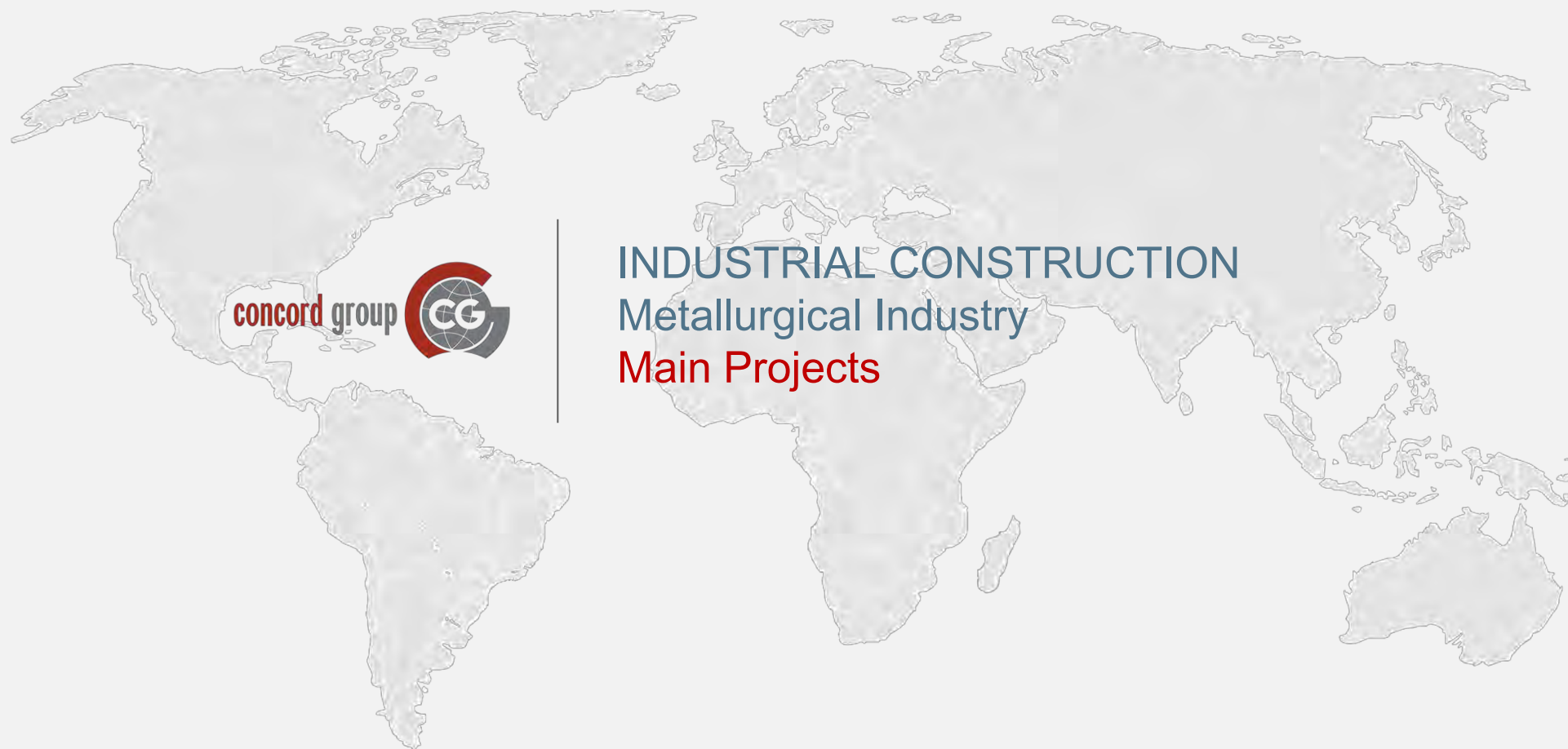


INDUSTRIAL CONSTRUCTION | METALLURGICAL INDUSTRY

REFERENCE PROJECTS



ZAPORIZHSTAL



Customer

METINVEST | ZAPORIZHSTAL
Cold-rolling Mill No.1.



Schedule

2013-2014



Scope of work

Revamping of annealing unit.



Rebuilding of annealing unit with installing 18 bell furnaces and a hydrogen generator by EBNER (Austria).

Scope included civil works, erection of equipment and gas-supply system, piping, electrical installation, commissioning.

Slitting line by DANIELI FROEHLING (Germany) was installed and commissioned.



ZAPORIZHSTAL



Customer

METINVEST | ZAPORIZHSTAL
Cold-rolling Mill No.1.



Schedule

2013-2014



Scope of work

Pickling division reconstruction.

New line of hydrochloric acid pickling
and hydrochloric regeneration unit
construction.



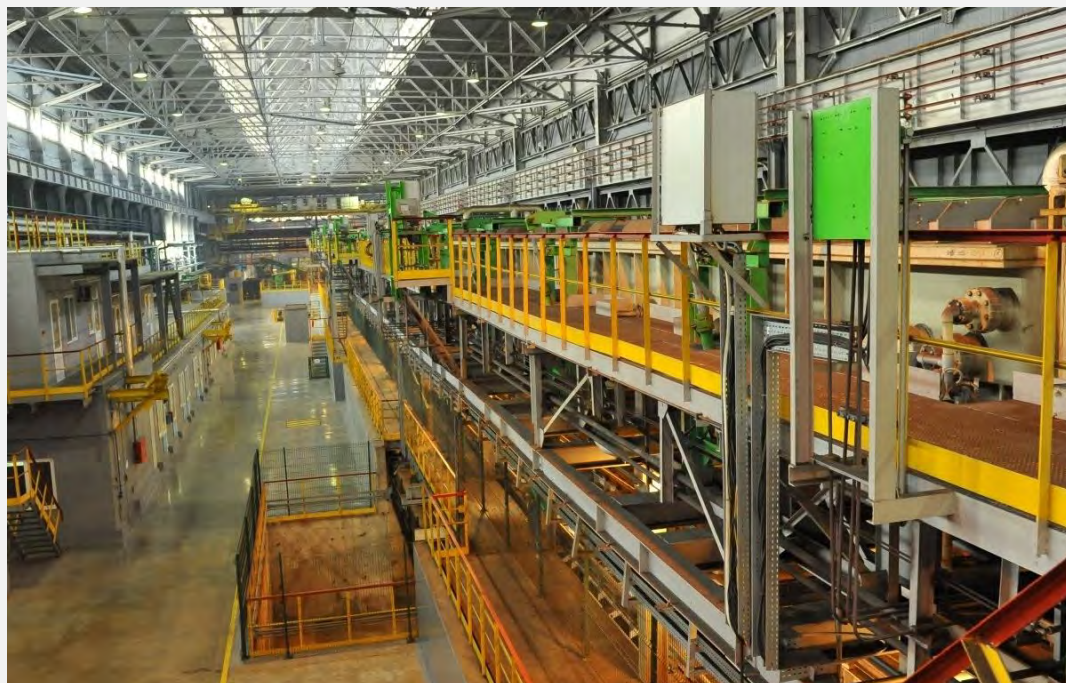
Full scope of construction and assembly works was performed for continuous pickling unit No.4 (NTA-4), along with hydrochloric regeneration unit, reverse osmosis system and butt-welding machine installation.

