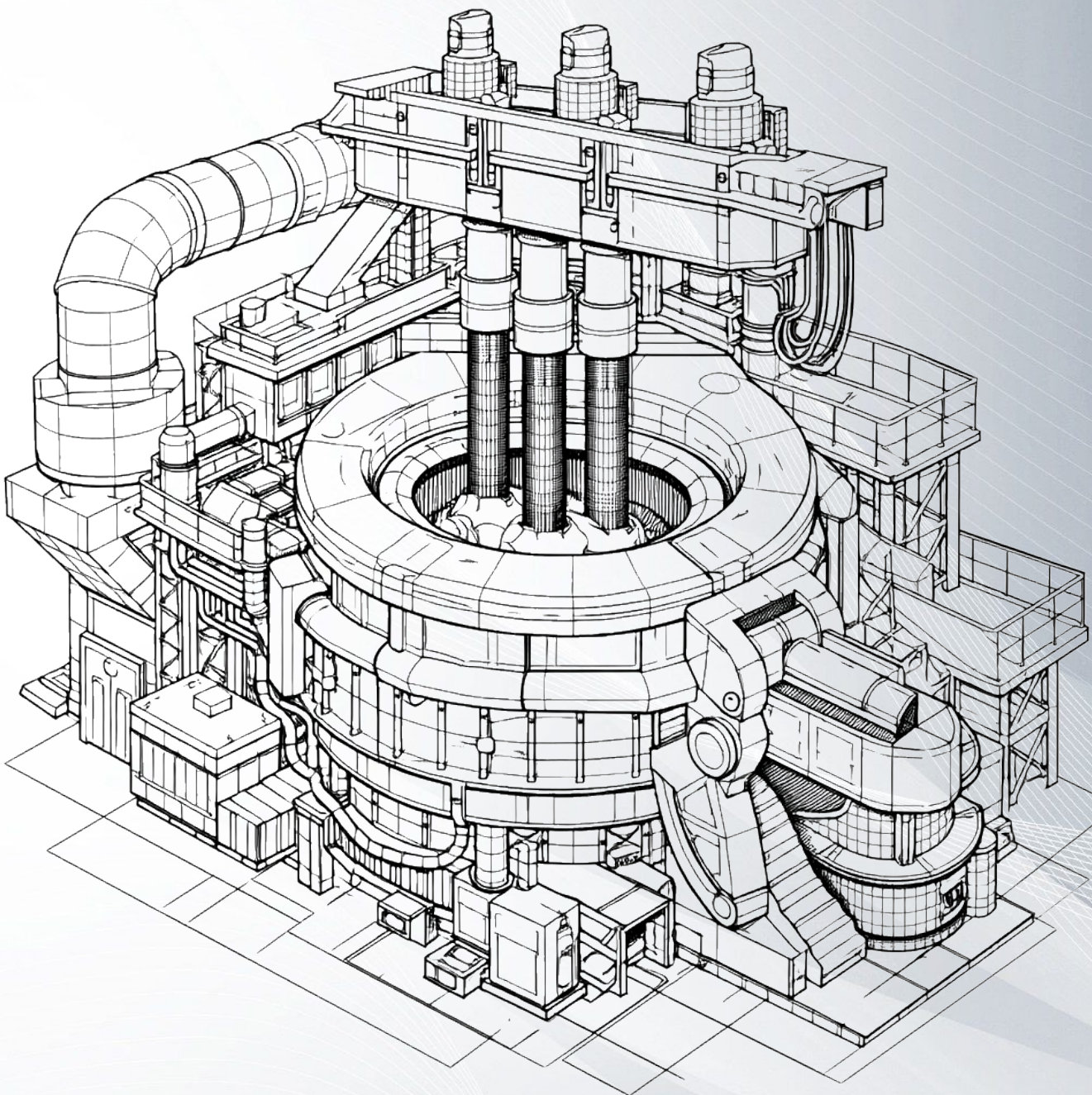




# SKRINEX Group CAPABILITY STATEMENT



# 1. COMPANY OVERVIEW

**SKRINEX Group (hereinafter “SKRINEX”) is an industrial construction and mechanical erection contractor specializing in metallurgical, heavy industrial, and decarbonization projects across Europe. The SKRINEX Group consists of the parent company SKRINEX INDUSTRIAL Sp. z o.o. (Poland) SKRINEX ATOM Sp. z o.o. (Poland) and its subsidiary SKRINEX DE GmbH (Germany). We operate jointly, leveraging the full potential and expertise of our team.**

**The Group is founded on the many years of experience of specialists at various levels, professional workers to engineers, builders, mechanics, installers, fitters, welders, and other specialists have carried out a large volume of complex construction and installation works, including installation and commissioning of complex metallurgical equipment, production of metal structures of varying complexity, and concrete products (paving slabs, road curbs, sidewalk curbs, and building blocks), in industrial and civil construction, manufacturing, and design.**

**SKRINEX's experience is based on the extensive knowledge, skills, and technical expertise our engineers gained in Ukraine — a country with a long and distinguished history in the steelmaking industry. Our roots go back to Ukraine, where we began our operations working with leading companies in the Ukrainian metallurgical industry. The technical strength of the group is built on a united team of highly qualified specialists with many years of experience in installation, assembly, and construction works for major industrial and metallurgical projects.**

**During the period from 2019 to 2022, our company's specialists completed the following works for the orders of Metinvest Holding LLC assets:**

- **Overhaul of PA 6738 press with a force of 630t RMTS-6 for Metinvest- Mariupol Machining and Repair Plant LLC (MRMZ).**
- **Overhaul of shot-blasting chamber No.1 of the foundry shop No.1 for Metinvest-MRMZ LLC, including the restoration of the aspiration system.**
- **Repair of hydraulic cylinders for electrode lifting in the ladle furnace-converter shop of Azovstal Iron C Steel Works.**
- **Repair of gear unit block for rolling stand R2 LPCT-1700 of Illich Iron C Steel Works. Repair of the upper knife drum assembly of the Continuous Hot Press (CHP) line of the APR (Assembly/Processing/Repair) workshop at Illich Iron C Steel Works.**
- **Repair and reconstruction of screw conveyors in the dust discharge system of Azovstal Iron C Steel Works.**
- **Overhaul of slag skimmer machine for Azovstal Iron C Steel Works.**
- **Installation of ladle lining scanner KS-350 in the converter shop of Azovstal Iron C Steel Works (turnkey project: working design, manufacturing and supply of materials, installation, and commissioning).**
- **Participation in the construction of the Continuous Casting Machine at Illich Iron C Steel Works (Building of CCM No.4, Ladle Furnace Installation, Gas Cleaning, Water Management**

Block, Water Tower, Transformer Substation 110/35 kV, High Voltage Line 110 kV, Slab Storage Warehouse, Railways/Highways, Compressor Station).

- Reconstruction of the LPCT-1700 rolling mill, foundation work for new equipment while the mill is in operation, installation of a reversible stand (400t) using MAMMOET lifting equipment, installation of an Intermediate Rewinding Device (COIL BOX), installation of winders, installation of roller table sections, and milling of finishing stand housings for overlays.
- Reconstruction of the sinter plant: bag filters, conveyors, gas ducts

**We deliver full-cycle installation solutions for BF/DRI/EDF, PCI, (Blast Furnace/ Direct Reduced Iron/ Electric Arc Furnace/ Pulverized Coal Injection) gas-cleaning, steel structures, piping, and rolling- mill equipment.**

Our experts previously worked with some of Ukraine's most reputable installation and construction enterprises, including:

- Specialised Erection and Construction Division No. 112 "Stalkonstruktziya" (Mariupol);
- "SU Metallurgmontazh-10" LLC (Mariupol);
- "Yuzhspetskonstruktziya" LLC (Synelnykove);
- "Metinvest Engineering" LLC (Mariupol);
- "Metinvest – Mariupol Mechanical Repair Plant" LLC (Mariupol);
- "Duglas Alliance" Ltd (Ukraine, UK).

Our specialists have been actively involved in the erection, installation, and commissioning of industrial equipment, working in close cooperation with leading international suppliers of metallurgical and heavy industrial technologies, including:

- Paul Wurth
- ThyssenKrupp
- Siemens
- Primetals Technologies
- Schenck
- Reitz
- Danieli
- Loesche and others

Thanks to its accumulated project experience and high level of professionalism, SKRINEX can execute a full range of works at industrial facilities of any complexity — from site preparation to turnkey delivery.

