipe length;

7.1.10. branding;

7.1.11. installation of protective plugs.



## Transportation services

Services of special vehicles and support service vehicles for extractive industry companies:

### 1. Services of support service vehicles:

- 1.1.1. pump units;
- 1.1.2. mixing plants US-4, US-6-30;
- 1.1.3. compressor stations (air type, nitrogen type);
- 1.1.4. steam mobile plants;

### 1.2. Services of oilfield special vehicles:

- 1.2.1. ADPM-12/150 units;
- 1.2.2. mobile workshops;
- 1.2.3. facilities for well surveying;
- 1.2.4. well logging truck hoists;
- 1.2.5. loaders, tractors, excavators;
- 1.2.6. service structures for electrical installations;
- 1.2.7. units for repair and servicing of beam pumping units.

### 2. Passenger transportation:

- 2.1. services of vehicles for an inspection tour around the well stock:
  - 2.1.1. cargo and passenger transport with an off-road capability;
  - 2.1.2. passenger vehicles with an off-road capability;
  - 2.1.3. buses with an off-road capability (truckbed-mounted);
  - 2.1.4. special cargo and passenger vehicles with a truck loader crane;
- 2.2. watch-based transportation:
  - 2.2.1. buses of the urban/suburban/inter-city type having a high and medium capacity;
  - 2.2.2. enhanced comfort buses;
  - 2.2.3. buses with an off-road capability (truckbed-mounted);
- 2.3. services of passenger vehicles:
  - 2.3.1. premium passenger cars;
  - 2.3.2. passenger cars of various brands.

## 3. Transportation of cargo:

3.1. transportation of various cargo (2 to 40 tons) within the territory of the Russian Federation by means of freight transport:

- 3.1.1. drop-side trucks;
- 3.1.2. tank trucks for technical fluids;
- 3.1.3. tank trucks for potable water;
- 3.1.4. sites;
- 3.1.5. dump trucks;
- 3.1.6. pipe trucks, stalk trucks;
- 3.1.7. cement trucks;

3.2. integrated elements for travels of the well servicing and workover crews:

- 3.2.1. the composition of the string is made in accordance with the customer's equipment;

3.3. transportation of dangerous goods:

- 3.3.1. oil tank trucks;
- 3.3.2. fuel tank trucks;
- 3.3.3. vehicles for transportation of propane, oxygen;

3.4. transportation of large-size and heavy-weight cargo:

- 3.4.1. heavy-duty trailers with a load-carrying capacity of up to 60 tons;

### freight handling:

4.1. services of loaders:

- 4.1.1. front loaders;
- 4.1.2. forklift loaders;

4.2. autocranes:

- 4.2.1. with a load-carrying capacity of 10 to 40 tons;

4.3. vehicles with crane manipulators:

- 4.3.1. vehicles with a truck loader crane;

4.4. services of tractor-mounted cranes and self-propelled cranes:

- 4.4.1. pipe layers;
- 4.4.2. tractor mounted crane KTP-6,3, KP-25;

4.5. services of self-propelled cranes with a heavy lift capability:

- 4.5.1. cranes with a hoisting capacity of 45, 55, 70, 90, 100, 120, 250, 400 tons;

## 5. services of construction and installation equipment:

5.1. services of construction and installation machines:

- 5.1.1. drilling-crane machines;
- 5.1.2. excavators with a bucket capacity of over 0.25;
- 5.1.3. loaders;
- 5.1.4. mounting hoisting units;
- 5.1.5. transportation-type tractors;