1608.3 tons of equipment was erected, namely:

- 1346.4 tons of machinery (coil downender, recoiler, shears, pickle-line processor etc.);
- 60.6 tons of equipment and hydraulic system, pneumatic drive and centralized lubricating systems;
- 201.3 tons of equipment and pipe line for chemical sheet treatment.

Equipment was supplied by SIEMENS VAI (Austria).

Commissioning was carried out.





ZAPORIZHSTAL



Customer

METINVEST | ZAPORIZHSTAL
Oxygen-compressor Shop.



Schedule

2016



Scope of work

Oxygen-compressor shop
reconstruction and VRU-60
reconstruction.

Both dismantling of existing buildings and constructions as well as new building and utility system construction were done.

New air separation unit by AIR LIQUID (France) with capacity of 60m³ air per hour was installed and commissioned. «Hot» and «cold» oxygen storage units of V=500m³ were erected.



ZAPORIZHSTAL



Customer

METINVEST | ZAPORIZHSTAL
Sinter Plant.



Schedule

2009-2016



Scope of work

Integrated reconstruction of sintering machines No.2,3,4,5,6 and gas-purifying system installation.

Sinter plant reconstruction and gas-purifying system installation were executed within the framework of the environmental program of ZAPORIZHSTAL plant. Wet gas-cleaners were replaced with the modern dry type.

Construction and assembly works of sintering machines were carried out phase-by-phase with the plant in operation, without interruption of basic metallurgical process.

Gas-cleaners with electrostatic precipitators for the aspiration system of the sintering machine tail section were commissioned.

Principal gas-purifying equipment was supplied by Berdichev Machinery Plant "Progress" (Ukraine).

The producer of draught equipment is REITZ (Germany).

ZAPORIZHSTAL



Customer

METINVEST | ZAPORIZHSTAL
Sinter Plant.



Schedule

2009-2014



Scope of work

PCI plant for Blast Furnaces
No.No.2-5.



PCI plant construction for Blast Furnaces №№2-5 was accomplished in collaboration with KUETTNER (Germany) in 2 phases:

Phase I: coal-dust section with coal receiver and conveyor gallery;

Phase II: basic stockyard for raw material handling.

The coal stockyard facilities include:

- Wagon tippler;
- Consolidation coal storage (5 stacks with overall capacity 136.6 thous. m³);
- Bedding yard (2 stacks with overall capacity 38.6 thous. m³);
- Railcar loading station;
- Frozen coal mixing unit;
- Belt-conveyor gallery of more than 7 km long.

ZAPORIZHSTAL



Customer

METINVEST | ZAPORIZHSTAL
Blast Furnace No.2



Schedule

2014-2015



Scope of work

Second grade overhaul repair with
partial reconstruction.

Duration of work:

- overall duration of work240 days
- preparatory work182 days
- banking period58 days

Personnel involved:

- number of personnel.....600 people

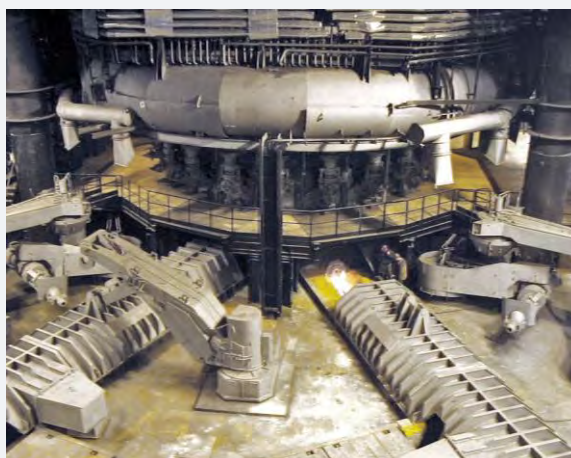
Scope of work:

- feed pipes replacement;
- aspiration equipment repair;
- repair of refractory lining;
- replacement of shaft coolers;
- replacement of charging device;
- cooling system reconstruction;
- upgrading of casthouse equipment.

Total weight of installed structures is over 1000 t.

Total weight of new refractory lining is over 1500 t.

ZAPORIZHSTAL



Customer

METINVEST | ZAPORIZHSTAL
Blast Furnace No.2



Schedule

2016



Scope of work

Third grade overhaul repair.

Duration of work (overhaul repair BF No.2):

- overall duration of work67 days
- preparatory work60 days
- banking period7 days

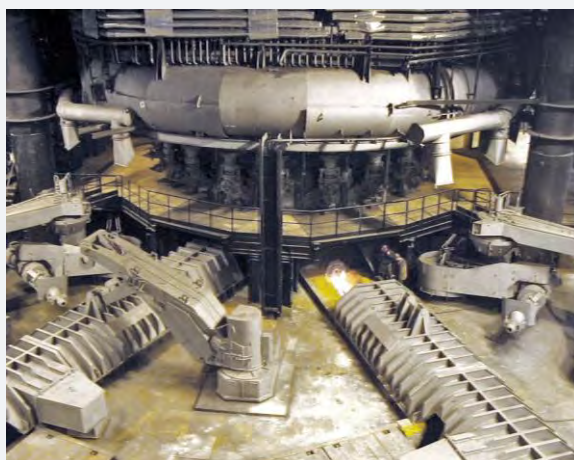
Personnel involved (overhaul repair BF No.2):

- number of personnel.....400 people

Scope of work (overhaul repair BF No.2)::

- replacement of furnace charging device;
- equipment inspection;
- skip hoist joint inspection and replacement;
- throttle unit steel structures repair;
- air heater equipment inspection;
- casthouse deduster inspection;
- bin trestle equipment repair;
- steel structures of charge-conveying system repair;
- lubrication system inspection.

ZAPORIZHSTAL



Customer

METINVEST | ZAPORIZHSTAL
Blast Furnace No.2.



Schedule

2016



Scope of work

Casthouse aspiration unit.

Duration of work (aspiration):

- overall duration of work240 days

Personnel involved (aspiration):

- number of personnel.....100 people

Scope of work (aspiration):

- general construction works;
- steel structures of duct aspiration and charge-conveying system repair;
- site assembly and installation of main flue structure with supports;
- installation of compressor station equipment;
- finishing works;
- electrical installation work;
- improvement of the area.

ZAPORIZHSTAL



Over 950 tons of steel structures, equipment, pipeline of gas purifiers and deduster were fabricated and installed, including steel structures of deduster, scrubber, water separator, large diameter pipelines, supporting structures, platforms and stair shafts.

Refractory lining of raw gas main and deduster diffuser was done.

Modern aspiration system with continuous automatic control, complying with international standards, was equipped.

All the works were carried out at limited area site while keeping production in operation.



Customer

METINVEST | ZAPORIZHSTAL
Blast Furnace No.3



Schedule

2016-2017



Scope of work

Blast Furnace reconstruction.

Production and installation of deduster and gas-purifier steel structures.