## **2. CORE COMPETENCIES AND SECTORAL EXPERIENCE**

The SKRINEX Group delivers the full scope of industrial erection and installation works on a turnkey basis, including:

- Development and approval of design and engineering solutions
- Construction, erection, and dismantling works
- Mechanical installation of heavy technological equipment
- Steel structure/special equipment erection
- Process piping (HP/LP), hydraulics, lubrication systems
- Gas-cleaning and aspiration systems installation
- Installation of processing and technological equipment
- Installation and routing of pipelines and hydraulic systems
- Electrical C instrumentation installation, automation C instrumentation (ACI) works
- Thermal insulation, cladding, fire protection
- Commissioning support (cold/hot tests)
- Handover of facilities for commercial operation

**A detailed portfolio of SKRINEX's completed industrial installations, including photographic documentation and descriptions of major projects, is provided in the accompanying SKRINEX Reference Document, demonstrating the practical execution of the capabilities outlined in this Company Overview.**

### **Sectoral Expertise**

- Metallurgical/ Ironmaking and Steelmaking industry
- Rolling mills and CCM installation
- Energy transition: hydrogen-ready and decarbonization projects
- Cement, chemical and power generation projects
- Civil and industrial infrastructure

### 3. POTENTIAL COOPERATION AREAS

SKRINEX has experience in the installation, assembly, and mechanical erection of large-scale industrial systems, including blast furnaces, EAF units, PCI plants, gas-cleaning systems, and associated auxiliary equipment. In line with the subcontracting practices typically applied in steelmaking and EPC project delivery, the following domains represent natural cooperation areas where SKRINEX's competencies correspond directly to the scopes usually entrusted to qualified installation partners.



## **MAIN AREAS WHERE SKRINEX TEAM CAN SUPPORT REALIZATION OF PROJECTS ON:**

- EAF (Electric Arc Furnace)/ Blast Furnaces / BOF Converters and Auxiliary Systems Projects. Full-Scope installation/mechanical erection works for EAF/BOF/BF units and all associated auxiliary systems.
- BOF/LD (Basic Oxygen Furnace / Linz-Donawitz converters Projects. Full-scope mechanical erection of all BOF (LD) furnace components, assemblies, and auxiliary systems.
- Cokemaking / Coke-oven batteries Projects. Full-scope works, Comprehensive installation of all coke-oven battery units, including oven chambers, doors, frames, charging and pushing systems, and auxiliary equipment
- PCI (Pulverized Coal Injection) Project. Full-scope works, Comprehensive installation and mechanical erection of the complete PCI system and all associated process units.
- Gas-Cleaning Systems/ Environmental Solutions Projects. Full-scope erection of gas-cleaning systems, including baghouse filters, ducts, fans, stacks, and auxiliary gas-cleaning equipment.
- Steel Structures. Dismantling of existing equipment/ Steel Structures. Installation of steel structures, including heavy-duty and high-load categories.
- Mechanical Installation of Process Equipment. Full-scope mechanical erection and alignment of technological units and OEM-supplied equipment.
- Continuous Casting Machines (CCM) Projects. Full-scope mechanical installation of the CCM, including all segments, oscillation systems, withdrawal and straightening units, tundish car systems, and auxiliary equipment.
- Hot/Cold Rolling Mills Projects. Full-scope mechanical installation of the CCM, including all segments, oscillation systems, withdrawal and straightening units, tundish car systems, and auxiliary equipment.
- Conveyor Galleries, Storage Bins, Pneumatic s Hydraulic Systems. Installation of conveyor galleries (belt and chain), silos and bunkers, and associated pneumatic and

## **4. RECENT/CURRENT EXPERIENCE IN IMPLEMENTING LARGE PROJECTS**

SKRINEX team has accumulated a strong portfolio of successfully executed industrial projects across Ukraine/Europe, demonstrating its ability to perform complex construction, installation, and commissioning works under demanding technical, schedule, and safety requirements.

The projects listed below highlight the company's experience in delivering large-scale assignments at active metallurgical plants, greenfield sites, and critical infrastructure facilities — often in cooperation with international OEMs and EPC contractors. This track record confirms SKRINEX's capability to integrate into multi-disciplinary project environments and to provide reliable, high- quality performance throughout all phases of execution.

**2013–2014 – Ukraine, Kamianske, Dnipropetrovsk region. Works at Dnieper Metallurgical Combine DMKD (renamed as Kamet Steel) including:**

- Full cycle of works for Pulverized Coal Injection (PCI) complex (manufacturer: Paul Wurth)
- Construction of the structural framework
- Installation of technological equipment and process pipelines

**2016–2017 – Ukraine, Mariupol, Donetsk region. Works at Ilyich Iron and Steel including:**

- Construction and installation of the CCM-4 (continuous casting complex)
- Erection of steel structures
- Installation of technological equipment and process pipelines

**2018–2023 – Ukraine, Mariupol and Dnipro. Civil construction Works including:**

- Construction of Polyclinic No.10
- Restoration of the historic water tower
- Reconstruction of a dormitories for civilians affected by Russian aggression
- Works for the construction of an industrial park

**2023–2024. France, Fos-sur-Mer. Works at ArcelorMittal Fos-sur-Mer including:**

- Installation of wire-feeding structures
- Pre-assembly of gas ducts
- Installation of thermal protection shields on beams
- Participation in the erection of the ladle furnace
- Cladding of the MHS supporting structure



**2024– Present. Luxembourg, Esch-sur-Alzette. Works at ArcelorMittal Belval including:**

- Participation in the Steel Up modernization program at ArcelorMittal Belval
- Comprehensive erection works for a new 120-ton electric arc furnace (EAF) and associated auxiliary equipment
- Works are performed without interrupting plant operations, in strict compliance with international quality and safety standards



**2025. Germany, Unterwellenborn. Works at Stahlwerk Thüringen including:**

- Installation works for the electric arc furnace roof



## **5. SKRINEX RESOURCES S CAPABILITIES**

**SKRINEX team of specialists includes experienced:**

- **Certified welders (ISO 9606, ISO 14732) – 10 pax**
- **Gas-cutting operators / oxy-fuel cutters – 10 pax**
- **Mechanical assemblers / installation fitters – 30 pax**
- **Mechanical technicians (mechanics) -25 pax**
- **Electrical installation technicians (ECI) – 6 pax**
- **Hydraulic system technicians – 3 pax**
- **Rigging and heavy lifting crews – 6 pax**
- **Rebar workers and concrete specialists – 10 pax**
- **Protective coating and anti-corrosion specialists for steel structures – 4 pax**
- **Finishing and plastering specialists – 5 pax**

### **QUALITY STANDARDS, SAFETY, CERTIFICATIONS AND EU COMPLIANCE**

The SKRINEX Group places the highest priority on full compliance with European standards, occupational health and safety regulations, and all applicable legislation. Our operations are built on a modern management system where quality, safety, and environmental responsibility are equally fundamental pillars.

We work in accordance with the principles and requirements of European law, including:

- **EU-OSHA occupational health and safety requirements**
- **Machinery Directive 2006/42/EC**
- **National construction, industrial, and environmental regulations in countries where we operate**

SKRINEX has appointed the Chief Engineer as the Management Representative for Quality.ISO CERTIFICATION

SKRINEX operates in full compliance with internationally recognized management standards. The company maintains the following ISO-certified systems, ensuring consistent quality, environmental responsibility, and a high level of occupational safety across all project sites:

- **ISO 9001 — Quality Management System. Demonstrates SKRINEX's capability to deliver installation and construction services that meet customer and regulatory requirements, with a strong focus on continuous improvement. SKRINEX has appointed the Chief Engineer as the Management Representative for Quality.**
- **ISO 14001 — Environmental Management System. Ensures systematic control of environmental impact, responsible resource use, compliance with environmental legislation, and sustainable execution of works on industrial and metallurgical projects.**
- **ISO 45001 — Occupational Health C Safety Management System. Confirms adherence to global best practices in workplace safety, risk mitigation, and the prevention of occupational injuries and incidents, especially critical for heavy industrial environments such as BF/BOF/EAF, DRI and PCI installations.**

SKRINEX employs certified welders qualified under EN ISO 9606-1 and EN ISO 9606-2, holding valid attestations for advanced welding processes, positions, and materials, including:

- 135/111 T BW FM1 S/B  $t = 25\text{ mm}$   $D = 114.3$  PH-L045 ss nb/ss mb, and

- 131 T BW 23 S I  $t = 10\text{ mm}$ ;  $D \geq 50\text{ mm}$ ; PF/PC; ss nb

Ensuring full compliance with the welding requirements of SMS Group and Paul Wurth projects. SKRINEX provides certified Electrical C Instrumentation (ECI) installation services, supported by licensed electricians holding MV/LV authorizations at B1V and H1V levels, ensuring full compliance with industrial and safety standards for complex metallurgical projects.