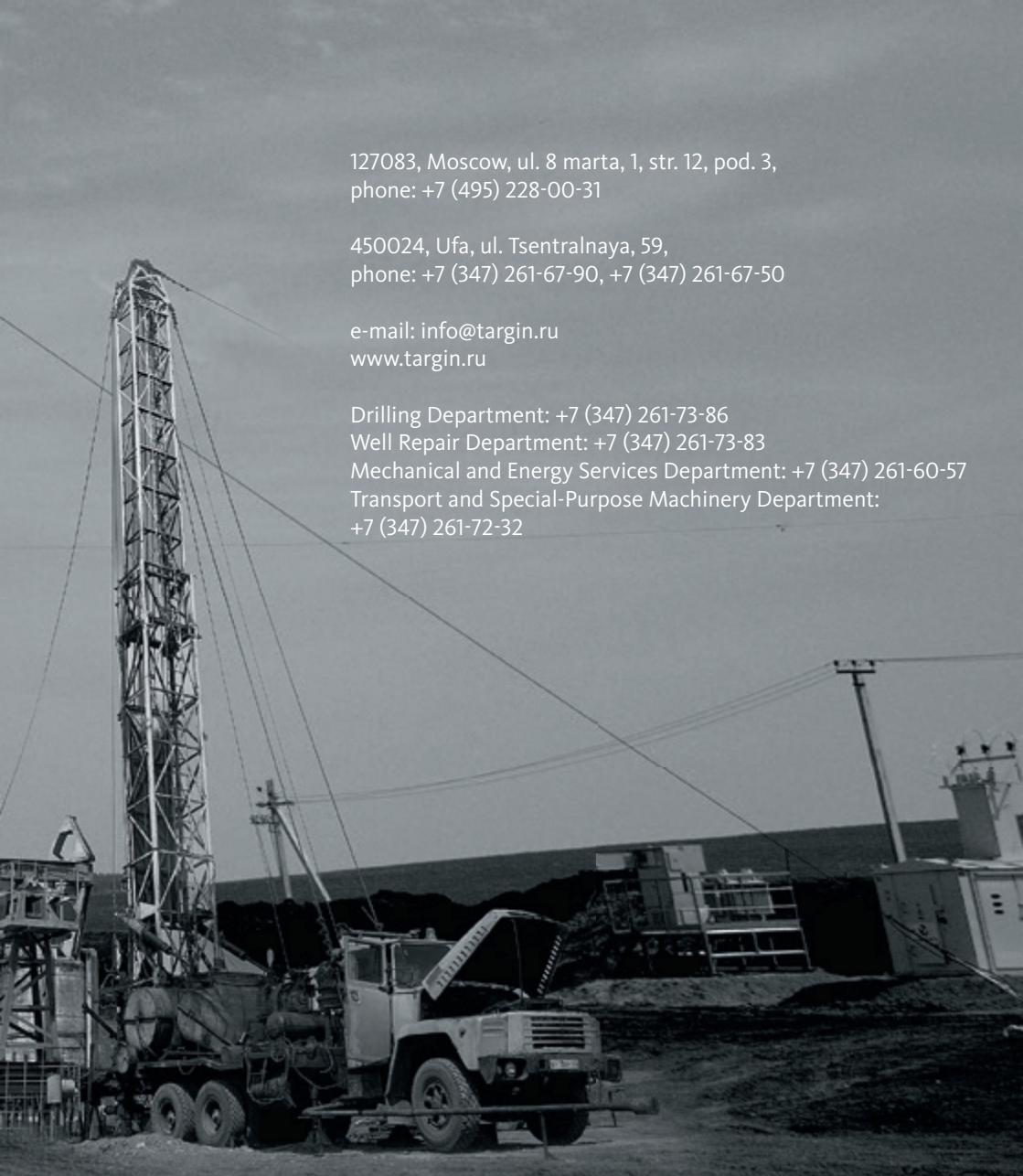
### 6. maintenance:

6.1. overhaul and routine repair of components and assemblies:

- 6.1.1. repair of internal combustion engines;
- 6.1.2. repair of units for vehicles of the following brands: GAZ, ZIL, KAMAZ, URAL, KRAZ, MAZ, T-170, MTZ;

6.2. maintenance:

- 6.2.1. maintenance-1, maintenance-2;
- 6.2.2. tire fitting, wheel balancing.



127083, Moscow, ul. 8 marta, 1, str. 12, pod. 3,  
phone: +7 (495) 228-00-31

450024, Ufa, ul. Tsentralnaya, 59,  
phone: +7 (347) 261-67-90, +7 (347) 261-67-50

e-mail: [info@targin.ru](mailto:info@targin.ru)  
[www.targin.ru](http://www.targin.ru)

Drilling Department: +7 (347) 261-73-86

Well Repair Department: +7 (347) 261-73-83

Mechanical and Energy Services Department: +7 (347) 261-60-57

Transport and Special-Purpose Machinery Department:

+7 (347) 261-72-32

**TARGIN**