Duration of work:

- overall duration of work265 days

Personnel involved:

- number of personnel.....450 people

Scope of work:

- fabrication and installation of steel structures;
- equipment installation;
- fabrication and installation of pipeline of gas-purifiers and deduster, including large diameter pipeline;
- fabrication and installation of steel structures of deduster, scrubber, water separator, supporting structures, platforms and stair shafts;
- refractory lining accomplishment;
- cooling plates replacement.

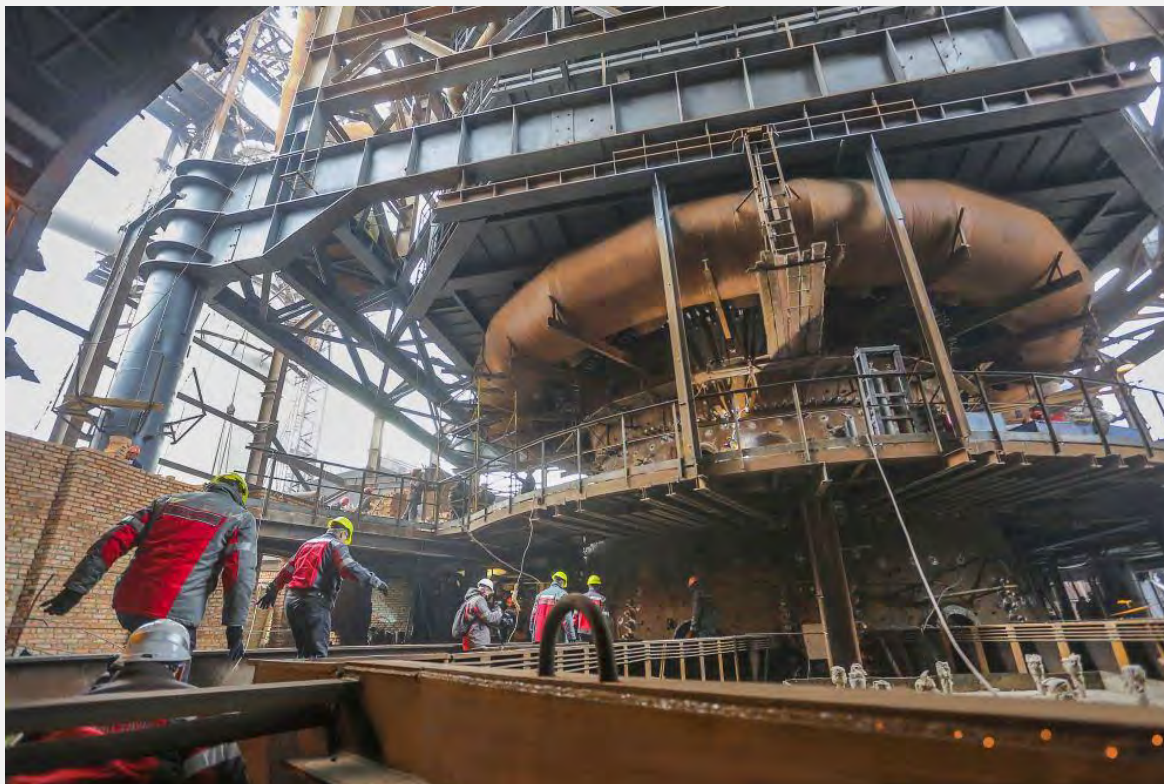


ZAPORIZHSTAL

Up-to-date solutions were applied to furnace cooling system.

Evaporative cooling system pumps were replaced with more powerful ones. Copper coolers, lined-up with improved resistance refractory by GONGIY (China), were installed as well as cooling elements.

The repair of furnace electric equipment, tilting runner remote control and evaporative cooling system pumps was done.



Customer

METINVEST | ZAPORIZHSTAL
Blast Furnace No.4



Schedule

2016



Scope of work

Third Grade overhaul repair with reconstruction features and upgrading.

Duration of work:

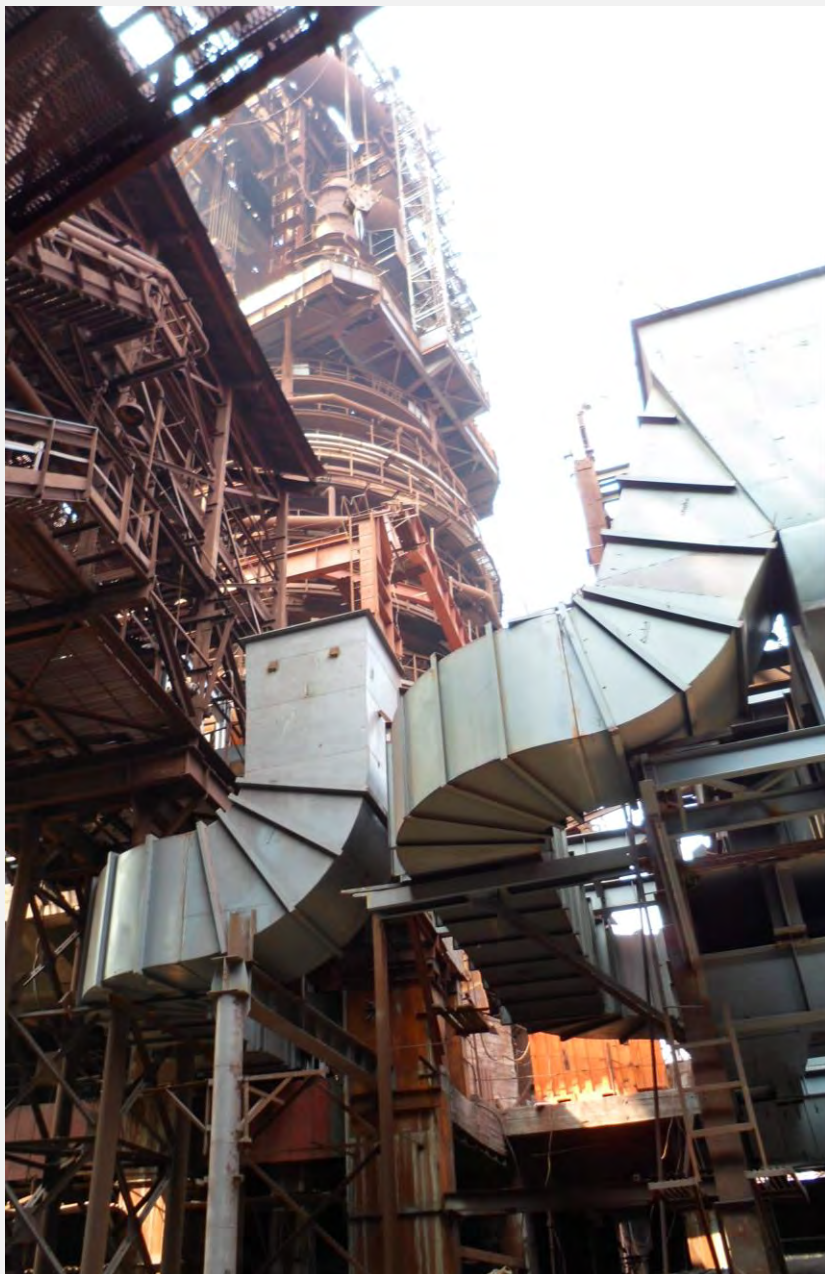
- overall duration of work180 days
- preparatory work150 days
- banking period30 days

Personnel involved:

- number of personnel.....400 people

Scope of work:

- evaporative cooling system pumps replacement;
- installation of copper coolers, lined-up with improved resistance refractory;
- shotcreting technology appliance;
- furnace-charging gear replacement;
- furnace feed delivery equipment inspection;
- repair of furnace electric equipment.