## 6. HEALTH, SAFETY & ENVIRONMENT (HSE), EU COMPLIANCE



SKRINEX operates under a comprehensive Health, Safety and Environment (HSE) framework that fully complies with international industrial standards. The company maintains certified procedures, qualified personnel, and all required permits to execute high-risk works safely and professionally on EPC construction sites. We place the highest priority on full compliance with European standards, occupational health and safety regulations, and all applicable legislation. Our operations are built on a modern management system where Quality, Safety, and Environmental responsibility are equally fundamental pillars.

We work in accordance with the principles of European law, including:

- EU-OSHA occupational health and safety requirements
- Machinery Directive 2006/42/EC
- National construction, industrial, and environmental regulations of each country where we operate

The following HSE competencies and permits are fully in place within SKRINEX, ensuring safe and compliant execution of projects:

- ☐ Working at heights
- ☐ Confined space work
- ☐ Hot work permit
- ☐ Rigging C slinging operations
- ☐ Crane / manlift / forklift operation. Ground-controlled crane operation, Manitowoc/Manitou-type forklifts, aerial work platforms C lifting platforms
- ☐ Scaffolding operations. Assembly, dismantling, inspection and issuing permits for scaffold access
- ☐ Corporate HSE Plan
- ☐ Method Statements (Work Execution Plans). Prepared for all tasks
- ☐ Risk Assessments. Developed for each activity and scope of works

## **7. OTHER INFORMATION**

SKRINEX maintains valid insurance coverage including Public Liability, Employer's Liability, Professional Indemnity, and Vehicle Insurance Policies, ensuring full compliance with EPC project requirements. The company's Environmental Policy is available and forms part of SKRINEX's certified documentation package.

## **8. CONTACT INFORMATION**

**SKRINEX Group**

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Director Roman Kobyliatskyi  
Karen Oganessian  
Taras Havryshkiv

## 9. OUR ENGINEERING TEAM EXPERIENCE SUMMARY

The following section provides a overview of SKRINEX's Engineering Team, summarizing the diverse technical backgrounds, project experience, and specialized competencies of our key specialists whose detailed professional profiles are presented below.

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### Specialist Name s Position

Full Name: **Konstantin Kostrash**

Position / Role: **Chief Engineer Core**

Expertise:

- Project planning, supervision, and multi-disciplinary coordination;
- Safety-focused leadership in high-risk industrial environments;
- Industrial mechanical erection C steel-structure installation on brownfield and greenfield metallurgical sites;
- Blast Furnace (BF), BOF, PCI, sinter plant, CCM, and gas-cleaning systems installation and repair;
- Large-diameter and high-pressure piping systems (cooling water, cold blast, process gases, technical water)
- Steel structures dismantling / installation (up to 1,600 t per project)
- Commissioning and start-up support for mechanical, aspiration, and auxiliary systems;
- Technical Maintenance and capital repair operations in BF, BOF, CCM, Coke, and Energy shops;
- Experience integrating equipment from **Paul Wurth, Siemens, Loesche, Metech STG, Danieli.**

### Professional Summary

Konstantin Kostrash is an experienced Industrial Installation and Mechanical Works Engineer with thirty years of practical expertise in large-scale metallurgical construction, repair, and reconstruction projects. He has led and executed full-cycle installation works, including the assembly of steel structures, process equipment, pipelines, PCI systems, gas-cleaning units, hot-blast stoves (Cowper), continuous casting machines, and complete construction of industrial facilities.

Konstantin has successfully delivered major work packages for Metinvest Engineering, Azovstal Iron & Steel Works, and Ilyich Iron & Steel Works, including the integration and commissioning of equipment supplied by Paul Wurth, Siemens, Loesche, and other global OEMs.

He has extensive experience coordinating multidisciplinary construction teams, supervising installation activities at operating steel plants, and ensuring strict compliance with HSE, quality, and technical standards. Konstantin combines deep technical knowledge, strong leadership, and a thorough understanding of heavy industrial processes, making him a highly qualified specialist for complex erection, reconstruction, and modernisation projects.

## Role at SKRINEX

- Current Position: **Chief Engineer, Head of Project Management**
- Years with SKRINEX: 3 Years
- Key Responsibilities:
  - Leads and supervises on-site mechanical, piping, and steel-structure installation activities for major industrial projects;
  - Coordinates multidisciplinary teams and ensures compliance with technical specifications, quality standards, and HSE requirements;
  - Plans and controls project execution phases, including installation sequencing, resource allocation, and progress monitoring;
  - Interfaces with clients, OEMs, and project stakeholders to ensure smooth integration of equipment and timely completion of works.

## Major Projects Delivered Under Supervision

### 1. Project Name: Construction, installation, and commissioning works for the hot-blast stove valve cooling system as part of the project “Capital Repair of Blast Furnace No. 3 (Reconstruction with New Construction)”

- Client: **PJSC 'Azovstal Iron s Steel Works'**
- Location: **Ukraine, Mariupol**
- Dates: **2019**

#### Scope of Works includes:

- Installation of 120 t of pipelines, diameters from Ø32 to Ø325;
- Works performed in integration with Paul Wurth supplied equipment
- Installation of Hot-Blast Stove Steel Structures,

including: 1,600 t of steel structures dismantled;

700 t of steel structures installed;

123 t of cold-blast pipelines Ø1420;

Installation of smoke/bleeder valves, stacks, access hatches, and other auxiliary equipment.

### 2. Project Name: Construction and installation works for the project “Construction of two Ø800 technical water pipelines from Pumping Station II (Communal Enterprise 'Water of Donbas') to K- 158 near the 17th overpass.”

- Client: **Metinvest Engineering LLC**
- Location: **Ukraine, Donetsk Region**
- Dates: **2019**
- Role: **Lead site Engineer**

#### Scope of Works includes construction/installation of:

- 500m of Ø800 pipelines;
- Over 1,500 m<sup>2</sup> of thermal insulation;
- 75 t of steel structures;
- 9,000 m<sup>2</sup> of roadbed construction;
- Construction of 12 new inspection manholes;
- Construction of 4 chambers;
- 70 linear meters of culvert pipes beneath the roadbed;
- 12,000 m<sup>3</sup> of earthworks (excavation) completed.

**3. Project Name:** Construction, installation, and commissioning works for the replacement of aspiration system electric motors in the Blast Furnace No. 3 cast house.

- Client: **PJSC 'Azovstal Iron s Steel Works'**
- Location: **Ukraine, Mariupol**
- Dates: **2019**
- Role: **Lead site Engineer**

**Scope of Works:**

- installation of two Siemens electric motors, 6 kW, 6t each including:
  - Dismantling of old motors;
  - Installation of new motors;
  - Installation and connection of electrical interfaces;
  - Commissioning and start-up, including:
    - Preliminary tests;
    - No-load (isolated) start-up;
    - Load testing;
    - System tuning and functional testing.

**4. Project Name:** Construction and installation works under the project “Reconstruction of Gas- Cleaning Systems of Sintering Machines No. 1–12 (Sintering Zone) and Reconstruction of Outdated Gas-Cleaning Systems of Sintering Machines No. 7–12 (Cooling Zone).

- Client: **PJSC 'Ilyich Iron s Steel Works'**
- Location: **Ukraine, Mariupol**
- Dates: **2020**
- Role: **Lead site Engineer**

**Scope of Works includes construction/installation of:**

- 1,100 t of steel structures and gas ducts;
- 200 t of technological equipment;
- More than 2,000 m<sup>2</sup> of sandwich panels;
- More than 1,500 m<sup>2</sup> of thermal and acoustic insulation for clean-gas;
- Pipelines, Induced Draft Fan ducts, and bag filter systems.

**5. Project Name:** Maintenance and Repair Works, Capital Repairs of Energy and Mechanical Equipment of Blast Furnaces No. 2, 3, 4, 5, 6.

- Client: Pjsc “Azovstal Iron s Steel Works”
- Location: Ukraine, Mariupol
- Dates: 2017-2021
- Role: Lead site Engineer

Scope of Works includes construction/installation of:

- Bunker bridge;
- Repair of wagon scales;
- Repair of wagon-scale tracks;
- Charging trestle;
- Inclined bridge (skip-bridge);
- Repair of main hoist travel beams;
- Furnace shell repair;
- Coke-weighing hoppers;
- Coke vibrating screens;
- Coke and ore storage bins;
- Bunker refractory relining;
- Energy, ventilation, aspiration systems maintenance;
- Skip pit repair;
- Sandblasting of internal surfaces of cooling pipelines for cooling plates;
- Hot-blast stove maintenance;
- Tap-hole opening and closing machines, manipulators, lifting platforms;
- SIO Bends (cooling-water system components)
- SIO pump
- Pipelines for shotcreting /taphole maintenance;
- RDO energy systems
- Process pipelines including high-pressure pipelines to the BF top (bell deck area).

**6. Project Name:** Maintenance, Repair and Overhaul Works of Energy and Mechanical Equipment of Basic Oxygen Furnace (BOF) Shop and Continuous Casting Machines (CCM) Nos. 3, 4, 5, 6

- Client: Pjsc “Azovstal Iron s Steel Works”
- Location: Ukraine, Mariupol
- Dates: 2020-2021
- Role: Lead Site Engineer

Scope of Works includes construction/installation (in BOF shop) of:

- Repair of the main BOF shop building;
- Cleaning of internal surfaces of gas-cleaning equipment and slurry pipelines;
- Oxygen-blowing machines; Cofferdam retraction carriages;
- Feedwater pipelines of the OKG-400 (fire-chamber gas boiler).

Scope of Works includes (for CCM Machines):

Modification of slab-section geometry for segment units

- Cooling-water manifolds for roller tables
- Modification of water drainage systems for horizontal and curved sections
- Repair of steam-extraction bunker steel structures; water feed to the mold
- Repair of tundish carriage systems
- Gas supply systems
- Water-cooling equipment for primary, secondary, and tertiary cooling
- Repair of heat exchangers (CCM-6 pump house, vacuumator, UPK “North”, UPK “South”)
- Repair of oscillation units (oscillator assemblies)

## 7. Current project:

- Client: **ArcelorMittal Belval**
- Location: **AM Belval, Esch-sur-Alzette, Luxembourg**
- Dates: **2024-2025**
- Role: **Chief Engineer, Head of Project Management**

### **Scope of Works:**

#### **MHS:**

- Expansion of existing production buildings
- Installation of a new 1,000 m<sup>3</sup> silo
- Dismantling of old conveyors and installation of new ones

#### **EAF:**

- Dismantling of the existing DC Electric Arc Furnace (EAF) complex
- Installation of the new DC Electric Arc Furnace (EAF) equipment package, including:
  - Tilting platform
  - Lower furnace shell
  - Upper furnace shell
  - Furnace roof
  - Gantry portal
  - Portal with roof-lifting hydraulic cylinder and electrode holder
  - Anode stand
  - Refractory lining platform for the lower furnace shell
  - Combustion chamber
  - Off-gas duct from the combustion chamber to the gas-cleaning system

#### **CCM (Continuous Casting Machine):**

- Turnkey installation of two cross-transfer cars
- Installation of walking beams and fixed beams of the cooling bed
- Fabrication and installation of associated steel structures

#### **VD:**

- Installation of the vacuum vessel (steel processing capacity: 120 tonnes)
- Piping system of the movable platform and vacuum cover
- Auxiliary equipment, wire feeding mechanisms, and a set of pneumatic and hydraulic cylinders

For all types of works, our company developed detailed operating procedures and a technology plan for modular (pre-assembly) installation of steel structures and equipment, based on the conditions and parameters of the operating shop, including the capacities of the existing overhead cranes. The weight of the pre-assembled modules ranged from 60 to 85 tonnes, with the maximum assembled structure reaching 325 tonnes.

Complex tandem lifts using two mobile cranes were carried out, with lifting points and connection nodes designed and strength-calculated by our in-house specialists. All works were executed with high precision under the supervision of our company's geodetic engineer.

## Specialist Name s Position

Full Name: **Korobkin Oleksandr**

Position / Role: **Site Installation Manager**

### Core Expertise:

- Multidisciplinary Project Coordination
- Management of large installation teams and subcontractors
- Technical supervision, QA/QC oversight, work planning
- Risk assessments, method statements, and safe execution of high-risk works
- Installation of utilities and engineering networks for public facilities
- Technical maintenance and capital repairs of BF, BOF, EAF, rolling mills, coke shop equipment
- Mechanical, electrical, and hydraulic system maintenance
- Emergency repair coordination in operating industrial facilities
- Full installation cycle of Pulverized Coal Injection (PCI) plants (Paul Wurth)
- Installation of milling, drying, conveying, bunker systems
- Installation of Rolling-Mill C Material-Handling Equipment, Bar rolling mills (Danieli, SMS Meer)
- Reheating furnace repair and maintenance
- Conveyor complexes, wagon tipplers, clinker kiln PUT systems (Loesche)
- Installation and repairs of Gas-Cleaning C Environmental Systems Sinter plant gas-cleaning systems, Bag filters, ESP systems, gas ducts
- Gas-cleaning system installation (STG, Danieli, Siemens)
- Mechanical Installation C Industrial Erection
- Blast Furnaces, Electric Arc Furnaces (EAF) – 120 t, 150 t
- BOF/Converter equipment and auxiliary systems
- Ladle Furnaces (LF) and vacuum degassers
- Continuous Casting Machines (CCM) – installation, repair, modernization
- Installation and alignment of heavy machinery and metallurgical equipment
- Installation and dismantling of large steel structures (up to 1600 t)
- Cable trestles / cable racks (110 kV, 35 kV, 6 kV)
- Pipe racks, platforms, galleries, and access structures
- Energy buildings and converter shop utilities
- High/low-pressure pipelines, process water, CVS systems
- Hydraulic and lubrication systems (SMS Meer, Danieli)
- PCI pipelines and technological gas pipelines

## Professional Summary

**Oleksandr Korobkin** is a highly qualified Site Installation Manager with a proven record of leading complex erection and commissioning projects across the metallurgical, energy, oil & gas, and civil construction sectors. With more than 30 years of professional experience, Oleksandr possesses extensive hands-on expertise in managing full-cycle installation works for blast furnaces (BF), EAF/BOF units, continuous casting machines (CCM), PCI systems, gas-cleaning equipment, rolling-mill systems, hydraulic and lubrication systems, as well as large-scale piping and steel-structure assemblies. He has successfully delivered key installation and reconstruction projects for major industrial enterprises such as Azovstal, Ilyich Iron C Steel Works, Donetsk Metallurgical Plant, Dnipro Metallurgical Combine, NLMK, Severstal, ArcelorMittal Algeria, Rosneft, and multiple rolling-mill and EAF/LF installations from manufacturers including Siemens, Danieli, SMS Meer, Loesche, and Paul Wurth.

Oleksandr is recognized for his ability to coordinate multidisciplinary teams, manage high-risk installation phases, ensure technical quality, and maintain strict compliance with industrial safety standards on operational production sites.

## Role at SKRINEX

- Current Position: **Site Installation Manager**
- Years with SKRINEX: 2 Years
- **Key Responsibilities:**
  - Management of On-Site Construction and Installation Activities;
  - Full operational responsibility for mechanical erection, piping installation, steel-structure assembly site crews, subcontractors, heavy-lifting teams, and technical specialists;
  - Implementation of SKRINEX HSE, Quality Assurance, and Site Control procedures and risk-mitigation measures;
  - Control of quality documentation, inspections, test records, and final handover packages;
  - Ensuring safe execution of works in high-risk environments (BF/BOF/EAF/CCM/LNG).

**1. Project Name:** Maintenance and repair works, capital repair of equipment in the Blast Furnace, Coke, BOF/Converter, Energy, and Rolling shops

- Client: **PJSC 'Azovstal Iron s Steel Works'**
- Location: **Ukraine, Mariupol**
- Dates: **2014-2018**
- Role: **Site Installation Manager**

**Scope of Works includes:**

- Capital repair of Blast Furnaces Nos. 2, 3, 4;
- Sintering machines;
- Cable trestles / cable racks 110 kV, 35 kV, 6 kV;
- Continuous Casting Machines (CCM) Nos. 3, 4, 5, 6;
- Process pipelines.

**2. Project Name:** Construction, Maintenance and Overhaul works

- Client: **Ilyich Iron s Steel Works**
- Location: **Ukraine, Mariupol**
- Dates: **2018-2021**
- Role: **Site Installation Manager**

**Scope of Works includes construction/installation of:**

- Installation of Gas-cleaning system of the sinter plant;
- Construction and Overhaul works of Energy building of the BOF/Converter shop

**3. Project Name:** Construction, installation, and commissioning works in the Blast Furnace No. 3.

- Client: **Donetsk Iron and Steel Works**
- Location: **Ukraine, Donetsk**
- Dates: **2014-2016**
- Role: **Lead Site Engineer**

**Scope of Works:**

- Continuous Casting Machine (CCM)
- 120-ton Electric Arc Furnace (EAF)
- Vacuum Degasser (manufacturer: Danieli)
- CWS (central water supply systems)
- PUT systems (process control and transport units)
- Blast Furnace No. 1, Blast Furnace No. 2
- Installation of Ladle Furnace and 150-ton Electric Arc Furnace (manufacturer: Siemens)

**4. Project Name:** Construction, installation, and commissioning works in the Blast Furnace Nos. 1,9,12 and PCI and Bar Rolling Mill Installations

- Client: **Dnieper Metallurgical Combine (renamed to Kamet Steel),**
- Location: **Ukraine, Kamianske**
- Role: **Lead Site Engineer**

**Scope of Works includes construction/installation of:**

- Pulverized Coal Injection (PCI) plant installation (manufacturer: Paul Wurth)
- Bar Rolling Mill (manufacturer: Danieli)
- Capital repair of Blast Furnaces No. 1, No. 9, No. 12

**5. Project Name:** Construction, installation, and commissioning works in the Electric Arc Furnace, Gas-cleaning system, overhaul works on the rolling mill and the reheating furnace.