ZAPORIZHSTAL



The blast furnace shell integrity and geometry were restored, bell-less top was replaced. The whole furnace shaft relining was done with BAT and refractory lining of hearth and hearth bottom was recovered.

Cooling system was repaired; the main parts of blast furnace aspiration system were renovated.

Blast furnace overhaul repair was accomplished by plant experts in collaboration with contractor and engineering company.

Overall weight of refractory lining is over 1500 tons.



Customer

METINVEST | ZAPORIZHSTAL
Blast Furnace No.5



Schedule

2016



Scope of work

Second grade overhaul repair.

Duration of work:

- overall duration of work180 days
- preparatory work135 days
- banking period45 days

Personnel involved:

- number of personnel.....400 people

Scope of work:

- blast furnace shell integrity restoration;
- bell-less top replacement;
- the whole furnace shaft relining was done;
- refractory lining of hearth and hearth bottom recovery;
- cooling system repair;
- aspiration system renovation.



ArcelorMittal



Customer

ArcelorMittal Kryviy Rih
Blast Furnace No.7



Schedule

2015



Scope of work

Blast Furnace repair.

Duration of work:

- overall duration of work180 days
- preparatory work158 days
- banking period 22 days

Personnel involved:

- number of personnel..... 230 people

Scope of work:

- furnace-charging gear replacement;
- furnace scaffold and skull shattering;
- dismantling, repair, manufacturing, assembly work and installation of steel structures;
- dismantling and installation of furnace shaft cooling plates;
- shut-off valves inspection, dismantling and reinstallation;
- pipeline manufacturing and installation;
- refractory lining dismantling and restoration.





Customer

ArcelorMittal Kryviy Rih
Blast Furnace No.9



Schedule

2015



Scope of work

Blast Furnace repair.

Duration of work:

- overall duration of work180 days
- preparatory work138 days
- banking period42 days

Personnel involved:

- number of personnel.....300 people

Scope of work:

- suspended platforms repair;
- cleaning out of scaffold, gunite lining and concrete;
- blast furnace shell replacement;
- shell support system installation;
- cooling plates replacement;
- pipeline production and replacement;
- steel structures all over blast furnace repair.



Customer

NLMK Group | Novolipetskiy Steel Plant
Metallurgical Industry.



Schedule

2010-2011



Scope of work

Design. Site supervision.



Blast Furnace No.7.

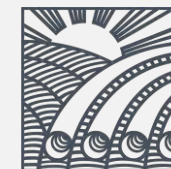
Scope of work:

- bin trestle;
- inclined charge gallery;
- bin trestle control building;
- sinter fines screening unit.

Converter Shop No.2.

Scope of work:

- converter No.1 construction;
- converter shop expanding;
- sludge dewatering block;
- cable tunnels, valve pumping station and electrical equipment rooms.



CHELPIPE



Customer

CHELPIPE | Chelyabinsk Pipe-Rolling Plant
Electric-weld pipe workshop No.3.

Electric-Weld Pipe Division.
Anticorrosive Coating Division.



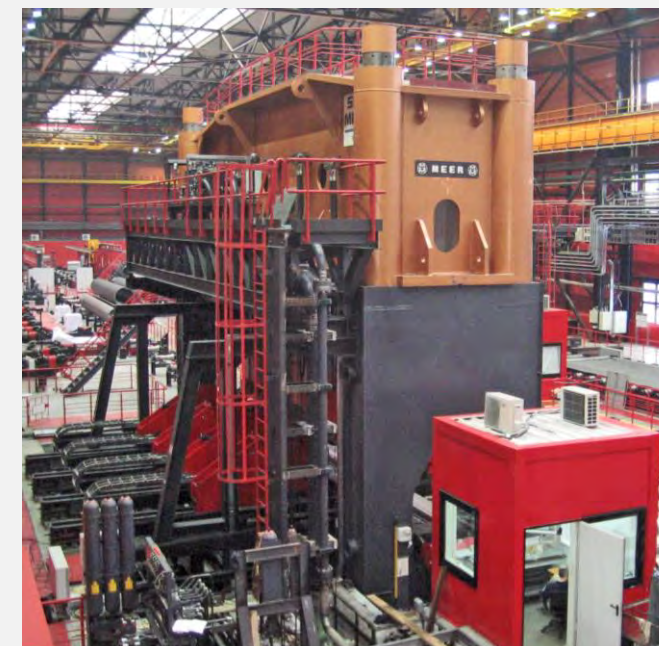
Schedule

2009



Scope of work

Design. Foundations for equipment.
Reinforced-concrete structures drawings.





Customer

INTERKOS-IV | Forged Element Shop and Steel Service Center

Production facility and administration and amenity block.



Schedule

2009-2010



Scope of work

Design.
Manufacturing drawings.





REFERENCE LIST

REFERENCE-LIST OF CONCORD GROUP | INDUSTRIAL CONSTRUCTION | METALLURGICAL INDUSTRY

1 | 19

Date	Customer Characteristics of the facility	Scope of work
Alchevsk Iron & Steel Works Alchevsk, Ukraine		
2009	Mill 3000. Blast furnaces No.3,4,5.	Overhaul of the mill. Scope of work: Overhaul of the mill 3000. 2-nd grade repair of the blast furnace with reconstruction. 3-rd grade repair of the blast furnace No. 3,4.
2013	Mill 600.	evaluation of technical condition of structures of the building, repair works. Scope of work: Work for expansion of the slab warehouse, strengthening of construction structures according to the results of the survey and evaluation of technical condition of the construction structures of the building of the mill 600.
2013	Blast furnace No.3.	Overhaul. Scope of work: Overhaul of the blast furnace No.3 (removal of cast-iron skull).
2013	Sintering machine No.3.	Overhaul. Scope of work: Overhaul of the sintering machine No. 3.
2013	Wagon dumper.	Overhaul. Scope of work: Overhaul of the wagon dumper.
2013	Blast furnaces No.4,5,1.	Overhaul. Scope of work: 3rd grade overhaul of the blast furnace No. 4, blast furnace No. 5 and blast furnace No. 1.
2013	Thick-sheet plant No.2. Roller-hearth furnace No.3.	Overhaul. Scope of work: Overhaul of the roller-hearth furnace No. 3 Thick-sheet plant No. 2.