- Client: **Donetsk Metal Rolling Plant (DMPZ)**
- Location: **Ukraine, Donetsk**
- Role: **Lead Site Engineer**

**Scope of Works includes construction/installation of:**

- Electric Arc Furnace;
- Ladle Furnace installation);
- Continuous Casting Machine;
- Gas-cleaning system (manufacturer: Metech STG).
- Maintenance and repair works, and overhaul works of the rolling mill and the reheating furnace.

**6. Project Name:** Construction, installation, and commissioning works.

- Client: **OJSC Novolipetsk Steel (NLMK) and NLMK Kaluga**
- Location: **Russia, Lipetsk and Vorsino village**
- Role: **Lead Site Engineer**

**Scope of Works includes construction/installation of:**

- The Continuous Steel Casting Unit of Converter Shop No.1;
- Hydraulic system of Continuous Casting Machine (CCM) of Converter Shop No.2, supplied by Danieli;
- Hydraulic and lubrication system of the bar rolling mill (manufacturer: SMS Meer).

**7. Project Name:** Construction, installation, and commissioning works.

- Client: **Severstal Steel Mill**
- Location: **Russia, Balakovo**
- Role: **Lead Site Engineer**

**Scope of Works includes construction/installation of:**

- Ladle Furnace installation (manufacturer: Siemens);
- Rolling Mill installation (manufacturer: Danieli).

**8. Project Name:** Construction, installation, and commissioning works.

- Client: **El Hadjar steel plant (ArcelorMittal Algeria)**
- Location: **Algeria, Annaba region**
- Role: **Lead Site Engineer**

**Scope of Works includes construction/installation of:**

- Dismantling, assembly, and installation of three converters.

**9. Project Name:** Construction, installation, and commissioning works.

- Client: **Amvrosiivka Cement Plant**
- Location: **Ukraine, Amvrosiivka**
- Role: **Lead Site Engineer**

**Scope of Works includes construction/installation of:**

- PUT system for clinker kiln lines (manufacturer: Loesche)
- Installation of a wagon tippler at the cement plant;

**10. Project Name:** Construction, installation, and commissioning works

- Client: **AO "Rospan Interneshnl" daughter Company of Rosneft**
- Location: **Russia, Novy Urengoy,**
- Role: **Lead Site Engineer**

**Scope of Works includes construction/installation of:**

- Installation of equipment and technological pipelines for the LNG plant and Gas Treatment Station (GTS).

**11. Project Name:** Urban / Civil construction Projects in Ukraine

- Client: **System Capital Management, City Administrations**
- Location: **Ukraine, Mariupol, Donetsk**
- Role: **Lead Site Engineer**

**Scope of Works includes construction/installation (in BOF shop) of:**

- EPC contractor in a several projects of Shopping Malls with Entertainment Centers;
- Fire-extinguishing system installation and commissioning for Donbass Arena Stadium;
- Fire-protection systems for Donetsk City Shopping Mall.

## Specialist Name s Position

Full Name: **Vadim Sirko**

Position / Role: **Steel Structure Assembly Supervisor**

Core Expertise:

- Industrial steel-structure erection for blast furnaces, BOF/Converter shops, PCI systems, and CCM/rolling-mill facilities;
- Mechanical installation support including auxiliary systems, charging bridges, cooling-water circuits, and gas-cleaning equipment;
- **Supervision of Operation, maintenance, and capital repair works** (BF/BOF/CCM infrastructure, energy systems, piping, aspiration C ventilation)
- **Assembly of large modular structures:** trestles, gallery supports bridges, platforms, bins, and high-load frames
- **Coordination of multi-discipline teams** (fitters, welders, riggers, refractory crews, pipeline installers)
- **Technical documentation s quality control** (ITPs, checklists, as-built documentation, inspection coordination)

## Professional Summary

A highly experienced Steel Structure Assembly Supervisor with more than a decade of practical expertise delivering installation and repair works across major metallurgical sites. Vadim has worked on full-cycle erection projects, including structural frameworks, technological equipment installation, and piping systems for the PCI complex in Kamianske, as well as long-term TOIR and capital repairs at Azovstal and multiple BOF/Converter and CCM lines.

He possesses strong competencies in supervising structural erection, coordinating heavy mechanical works, managing teams in high-risk industrial environments, and ensuring compliance with safety, quality, and technical requirements. His experience covers blast furnace infrastructure, converter shop equipment, gas-cleaning units, cooling-water systems, and rolling-mill auxiliary structures. Vadim is known for reliability, technical precision, and consistent delivery of complex work packages within demanding plant conditions.

## Role at SKRINEX

- Current Position: **Steel Structure Assembly Supervisor**
- Years with SKRINEX: 2 Years
- **Key Responsibilities:**
  - Supervision of Structural Erection C Mechanical Assembly, including control over installation of steel structures, galleries, platforms, pipe racks, and auxiliary mechanical systems; ensuring of dimensional accuracy, alignment, and compliance with engineering documentation;
  - Coordination of Multidisciplinary Site Teams, including management of daily tasks for assemblers, welders, riggers, and subcontracted crews; organizing safe lifting operations; supervising installation sequences to meet schedule and quality benchmarks;
  - Quality, Safety C Technical Documentation Management including controls execution according to ITPs, welding procedures, and safety standards; preparation as-built documentation; coordination inspections and testing; ensuring adherence to project HSE requirements.

## Major Projects Delivered Under Supervision

**1. Project Name:** Construction of the structural framework, installation of technological (process) equipment, and erection of pipelines for the Pulverized Coal Injection (PCI) complex. The project included installation of equipment supplied by Paul Wurth”

• Client: **Dnieper Metallurgical Combine** (*formerly named DMKD, Dniprovsky Metallurgical Combine named after Dzerzhinsky*)

• Location: **Ukraine, Kamianske, Dnipropetrovsk Region**

• Dates: **2013-2104**

• Role: **Steel Structure Assembly Supervisor**

**Scope of Works includes:**

- Site Preparation C Structural Framework Construction;
- Construction of structural framework for the new PCI buildings and galleries;
- Installation of heavy foundations, grouting, anchor bolts, base plates for major equipment;
- Erection of steel structures supporting conveyors, mills, bunkers and injection systems;
- Installation of pipelines and ducts: coal dust, conveying air, cooling water, aspiration;
- Mechanical installation support for the supplied Paul Wurth equipment (mills, dryers, feeders) and tie-in works to the blast furnace;
- Installation of gas-cleaning / dust-removal systems adjacent to or part of the PCI complex;
- Carrying out the structural and mechanical erection works under full-cycle scope (from site preparation to hand-over) for the PCI complex project.

**2. Project Name:** Operation, maintenance, and capital repair of Energy and Mechanical Equipment for Blast Furnaces Nos. 2, 3, 4, 5, 6.

• Client: **PJSC 'Azovstal Iron s Steel Works'**

• Location: **Ukraine, Mariupol**

• Dates: **2017-2021**

• Role: **Steel Structure Assembly Supervisor**

**Scope of Works includes:**

- Operation, maintenance, and capital repair of Energy and Mechanical Equipment, including:
  - bunker trestle / charging bridge
  - repair of wagon scales
  - repair of wagon-scale tracks
  - bunker trestles
  - inclined bridge (skip bridge)
  - repair of main-hoist travel beams
  - furnace shell repair
  - coke-weighing hoppers
  - coke vibrating screens
  - coke and ore storage bins
  - refractory relining of bins/hoppers
  - energy systems, ventilation, aspiration
  - skip pit repair
  - sandblasting and cleaning of cooling-pipe circuits for furnace cooling plates.

**3. Project Name:** Operation, maintenance, and capital repairs of Energy and Mechanical Equipment of the Converter Shop and Continuous Casting Machines (CCM) Nos. 3, 4, 5, 6.