Date	Customer Characteristics of the facility	Scope of work
2013	Polysius furnaces.	Installation works. Scope of work: Installation work at the lime production site.
2013	Long product rolling mill.	Overhaul. Scope of work: Overhaul of the through-type furnace at the long product rolling mill.
2013	Long product rolling mill.	Overhaul. Scope of work: Overhaul of scissors with a cutting force of 800 tons at the long-product rolling mill.
2014	Blast furnace No.3.	Overhaul. Scope of work: 2nd grade overhaul of the blast furnace No. 3.
2014	Blast furnace No.1.	Overhaul. Scope of work: 2nd grade overhaul of the blast furnace No. 1.
2015	Processing equipment and steel structures.	Current repair and maintenance.
2015	Blast furnace No.5.	Overhaul. Scope of work: 2nd grade overhaul of the blast furnace No. 5.
ArcelorMittal Kryvyi Rih Kryvyi Rih, Ukraine		
2014	Sintering shop No.2.	Engineering.
2014	Blast furnace shop 2. Blast furnace No.9.	Engineering. Construction of the complex for preparation and injection of coal fuel in the blast furnace No.9. Department of acceptance and storage of coal.
2015	Metallurgical plant. Blast furnace No.9.	Repair of the blast furnace. Scope of work: Repair and assembly of steel structures of hanging platforms and stack casing. Dismantling of piping of furnace coolers, bosh coolers. Dismantling, installation and testing of cooling plates. Installation / dismantling of support system of casing. Manufacturing, installation and purging of technical piping assemblies, installation of three-way valves.

Date	Customer Characteristics of the facility	Scope of work
2015	Metallurgical plant. Blast furnace No.7.	Repair of the blast furnace. Scope of work: Dismantling, manufacturing, repair, assembly and installation of steel structures. Installation and dismantling of cooling plates of furnace stack. Inspection, installation, dismantling of stop valves. Manufacturing, installation, dismantling of pipelines. Dismantling and restoration of refractory lining.
2015	Blast furnace.	Refractory works. Scope of work: Refractory works for repair of the blast furnace.
2015	Blast furnace shop No.2. Blast furnace No.9.	Engineering. Construction of the complex for preparation and injection of coal fuel in the blast furnace No.9.
2018	Metallurgical plant. Blast furnace No.7.	Repair of the blast furnace No.7.
2018	Metallurgical plant. Blast furnace No.9.	Restoration of the equipment of the blast furnace No.9.
2019	Metallurgical plant. Blast furnace No.9.	3-rd grade overhaul of the blast furnace No.9.
Artyomovsk Non-ferrous Metal Processing Works Artemovsk, Ukraine		
2010	Rolling plant. Electric furnace UKR-24.	Current repair of lining. Scope of work: Current repair of the refractory lining of the 2nd channel of the electric furnace UKR-24 of the rolling mill.
BECK u. KALTHEUNER GmbH & Co.KG Germany, Germany		
2013	Oskolsky Metallurgical Pant. Heating furnace No.3.	Lining. Scope of work: Lining of the heating furnace No. 3.

Date	Customer Characteristics of the facility	Scope of work
Cast-iron Works Republic of the Union of Myanmar		
2009	Control building for bunker trestle.	Engineering.
2009	Bunker trestle building with over-bin room and drive station.	Engineering.
2009	Casting machine building.	Engineering.
DNEPROSTAL Metallurgical Plant Dnepr, Ukraine		
2012	Electric steel melting complex.	Engineering. Pedestrian intra-shop passageways.
2015	Reconstruction of the primary gas flue duct of electric arc steel-making furnace	Inspection of building structures Detailed engineering (complex).
Donetsk Rolling Mill Donetsk, Ukraine		
2010	Rolling Plant.	Reconstruction of the rolling plant. Area of metal storage and shipment. Scope of work: Installation of metal framework of the building; overhaul of crane girders, blank cutting department and charging bay; overhaul of crane girders, department of small-sized rolled metal products; current repair of steel structures, equipment, buildings and facilities of the plant, overhaul of continuous furnaces.
2013	Ball-rolling mill.	Technical re-equipment. Equipment installation. Scope of work: Installation of the ball mill 30-80 in the rolling mill (heating furnace). Technical re-equipment. Assembly and installation of an electric bridge crane, lifting capacity 10 t.

Date	Customer Characteristics of the facility	Scope of work
2014	Rolling Plant.	Overhaul. Scope of work: Overhaul of the crane №8. Rails replacement.
2015	Equipment, buildings and facilities.	Technical re-equipment. Current repair. Scope of work: Current repair of steel structures, equipment, buildings and facilities of the plant. Technical re-equipment and maintenance of fixed assets.
DONETSKSTEEL Donetsk, Ukraine		
2011	Processing equipment.	Current repair and maintenance. Scope of work: Current repair and maintenance of the blast furnace, casting machines and electric bridge cranes of the cold iron warehouse.
2011	Blast furnace No.2. Open-hearth plant.	Overhaul. Scope of work: 3-rd grade overhaul of the blast furnace No. 2. Restoration of the bar of the small body of the blast furnace No. 2. Overhaul of the continuous casting machine of the open-hearth shop.
2013	Blast furnace No.1.	3-rd grade overhaul. Installation of the system for control of gas stream distribution over charge level at blast furnace No.1. Scope of work: 3rd grade category overhaul of the blast furnace No. 1 and installation of the monitoring system for the distribution of the gas flow above the charge level of the blast furnace No. 1.
ELECTROSTAL Kurakhovo, Ukraine		
2011	Arc-furnace shop.	Maintenance and current repair of equipment.
2015	Arc-furnace shop.	Overhaul.
2015	Arc-furnace shop.	Current repair.

Date	Customer Characteristics of the facility	Scope of work
EUROCEMENT-Ukraine Kramatorsk Cement Plant-Pushka Kramatorsk, Ukraine		
2013	Drying plant (inventory No.1602).	Repair of refractory brickwork.
EVRAZ DMZ Kamenskoe (Dneprodzerzhinsk), Ukraine		
2009	Blast furnace No.12.	Refractory works. Scope of work: Refractory works at the blast furnace No. 12.
2015	Oxygen supply system to the oxygen-converter and blast furnace shops.	Engineering.
2016	New construction of a warehouse complex of material and technical resources in the section of the "E-Zh" span in the axes "31-48b" of the building of the rolling plant No.1.	Feasibility study (complex)
2016	Rolling plant No.1. The building of the machine hall of the mill-800.Overhaul of the suspended ceiling.	Engineering. Overhaul of the suspended ceiling.
2017	New construction of the department of continuous casting of steel, located in Dnepr, Udarnikov str., 31	Feasibility study (complex)
2017	Rolling plant No.1. Overhaul of building structures of the span of heating wells.	Engineering. Research. Overhaul of construction structures of the span of heating wells.