- Client: **PJSC 'Azovstal Iron s Steel Works'**
- Location: **Ukraine, Mariupol**
- Dates: **2020-2021**
- Role: **Steel Structure Assembly Supervisor**

**Scope of Works includes:**

- Repair of the Hot Metal Desulphurization Unit (HMDS) Building
- Cleaning of internal surfaces of gas-cleaning equipment and slurry pipelines
- Repair of Oxygen-blowing machines; ladle-carriage / vessel-carriage systems
- Repair of the feedwater pipeline of the OKG-400 boiler (Open-Type Horizontal Heat Boiler with a steam production capacity of 400 t/h)

**Scope of Works for Continuous Casting Machines (CCM) Nos. 3, 4, 5, 6 includes:**

- Modification of the slab-section dimensions of the segment unit at the Continuous Casting Department (CCD)
- Installation and replacement of cooling-water manifolds for roller tables
- Modification of water-drainage systems for horizontal and curved sections
- Repair of the steel structures of the steam-extraction bunker and installation of the water-supply line to the mold
- Repair of tundish-carriage systems (tundish transfer cars)

## Specialist Name s Position

Full Name: **Konstantin Melnikov**

Position / Role: **Welding Section Manager**

Core Expertise:

- Industrial welding management for large-scale steel structures, ducts, technological equipment, and pressure-bearing pipelines
- Coordination of multi-process welding works (SMAW, GMAW/MAG, FCAW, GTAW/TIG) across BF/DRI/EAF, PCI, sintering, and gas-cleaning systems
- Quality assurance C compliance with EN ISO 3834, EN 1090, ISO 9606, WPS/WPQR, and international welding standards
- Supervision of welding teams during erection of structural steel, gas ducts, PCI equipment, technological units, and auxiliary systems
- Execution of high-complexity welding tasks including thick-section welding, large-diameter ducts, structural connections, and critical process lines
- Inspection, testing C documentation management, including NDT coordination (MT/PT/UT/RT), welding logs, ITPs, and as-built dossiers

## Professional Summary

A highly skilled Welding Section Manager with extensive field experience delivering welding works for complex industrial construction and heavy-industry projects.

Konstantin played a key role in the full-cycle construction of the PCI (Pulverized Coal Injection) complex in Kamianske, covering structural erection, mechanical installation, and piping works, including the installation of equipment supplied by Paul Wurth.

He also supervised welding operations for the reconstruction of gas-cleaning systems for sintering machines **No. 1–12 and 7–12 at Ilyich Iron s Steel Works**, contributing to the installation of 1,100 t of steel structures and gas ducts, 200 t of technological equipment, and extensive insulation and paneling works.

Konstantin is known for his strict adherence to international welding standards, strong leadership of welding crews, hands-on technical expertise, and ability to deliver high-quality welded joints under demanding industrial conditions.

## Role at SKRINEX

- Current Position: **Welding Section Manager**
- Years with SKRINEX: **2 Years**
- **Key Responsibilities:**
  - Management of All Welding Activities on Industrial Sites, including supervision and coordination of welding teams, ensuring correct execution of welding procedures (WPS), monitoring joint preparation, weld quality, and adherence to project standards.
  - Quality Control, Testing C Documentation ensuring compliance with ISO/EN welding standards; managing WPQR/WPS implementation, controlling welder qualification, coordinating NDT activities, and preparing complete QA documentation packages.
  - Technical Coordination with Structural, Mechanical C Piping Teams. Support of erection teams by planning welding sequences, resolving technical issues on site, coordinating with mechanical/piping leads, and ensuring safe and efficient welding operations across all project areas.

## Major Projects Delivered Under Supervision

**1. Project Name:** Construction of the structural framework, installation of technological (process) equipment, and erection of pipelines for the Pulverized Coal Injection (PCI) complex. The project included installation of equipment supplied by Paul Wurth”

- Client: **Dnieper Metallurgical Combine** (*formerly named DMKD, Dniprovsky Metallurgical Combine named after Dzerzhinsky*)
- Location: **Ukraine, Kamianske, Dnipropetrovsk Region**
- Dates: **2013-2104**
- Role: **Welding Section Manager**

**Scope of Works includes:**

- Site Preparation C Structural Framework Construction
- Structural Steel Fabrication C Erection Welding
- Welding Works for Mechanical Installation
- Erection of steel structures supporting conveyors, mills, bunkers and injection systems
- Welding Scope Related to Pipeline C Ductwork Installation
- Preparation of Welding Quality Control C Documentation
- Health, Safety, and Environmental (HSE) Oversight in Welding Areas
- Commissioning-Phase Welding Support
- Coordination with Multi-Disciplinary Teams and cooperation with leaders of:
  - structural erection teams
  - mechanical fitters
  - piping engineers
  - NDT specialists
  - Paul Wurth supervisors / QA inspectors
  - electrical / automation teams

**2. Project Name:** Construction and installation work under the project:

**“Reconstruction of Gas-Cleaning Systems of Sintering Machines No. 1–12 (Sintering Zone) and Reconstruction of Outdated Gas-Cleaning Systems of Sintering Machines No. 7–12 (Cooling Zone)**

- Client: **PJSC 'Azovstal Iron s Steel Works'**
- Location: **Ukraine, Mariupol**
- Dates: **2020**
- Role: **Welding Section Manager**

**Scope of Works includes installation of:**

- 1,100 t of steel structures and gas ducts
- 200 t of technological equipment
- over 2,000 m<sup>2</sup> of sandwich panels
- over 1,500 m<sup>2</sup> of thermal and acoustic insulation for clean-gas pipelines, the ID fan system, and bag filter units

## Specialist Name s Position

Full Name: **Svetlana Shilina**

Position / Role: **Structural Design Engineer**

Core Expertise:

- Industrial welding management for large-scale steel structures, ducts, technological equipment, and pressure-bearing pipelines
- Coordination of multi-process welding works (SMAW, GMAW/MAG, FCAW, GTAW/TIG) across BF/DRI/EAF, PCI, sintering, and gas-cleaning systems
- Quality assurance C compliance with EN ISO 3834, EN 1090, ISO 9606, WPS/WPQR, and international welding standards
- Supervision of welding teams during erection of structural steel, gas ducts, PCI equipment, technological units, and auxiliary systems
- Execution of high-complexity welding tasks including thick-section welding, large-diameter ducts, structural connections, and critical process lines
- Inspection, testing C documentation management, including NDT coordination (MT/PT/UT/RT), welding logs, ITPs, and as-built dossiers

## Professional Summary

**Mrs. Shilina** A highly qualified Structural Design Engineer with extensive experience in developing design and shop-detail documentation and drawings for industrial, civil, and infrastructure projects.

Svetlana specializes in producing steel detailing drawings (shop-detail drawings) and demonstrates high productivity — up to 100 tons of steel detailing per month. She played a key role in preparing design and shop-detail documentation for major metallurgical facilities at PJSC Azovstal Iron C Steel Works and Ilyich Iron C Steel Works, as well as for commercial and civil projects such as the Port City Shopping C Entertainment Center and the Azovskyi Market.

Svetlana is proficient in Tekla Structures, AutoCAD, MS Office, MS Project, and Adobe Photoshop, and is certified as a Design Engineer. She is known for precision, design accuracy, high productivity, and the ability to support fabrication and installation teams with clear, detailed, and technically correct project documentation.

## Role at SKRINEX

- Current Position: **Structural Design Engineer**
- Years with SKRINEX: 2 Years
- **Key Responsibilities:**
  - Development of Structural Design C Shop-Detail Documentation, including for creating Steel detailing drawings, structural models, fabrication details, assembly drawings, and erection schemes for industrial and civil structures, ensuring compliance with design standards and project requirements.
  - Technical Support for Fabrication C Installation Teams, providing clarifications, preparing Work Execution Plans (WEP), resolves technical issues, coordinating with workshop engineers and site teams, and ensuring manufacturability and installation accuracy of steel structures.
  - Documentation, Modeling C Quality Control, managing design documentation, performs clash checks and structural verification, ensures consistency of design data, and maintains high-quality deliverables using Tekla Structures, AutoCAD, and other engineering tools.