Date	Customer Characteristics of the facility	Scope of work
2017	The system of oxygen supply to the oxygen-converter shop and blast furnace shop. New construction of Oxygen distribution plant for oxygen enrichment of cold blast of blast furnace shop and new construction of process oxygen pipeline.	Engineering. Oxygen supply oxygen-converter shop and blast furnace shop.
INTERKOS-IV Plant of forged components and service metal center Kolpino, Russian Federation		
2009	Plant of forged components and service metal center.	Engineering. Main production building.
2010	Plant of forged components and service metal center.	Engineering. Administrative and amenity building.
INTERPIPE NTRP Dnepr, Ukraine		
2016	Recycling of slag dumps.	Feasibility study (complex)
2017	Modernization of the thermal department (first line). Pipe rolling plant-4.	Quenching device and circulating local closed cycle of quenching section-type heater No.1
Izhora Pipe Mill Kolpino, Russian Federation		
2012	Section of pipe welded unit.	Engineering. Modernization of electric-weld pipe department.

Date	Customer Characteristics of the facility	Scope of work
Kosaya Gora Iron Works Tula, Russian Federation		
2009	Blast furnace No.1.	Refractory works. Scope of work: Refractory works for filling of gaps between coolers and shell of the blast furnace No. 1.
Kramatorsk Rolling Plant Kramatorsk, Ukraine		
2013	Rolling plant. Heating furnace of the Mill 330.	Current repair of equipment, pipelines and steel structures. Scope of work: Current repairs of the heating furnace of the mill 330, crane girders and tracks. Maintenance and repair of lifting machines and mechanisms. Current repair of power equipment. Mounting and Refractory works for the overhaul of the heating furnace of the mill 330.
KRAMFER Kramatorsk Ferroalloy Plant Kramatorsk, Ukraine		
2014	Complex of blast-furnace No.4.	Overhaul of the complex of blast furnace No.4.
Krylov State Research Center Saint-Petersburg, Russian Federation		
2013	Complex of stands with reversed motion (facility 23A).	Engineering.
Lebedinskiy Mining and Processing Works Belgorod region, Gubkin-11, Russian Federation		

Date	Customer Characteristics of the facility	Scope of work
2014	Washing-house.	Engineering. Ts-30M thickener with pump station and feeding trays.
MECHEL Chelyabinsk Pipe Rolling Plant Chelyabinsk, Russian Federation		
2009	Pipe welding shop No.3. Pipe welding department.	Engineering.
2009	Pipe welding shop No.3. Anticorrosion coating department.	Engineering.
MECHEL Donetsk Electrometallurgical Plant Donetsk, Ukraine		
2010	Arc-furnace shop.	Equipment maintenance. Scope of work: Maintenance of equipment of the arc-furnace shop.
METINVEST AZOVSTAL Iron & Steel Works Mariupol, Ukraine		
2011	Blast furnace No.2. Converter plant.	Overhaul. Scope of work: Overhaul of the blast furnace No. 2. Repair of the converter No. 1. Overhaul of open-hearth furnaces.
2014	Blast furnace top gas treatment systems.	Engineering. Feasibility study of the construction.
2015	The first stage of the construction of a complex for preparation and injection of coal fuel into the furnace hearths.	Engineering. Station for shipment of coal fuel to PJSC Yenakiievo Iron & Steel Works.
2015	Processing equipment.	Maintenance, repair and liquidation of fixed assets.

Date	Customer Characteristics of the facility	Scope of work
2015	Blast furnace No.4.	Overhaul. Scope of work: 2nd grade overhaul of the blast furnace No.4
METINVEST Ilyich Iron and Steel Works of Mariupol Mariupol, Ukraine		
2011	Sheet-rolling plant 3000. Blast furnace No.3.	Overhaul of the blast furnace. Equipment repair and maintenance.
2013	Blast furnace No.4.	Overhaul.
2013	Mill 3000. Mill 1700.	Overhaul.
2014	Processing equipment.	Equipment repair.
METINVEST Mariupol Repair and Engineering Works Mariupol, Ukraine		
2015	Processing equipment.	Maintenance and repair of equipment and steel structures.
METINVEST ZAPORIZHSTAL Zaporizhzhia Metallurgical Plant Zaporozhye, Ukraine		
2008	Processing equipment.	Installation of processing equipment.
2009	Cold-rolling mill 2800.	Overhaul of the thin-sheet mill 1680. Scope of work: Dismantling, restoration of foundations. Dismantling, repair and installation of technological and load-lifting equipment. Installation of high-voltage and low-voltage cable networks, installation of electric equipment, instrumentation and automation equipment, automatic process control system. Start-up and adjustment works.

Date	Customer Characteristics of the facility	Scope of work
2009	Blast furnace department. Blast furnace No.3.	3-rd grade overhaul of the blast furnace. Scope of work: Dismantling, repair and installation of steel structures of charging equipment, stoves, dust collecting equipment, bin trestle, cast house and other furnace structures. Dismantling, repair and installation of technological and load-lifting equipment. Installation of high-voltage and low-voltage cable networks, installation of electric equipment, instrumentation and automation equipment, automatic process control system. Start-up and adjustment works.
2010	Blast furnace department. Blast furnace No.2.	3-rd grade overhaul of the blast furnace. Scope of work: Dismantling, repair and installation of steel structures of charging equipment, stoves, dust collecting equipment, bin trestle, cast house and other furnace structures. Dismantling, repair and installation of technological and load-lifting equipment. Installation of high-voltage and low-voltage cable networks, installation of electric equipment, instrumentation and automation equipment, automatic process control system. Start-up and adjustment works.
2010	Continuous thin-sheet mill 1680. Continuous pickling unit No.2. Cold-rolling mill 1200. Tandem 2800.	Overhaul of the slabbing mill 1150. Scope of work: Dismantling, restoration of foundations. Dismantling, repair and installation of technological and load-lifting equipment. Installation of high-voltage and low-voltage cable networks, installation of electric equipment, instrumentation and automation equipment, automatic process control system. Start-up and adjustment works.
2010	Sintering shop. Sintering machine No.6.	Overhaul of the sintering machine No.6. Scope of work: Dismantling and restoration of reinforced concrete floors. Dismantling, repair and installation of technological and load-lifting equipment. Installation of high-voltage and low-voltage cable networks, installation of electric equipment, instrumentation and automation equipment, automatic process control system. Start-up and adjustment works.
2010	Blast furnace department. Blast furnace No.5.	3-rd grade overhaul of the blast furnace. Scope of work: Dismantling, repair and installation of steel structures of charging equipment, stoves, dust collecting equipment, bin trestle, cast house and other furnace structures. Dismantling, repair and installation of technological and load-lifting equipment. Installation of high-voltage and low-voltage cable networks, installation of electric equipment, instrumentation and automation equipment, automatic process control system. Start-up and adjustment works.
2011	Slabbing mill 1150. Continuous thin-sheet mill 1680. Cold rolling mill Tandem. Cross cutting unit No.2.	Overhaul of the slabbing mill 1150. Scope of work: Dismantling, restoration of foundations. Dismantling, repair and installation of technological and load-lifting equipment. Installation of high-voltage and low-voltage cable networks, installation of electric equipment, instrumentation and automation equipment, automatic process control system. Start-up and adjustment works.