### **Scope of Works for Projects Delivered includes:**

- Structural steel design and detailing for industrial, civil, and infrastructure facilities
- Development of design documentation, shop-detail drawings, assembly drawings, and erection schemes for steel structures
- Advanced 3D modeling and BIM-based detailing using Tekla Structures, AutoCAD, and related CAD software
- Preparation of installation methodologies and Work Execution Plans (WEP) for structural erection works
- Coordination with fabrication shops and installation teams, ensuring accuracy, manufacturability, and compliance with standards
- Expert understanding of materials, structural behavior, and industrial facility requirements in metallurgical environments
- Documentation management, clash detection, and technical support throughout the project lifecycle

## Specialist Name s Position

Full Name: **Hryhorii Kashcheiev**

Position / Role: **Hydraulic Systems Engineer**

Core Expertise:

- Design, installation, and commissioning of industrial hydraulic systems for heavy mechanical equipment (EAF, BOF, CCM, coke ovens, cast-house systems)
- Hydraulic power units (HPUs), lubrication C cooling systems: assembly, alignment, flushing, testing, and troubleshooting
- Integration of OEM hydraulic systems (VAI FUCHS, Siemens, Danieli, Paul Wurth) with site equipment and plant utilities
- Technical supervision during erection of hydraulic piping, manifolds, cylinders, valves, pumps, heat exchangers, filters, actuators, and control units
- Commissioning C start-up of hydraulic, lubrication, and cooling-water systems, including adjustment, calibration, and functional testing
- Maintenance engineering C diagnostics for high-pressure hydraulic circuits and complex automation-driven equipment
  - Coordination with mechanical, piping, and automation teams during large-scale steel plant construction and modernization

### Professional Summary

A highly experienced Hydraulic Systems Engineer with more than 35 years of hands-on expertise in hydraulic, lubrication, and cooling systems for heavy metallurgical equipment. Hryhorii worked on major projects including Electric Arc Furnace installations, Continuous Casting Machines, coke- oven batteries, and large-scale modernization programs at Donetsk Iron and Steel Works, Electrostal Steelmaking Plant LLC (Kurakhove, Donetsk Region), Lipetsk Steel Works, and ArcelorMittal Krzywý Róg.

His responsibilities covered the installation, adjustment, and commissioning of hydraulic systems, integration of OEM equipment, and supervision of hydraulic and lubrication pipelines. He has worked with equipment from global suppliers such as VAI FUCHS, Siemens, and other major OEMs, delivering turnkey hydraulic solutions for both vertical and radial CCMs, EAF modernization, and complex coke-oven projects.

Hryhorii is recognized for his strong diagnostic skills, deep understanding of high-pressure hydraulic systems, precise commissioning methodology, and the ability to solve complex technical issues in demanding industrial environments.

### Role at SKRINEX

• Current Position: **Hryhorii Kashcheiev**

• Years with SKRINEX: **2 Years**

• **Key Responsibilities:**

- Supervision of Hydraulic, Lubrication C Cooling System Installation. Management of pipe routing, installation of HPUs, cylinders, pumps, valves, filtration systems, heat exchangers; verification of assembly quality, alignment, and compliance with design requirements.
- Commissioning, Adjustment C System Optimization. Execution of flushing, pressure testing, system calibration, leak testing, valve setting, and performance tuning. Ensures proper functional integration of hydraulic systems with mechanical and automated equipment.
- Technical Support C Multi-Discipline Coordination. Technical interface between mechanical, piping, welding, and automation teams; troubleshooting operational issues; executing start-up procedures; ensuring adherence to safety and OEM

## Major Projects Delivered Under Supervision

**1. Project Name:** Complete replacement of two Electric Arc Furnaces (EAF 1 C 2), installation of the cast-house equipment and associated hydraulic systems for the melting shop at DMZ.

- Client: **Donetsk Metallurgical Plant (DMZ)**
- Location: **Ukraine, Donetsk**
- Dates: **2000-2003**

**Scope of Works includes:**

- Hydraulic Systems Design Review C Preparation.
- Review of hydraulic system design documents provided by OEM / engineering contractor: power units (HPUs), cylinders, valves, accumulators, reservoirs, piping schematics, cooling and filtration systems.
- Installation of Hydraulic Power Units and Components
- Commissioning, Adjustment C Functional Testing of Hydraulic Systems. Documentation, Handover C Maintenance Planning. Preparation of hydraulic installation as-built documents:  
piping isometrics, manifold layouts, cylinder locations, HPU schematics.
- Health, Safety C Environment (HSE) Considerations. Ensuring hydraulic installations comply with safety standards and steel-plant HSE practices: guarding of high-pressure lines, safe placement of HPUs, leak detection, fire risk reduction (see hydraulic systems in steel production article)
- Interface with Cast-House C EAF Structural/Mechanical Systems. Collaboration with mechanical team: coordinate between hydraulic equipment and EAF shell, cast-house ladle systems, furnace tilting mechanisms, molten metal and slag handling.

**2. Project Name:** Construction of the “Electrostal” Steelmaking Plant, Mechanical installation of the Electric Arc Furnace, Installation of the Continuous Casting Machine (CCM). Installation of hydraulic, lubrication, and cooling systems, equipment supplied by VAI FUCHS (Italy).

- Client: **Electrostal Steelmaking Plant LLC, enterprise affiliated with Donetsk Electrometallurgical Plant (DMPZ)**
- Location: **Ukraine, (Kurakhove, Donetsk Region)**
- Dates: **2006-200G**

**Scope of Works includes:**

**Scope for the Electric Arc Furnace (EAF)**

- Installation of Furnace Tilting System and large-capacity tilting hydraulic cylinders
- Installation of hydraulic cylinders for electrode lifting + positioning,
- Integration of hydraulic system with electrode regulation control (LVC / ARC regulators)
- Calibration for response speed, pressure settings, synchronization
- Installation of roof swing and lift cylinders

### **Scope for the Continuous Casting Machine (CCM)**

- Installation of Mold Oscillation System, installation of hydraulic oscillators or oscillation cylinders
- Installation of Segment Adjustment and Roll-Gap Control
- Installation of Withdrawal C Straightening Units
- prefabrication C installation of High C Medium-Pressure lines
- Lubrication Line Installation
- Cooling-Water System Integration
- Hydraulic Power Unit (HPU) Installation
- Commissioning of All Hydraulic Systems
- Quality Assurance, Documentation C Handover
- Safety Management

**3. Project Name:** Turnkey construction and commissioning of a vertical CCM and the construction/installation of a radial CCM at NLMK.

- Client: **Novolipetsk Metallurgical Plant (NLMK)**
- Location: **Russia, Lipetsk**
- Dates: **2010-2013**

#### **Scope of Works includes:**

##### **For the Vertical Continuous Casting Machine**

- Installation of Hydraulic Power Units (HPUs)
- Installation of Hydraulic Power Units (HPUs)
- Hydraulic Systems for Withdrawal C Straightening Units (Vertical to Bending Zone)
- Dummy Bar System Installation
- Integration With Tundish-Car Hydraulic Drives

##### **For Radial CCM (Siemens Equipment)**

- Segment (Roll Unit) Hydraulics Installation
- Mold Oscillation System Installation (Radial Machine)
- Withdrawal C Straightening Area Hydraulics
- Dummy Bar Storage, Conveyance C Launch Systems
- Installation of Hydraulic, Lubrication C Cooling Pipelines
- Commissioning C Start-Up of Hydraulic Systems
- Health, Safety C Environment (HSE) Considerations. Ensuring hydraulic installations comply with safety standards and steel-plant HSE practices
- Documentation, QA/QC, and Handover.

**4. Project Name:** Modernization of coke-oven facilities, including construction of new oven chambers and installation of the full set of coke-oven service machines, all of which rely heavily on complex hydraulic systems.

- Client: **ArcelorMittal Kryvyi Rih**
- Location: **Ukraine, Kryvyi Rih**
- Dates: **2016-2018**

#### **Scope of Works includes:**

- Supervision over installation of hydraulic pumps, cylinders, valves
- Installation of High-Pressure Hydraulic Piping
- Lubrication Systems Installation
- Cooling Systems Installation
- Installation of cooling-water manifolds
- Lining cooling channels for coke pusher C door machines
- Commissioning of All Hydraulic Systems
- Quality Control C Documentation, preparation and review of critical documentation including hydraulic as-built drawings, pressure-test certificates, flushing reports, troubleshooting protocols
- Health, Safety C Environment (HSE) Considerations. Ensuring hydraulic installations

## Specialist Name s Position

Full Name: **Denis Kohus**

Position / Role: **Geodetic (Surveying) Engineer**

Core Expertise:

- Industrial geodetic surveying for large-scale construction, mechanical installation, and process- equipment alignment (Steel plants, Hydropower plant, Cement plants, Construction materials plants)
- High-precision layout and setting-out works for foundations, steel structures, columns, technological equipment, and underground utilities
- Topographic surveys, as-built documentation, and 3D geodetic control using modern surveying instruments (total stations, GNSS, digital levels)
- Quality control of geometric tolerances during erection of steel structures, large equipment, conveyors, pipe racks, and heavy civil structures
- Monitoring of deformation and settlement in industrial buildings, hydropower structures, and high-load foundations
- Coordination with structural, civil, mechanical, and installation teams during full project lifecycle systems, including adjustment, calibration, and functional testing

### Professional Summary

An experienced Geodetic (Surveying) Engineer with over a decade of work on industrial and infrastructure projects in Ukraine and internationally (Equatorial Guinea) where Denis handled full surveying cycles from initial terrain studies to precise alignment of equipment foundations and steel structures.