Date	Customer Characteristics of the facility	Scope of work
2011	Blast furnace department. Coal fuel injection unit.	Reconstruction of coal bulk storage. Scope of work: Foundation works, installation of cast-in-situ structures, installation of precast reinforced concrete structures, installation of steel structures, installation of ventilation system, waterproofing work, heat-insulating works, corrosion protection, installation of technological pipelines and gas supply systems, installation of technological equipment, electric installation works, start-up and adjustment works.
2012	Continuous thin-sheet mill 1680. Cold rolling mill Tandem. Cross cutting unit No.2.	Overhaul of the slabbing mill 1150. Scope of work: Dismantling, restoration of foundations. Dismantling, repair and installation of technological and load-lifting equipment. Installation of high-voltage and low-voltage cable networks, installation of electric equipment, instrumentation and automation equipment, automatic process control system. Start-up and adjustment works.
2013	Mill NTLS-1680. Thin-sheet hot-rolling plant.	Overhaul. Scope of work: Overhaul of the mill NTLS-1680 Thin-sheet hot-rolling plant.
2013	Continuous thin-sheet mill 1680.	Overhaul of the slabbing mill 1150. Scope of work: Dismantling, restoration of foundations. Dismantling, repair and installation of technological and load-lifting equipment. Installation of high-voltage and low-voltage cable networks, installation of electric equipment, instrumentation and automation equipment, automatic process control system. Start-up and adjustment works.
2013	Blast furnace shop. Blast furnace No.2.	3-rd grade overhaul of the blast furnace. Scope of work: Dismantling, repair and installation of steel structures of charging equipment, stoves, dust collecting equipment, bin trestle, cast house and other furnace structures. Dismantling, repair and installation of technological and load-lifting equipment. Installation of high-voltage and low-voltage cable networks, installation of electric equipment, instrumentation and automation equipment, automatic process control system. Start-up and adjustment works.
2013	Sintering shop.☐ Sintering machine No.6.	Overhaul of the sintering machine No.6. Scope of work: Dismantling and restoration of reinforced concrete floors. Dismantling, repair and installation of technological and load-lifting equipment. Installation of high-voltage and low-voltage cable networks, installation of electric equipment, instrumentation and automation equipment, automatic process control system. Start-up and adjustment works.
2013	Blast furnace No.4.	Refurbishment repair. Scope of work: Refurbishment repair of the blast furnace No. 4, including: inclined bridge, blast furnace house, casting house, reconstruction of bin trestle, replacement of top charging steel structures.

Date	Customer Characteristics of the facility	Scope of work
2013	Blast furnace No.2.	Overhaul. Scope of work: 3rd grade overhaul of the blast furnace No. 2.
2013	Blast furnace department. Coal injection installation. Coal bulk storage.	Reconstruction of coal bulk storage. Scope of work: Foundation works, installation of cast-in-situ structures, installation of precast reinforced concrete structures, installation of steel structures, installation of ventilation system, waterproofing work, heat-insulating works, corrosion protection, installation of technological pipelines and gas supply systems, installation of technological equipment, electric installation works, start-up and adjustment works.
2013	Sintering shop.☐ Sintering machine No.1.	Replacement of the sintering machine No.1 with technological gas treatment system. Scope of work: Foundation works, installation of cast-in-situ structures, installation of precast reinforced concrete structures, installation of steel structures, installation of ventilation system, waterproofing work, heat-insulating works, corrosion protection, installation of technological pipelines and gas supply systems, installation of technological equipment, electric installation works, start-up and adjustment works.
2014	Blast furnace shop. Blast furnace No.5.	3-rd grade overhaul of the blast furnace. Scope of work: Dismantling, repair and installation of steel structures of charging equipment, stoves, dust collecting equipment, bin trestle, cast house and other furnace structures. Dismantling, repair and installation of technological and load-lifting equipment. Installation of high-voltage and low-voltage cable networks, installation of electric equipment, instrumentation and automation equipment, automatic process control system. Start-up and adjustment works.
2014	Blast furnace shop. Blast furnace No.2.	2-nd grade overhaul of the blast furnace. Scope of work: Disassembly and restoration of foundations. Dismantle, repair and installation of metal structures of the furnace casing, air heaters, dust collector, inclined bridge, bunker ramp, casting yard and other furnace structures. Dismantling, repair, installation of technological and lifting equipment. Laying of high-voltage and low-voltage cable networks, installation of electrical equipment, equipment of instrumentation and automation, automatic process control system. Recovering the refractory lining of the furnace. Commissioning works.
2014	Sintering shop. Sintering machine No.5.	Reconstruction of the sintering machine No.5. Scope of work: Dismantling and restoration of reinforced concrete floors. Dismantling, repair, installation of technological and lifting equipment. Laying of high-voltage and low-voltage cable networks, installation of electrical equipment, equipment of instrumentation and automation, automatic process control system. Commissioning works.
2014	Coal injection installation for Blast furnaces No.2-5.	Start-up facility I. Scope of work: Reconstruction on turnkey basis.

Date	Customer Characteristics of the facility	Scope of work
2014	Coal injection installation for Blast furnaces No.2-5.	Start-up facility II. Scope of work: Reconstruction on turnkey basis.
2014	Blast furnace shop. Blast furnace No.4.	Complete renovation. Scope of work: Foundation works, installation of cast-in-situ structures, installation of precast reinforced concrete structures, installation of steel structures, installation of ventilation system, waterproofing work, heat-insulating works, corrosion protection, installation of technological pipelines and gas supply systems, installation of technological equipment, electric installation works, start-up and adjustment works.
2014	Cold rolling shop No.1.☐ Pickling room.	Reconstruction of the pickling room, transfer to hydrochloric pickling. Complex of construction of continuous pickling unit No.4 with acid regeneration plant. Scope of work: Foundation works, installation of cast-in-situ structures, installation of precast reinforced concrete structures, installation of steel structures, installation of ventilation system, waterproofing work, heat-insulating works, corrosion protection, installation of technological pipelines and gas supply systems, installation of technological equipment, electric installation works, start-up and adjustment works.
2014	Sintering machine No.5.	Overhaul. Scope of work: Overhaul of the sintering machine No. 5.
2015	Sintering shop. Sintering machines No.3-6.	Reconstruction of technological gas purification systems of the sinter plant No.3. Scope of work: Reconstruction on turnkey basis.
2015	Sintering shop. Sintering machines No.3-6.	Reconstruction of technological gas purification systems of the sinter plant No.4. Scope of work: Reconstruction on turnkey basis.
2015	Sintering shop.☐ Sintering machine No.1.	Reconstruction of the sintering machine No.1 with technological gas treatment facility. Scope of work: Earthworks, installation of drilled piles, installation of cast-in-situ reinforced concrete structures, installation of steel structures, installation of technological equipment, installation of carrying and lifting equipment, installation of nonstandard equipment, construction works for roads and sites, dismantling of steel structures, dismantling of technological equipment.
2016	Blast furnace shop.	Reconstruction of gas-discharge device for blast-furnace gas No.2
2016	Sintering shop. Sintering machines No.2-6.	Transfer of the sintering machines No.2-6 to combustion of mixed gas.

Date	Customer Characteristics of the facility	Scope of work
2016	Blast furnace shop. Blast furnace No.4.	3-rd grade overhaul of the blast furnace.
2016	Blast furnace shop. Blast furnace No.2.	Aspiration unit of cast house of the blast furnace No.2.
2016	Blast furnace shop. Blast furnace No.2.	3-rd grade repair of the blast furnace.
2016	Sintering shop. Sintering machine No.2.	Reconstruction of the sintering machine No.2 with technological gas treatment facility. Scope of work: Earthwork, installation of bored piles, installation of monolithic reinforced concrete structures, installation of metal structures, installation of process equipment, installation of lifting and transport equipment, laying of railway tracks, wall cladding with sandwich panels, installation of sanitary equipment, installation of electrical equipment, laying of pipelines (including air supply, wiring, communications, instrumentation), dismantling of metal equipment, dismantling metal support structures, dismantling prefabricated reinforced concrete panels.
2016	Blast furnace shop. Blast furnace No.5.	3-rd grade overhaul of the blast furnace.
2016	Complex for the production of hot rolled coils with a capacity of 5,0 million tons per year.	Engineering. Construction of the department of casting and rolling modules.
2016	Gas department.	Dismantling of blast furnace and coke oven gas pipelines from PJSC ZAPOROZHSTAL PJSC Zaporozhkoks Scope of work: Strengthening of the existing metal structures of supports, manufacturing and installation of metal structures for supports, maintenance area for equipment on a gas pipeline, pre-assembly of elements of gas ducts of large diameters, electrical installation work for power supply to valves, installation of networks to the drainage system, installation of vents, metal structures of the stairs. Piping insulation work.
2017	Combined heat and power plant.	Overhaul (replacement) of the section of the trestle of fuel oil pipeline power between columns No.9-10 in the area of the railway entrance to the mixing department.
2017	Blast furnace shop. Blast furnace No.3.	Reconstruction of the blast furnace No.3. Production and installation of steel structures of dust collector and gas cleaning system.

Date	Customer Characteristics of the facility	Scope of work
Mikhailovskiy Mining and Processing Works Republic of Kalmykia, Elista, Russian Federation		
2015	Process system of baking furnace No.3.	Construction of STKOM No.3. Subcontracting of Trust YUZHSTALKONSTRUKTSIIA.
MOTOR-SICH Zaporozhye, Ukraine		
2008	Silicate brick shop.	Overhaul of the brickwork. Scope of work: Refractory brickwork of heating furnaces, lining works.
NLMK Kaluga Research, Development and Production Electrometallurgical Plant Lipetsk, Russian Federation		
2013	Rolling plant. Mill A/S.	Construction and installation works.
NLMK Novolipetsk Steel Plant Lipetsk, Russian Federation		
2010	Blast furnace No.7.	Engineering. Bin trestle. Inclined gallery for charge supply. Control building for bin trestle. Coke breeze screening unit.
2010	Converter plant No.2.	Engineering. Construction of the converter No.1. Expansion of the converter department. Sludge dewatering department. Building of EP 49.
2011	Blast furnace No.7. Converter plant No.1.	Equipment installation.
2011	Converter plant No.2.	Designer supervision.

Date	Customer Characteristics of the facility	Scope of work
2011	Converter plant No.2.	Engineering. Facilities of the complex: cable tunnels, valve pump house, electric rooms.
	OUTOTEC Saint-Petersburg Saint-Petersburg, Russian Federation	
2013	Autoclave hydro-metallurgical complex (Russia, Amur region, Blagoveshchensk).	Installation of internal equipment of high-pressure vessels.
	Pervouralsk New Pipe Plant Sverdlovsk region, Pervouralsk, Russian Federation	
2011	Pipe rolling shop with a three-roll continuous mill and a complex of equipment for finishing.	Engineering.
	STRABAG SE Moscow, Russian Federation	
2013	Metallurgical plant in the area of CHP-4 (Russia, Saratov region, Balakovo).	Installation of processing equipment, machinery and pipelines. Scope of work: Installation of processing equipment for the areas of package formation and removal, installation of equipment for a mechanical testing laboratory and a roll-turning workshop. Supply and installation of hydraulic pipelines and installation of equipment for a bucket-furnace in arc-furnace shop. Installation of equipment for repair and storage of steel ladles, as well as installation of the steel truck and ways of the steel truck, installation of equipment for the electrical power supply of carts for steel ladles in arc-furnace shop. Installation of the system of hydraulics and lubrication of the section of the shaft furnace arc-furnace shop. Installation of equipment of the alloying machine.

Date	Customer Characteristics of the facility	Scope of work
	TOO "G4 City" r. G4 City, Kazakhstan	
2011	Combined-cycle gas turbine station to the first two satellite towns of Gate City and Golden City.	Engineering. Combined heat and power plant for the first two satellite towns Gate City and Golden City.
	Vyksa Metallurgical Plant Nizhniy Novgorod region, Vyksa, Russian Federation	
2012	Pipe electric welding complex for large diameter pipes.	Engineering. The organization of a new section of coatings for large-diameter pipes. Warehouse of anti-corrosion coatings.
2012	Electric welding shops No.4,5.	Engineering. Replacement of the equipment. Installation of the pipe cutting line by EMAG. Foundations for the equipment.
2013	Buildings for a warehouse of finished products for a pipe-electric welding complex of large-diameter pipes.	Engineering. Expansion of the span P-P'-R from 22 to 33 axes of the building. The organization of the area for application of external anti-corrosion coating on electrowelded longitudinal pipes of large diameter and the finished product warehouse in the s
	Yenakiievo Iron & Steel Works Yenakiievo, Ukraine	
2010	Blast furnaces No.1,3,4,5.	Overhaul. Scope of work: 2nd grade overhaul of equipment of pipelines and steel structures of the blast furnace shop No. 1,4,3. 3-rd grade overhaul of the blast furnace No. 1, 4, 5.
2013	Mining grab-bucket crane No.2.	Overhaul. Scope of work: Overhaul of the ore-grab crane №2.
2013	Blast furnace No.5.	Overhaul. Scope of work: 3rd grade overhauls of the blast furnace No. 5.
2013	Mining grab-bucket crane No.1.	Overhaul. Scope of work: Overhaul of grab crane №1.

Date	Customer Characteristics of the facility	Scope of work
2014	Blast furnace No.3.	Overhaul. Scope of work: 3rd grade overhaul of the blast furnace No. 3.
2014	Coal storage. ☒	Engineering. Coal dust injection unit for the Blast furnaces No.1,3,5.
2014	Sintering plant.	Engineering.
2015	Processing equipment, pipelines and steel structures.	Current repair. Scope of work: Maintenance of equipment, pipelines, steel structures.
2015	Blast furnace No.1.	Overhaul. Scope of work: 2nd grade overhaul of the blast furnace No. 1.
2015	Coal storage. Coal fuel injection plant.	Capital construction. Scope of work: Installation for injection of coal fuel for blast furnaces №1,3,5. Coal storage



CONCORD ENGINEERING GmbH

Rotenturmstrasse 16-18, Room 101,

1010 Vienna, Austria

Phone: +43 1/301 0022 -10

E-mail: office@concordgroup.eu

www.concordgroup.eu