Denis has executed full geodetic support for cement plants, manufacturing facilities, hydropower stations, and metallurgical plant modernization works, providing layout, alignment, control measurements, and as-built documentation. His expertise includes layout and setting-out of civil and industrial structures, geometric control of equipment installation, surveying for technological pipelines, and preparation of as-built documentation compliant with international standards.

Denis possesses strong competencies in high-precision setting-out, equipment alignment, structural erection support, and geodetic monitoring, particularly in complex industrial environments requiring strict tolerances (steel mills, hydropower plants, large rotary kilns, heavy equipment foundations). He is experienced working in challenging environments and fast-track industrial construction projects, ensuring accuracy, safety, and coordination with construction teams.

Denis is known for his accuracy, reliability, and ability to support multidisciplinary teams throughout the entire construction cycle—from initial survey and earthworks to equipment installation and handover.

## Role at SKRINEX

- Current Position: **Denis Kohus**
- Years with SKRINEX: 2 Years
- **Key Responsibilities:**
  - High-Accuracy Setting-Out C Geodetic Control, Responsibility for layout and alignment of steel structures, foundations, equipment supports, conveyor galleries, pipelines, and complex industrial installations; ensuring compliance with engineering drawings and tolerance requirements.
  - Topographic C As-Built Surveying. Execution of terrain surveys, structural monitoring, and post- installation geodetic measurements; preparation of complete as-built documentation for clients, supervisors, and EPC contractors such as Paul Wurth and SMS group.
  - Multi-Discipline Coordination C Quality Assurance. Cooperating closely with civil, mechanical, and installation teams to ensure accurate geometry, prevent misalignment, verify installation stages, monitor deformations, and support technical documentation and project QA processes.

**1. Project Name:** construction of a new cement plant in Priozeroye, Crimea.

- Client: **LLC “Altcom”'s subsidiary company LLC Altcem”**
- Location: **Ukraine, Donetsk**
- Dates: **2013-2014**
- Role: **Geodetic (Surveying) Engineer**

### Scope of Works includes:

- Topographic C Engineering Surveys (Project Start Phase).
- Detailed topographic survey of the construction site.
- Earthworks surveying, etting-out of slopes, drainage trenches, and embankments
- Setting-Out C Layout of Civil Foundations
- Structural grid layout, Foundation setting-out, Anchor-bolt installation control
- Surveying Support for Structural Steel Installation
- Surveying for Rotary Kiln Installation (Critical EPC Activity)
- Surveying for Raw Mill C Cement Mill Installation
- Silo Construction Surveying
- Conveyor System C Transfer Tower Surveying
- As-Built Surveying C Documentation
- Construction Monitoring C Quality Assurance

- Surveying for Steel Structure Installation
- High-Precision Alignment of Technological Equipment
- Continuous Hot-Press Installation (critical)
- Alignment for Dryer and Air Handling Equipment, foundation alignment for Chip Preparation C Refiner Systems
- Alignment of Conveyor Systems (Process C Logistics)
- Silo and Storage Facility Surveying
- As-Built Surveys C Documentation
- Structural Monitoring C Quality Assurance

## 2. Project Name: Sendje Hydropower Power Plant (HPP) Construction

- Client: **Sendje Hydroelectric Plant, Duglas Alliance Ltd**
- Location: **Equatorial Guinea, near Bata and Sendje Towns (Litoral Province)**
- Dates: **2016-2020 and 2023-2024**
- Role: **Geodetic (Surveying) Engineer**

### Scope of Works includes:

- Terrain C Topographic Surveys including:
- Establishing geodetic control network (benchmarks, reference points) across river site, dam axis, intake and powerhouse zones.
- Conducting detailed topographic surveys of dam site, reservoir area, penstock alignments, excavation zones, diversion channels.
- Producing digital terrain models (DTM) and contour maps for civil works design and earthworks planning
- Setting-out foundations for dam piers, intake structures, powerhouse base, turbine pits.
- Preparation of Layout of penstock centre-lines, alignment, elevation control of penstock trenches or tunnels.
- Setting out of powerhouse structure, crane rails, turbine foundations, control building, access roads.
- Marking structural steelworks, mounting pads, anchor bolt positions, and major equipment plinths.
- Monitoring C Surveying of Concrete and Structural Works
- Preparation of Topographic As-Built Surveys C Documentation
- Coordination with civil, structural, mechanical and hydro-mechanical teams to integrate surveying data.
- Health, Safety C Environment (HSE) Considerations.
- Documentation, Quality Assurance C Compliance.

## 3. Project Name: Modernisation of the Equipment Workshop at Metinvest Engineering LLC, covering all stages from initial inspection to final as-built documentation.

- Client: **Metinvest Engineering LLC**
- Location: **Ukraine, Mariupol s Zaporizhzhia**
- Dates: **2022-2023**
- Role: **Geodetic (Surveying) Engineer**

#### **4. Project Name:** Construction of an MDF Production Plant

- Client: **Kronospan UA**
- Location: **Ukraine, Novovolynsk, Volyn Region**
- Dates: **2014-2018**
- Role: **Geodetic (Surveying) Engineer**

##### **Scope of Works includes:**

###### **Scope for the Electric Arc Furnace (EAF)**

- Initial Engineering Surveys C Site Preparation
- Topographic and geodetic baseline surveys , Earthworks surveying
- Geodetic Support for Civil Works, Setting-out of all foundations, High-accuracy control for heavy- machine foundations, Anchor-bolt positioning and elevation control
- Surveying for Steel Structure Installation
- High-Precision Alignment of Technological Equipment
- Continuous Hot-Press Installation (critical)
- Alignment for Dryer and Air Handling Equipment, foundation alignment for Chip Preparation C Refiner Systems
- Alignment of Conveyor Systems (Process C Logistics)
- Silo and Storage Facility Surveying
- As-Built Surveys C Documentation
- Structural Monitoring C Quality Assurance

#### **5. Project Name:** Sendje Hydropower Power Plant (HPP) Construction

- Client: **Sendje Hydroelectric Plant, Duglas Alliance Ltd**
- Location: **Equatorial Guinea, near Bata and Sendje Towns (Litoral Province)**
- Dates: **201G-2020 and 2023-2024**
- Role: **Geodetic (Surveying) Engineer**

##### **Scope of Works includes:**

- Terrain C Topographic Surveys including:
- Establishing geodetic control network (benchmarks, reference points) across river site, dam axis, intake and powerhouse zones.
- Conducting detailed topographic surveys of dam site, reservoir area, penstock alignments, excavation zones, diversion channels.
- Producing digital terrain models (DTM) and contour maps for civil works design and earthworks planning
- Setting-out foundations for dam piers, intake structures, powerhouse base, turbine pits.
- Preparation of Layout of penstock centre-lines, alignment, elevation control of penstock trenches or tunnels.
- Setting out of powerhouse structure, crane rails, turbine foundations, control building, access roads.
- Marking structural steelworks, mounting pads, anchor bolt positions, and major equipment plinths.
- Monitoring C Surveying of Concrete and Structural Works
- Preparation of Topographic As-Built Surveys C Documentation
- Coordination with civil, structural, mechanical and hydro-mechanical teams to integrate surveying data.
- Health, Safety C Environment (HSE) Considerations.
- Documentation, Quality Assurance C Compliance.

**6. Project Name:** Modernisation of the Equipment Workshop at Metinvest Engineering LLC, covering all stages from initial inspection to final as-built documentation.

- Client: **Metinvest Engineering LLC**
- Location: **Ukraine, Mariupol s Zaporizhzhia**
- Dates: **2022-2023**
- Role: **Geodetic (Surveying) Engineer**

**Scope of Works includes:**

- Provision of complete geodetic support for the reconstruction and modernisation of the Equipment Workshop at Metinvest Engineering, covering all stages from initial inspection to final as-built documentation
- Full-cycle surveying support for civil, structural, technological, and mechanical installation works
- Ensuring the accuracy of layout, alignment, elevations, and geometry of all upgraded and newly installed structures and equipment
- Coordination with project designers, construction teams, mechanical installation groups, subcontractors, and HSE engineers
- Maintaining compliance with Metinvest internal standards, Ukrainian DSTU/SNiP norms, and equipment manufacturer requirements (DMG Mori, Doosan, ESAB, Fronius, etc.).