### CONTENT

ABOUT SPS GROUP PRINCIPLES OF WORK AND ADVANTAGES ARCHITECTURAL ENGINEERING: PARAMETRIC AND ALGORITHMIC DESIGN **CURTAIN WALL SYSTEMS PRODUCTION OPERATION OF SHEET METAL PROCESSING EXHIBITION PROJECTS** SELECTED PROJECTS



Perm airport, 2017 Architects: Asadov bureau General contractor: ACONS Energy pavilion at the Astana Expo, 2017 Kazakhstan

General contractor: BAZIS



SPS GROUP is a brand specializing in complete façade production and is part of CG Stroyprofil group of companies, which successfully operates in civil engineering since 2003. Our offices are located in Moscow and Ekaterinburg where we manage, engineer and provide full technical support for our projects. The company's production complex is located in the city of Verkhnyaya Pyshma (not far from Ekaterinburg), Sverdlovsk Region.

Our range encompasses the entire building envelope: both system and bespoke solutions for all types of Cladding, Glazing, Curtain Walling, Unitized curtain walls, free form structures, as well as a backing structure such as Lightweight Steel Framing together with any Secondary Steel Support.

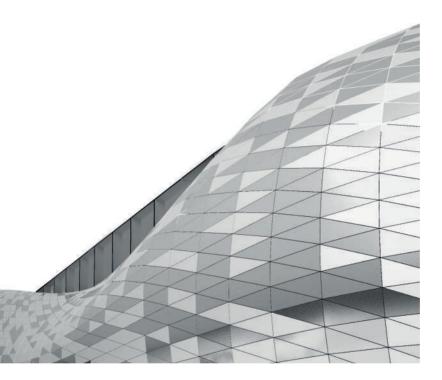
We produce all types of steel and glass systems and metal cladding.





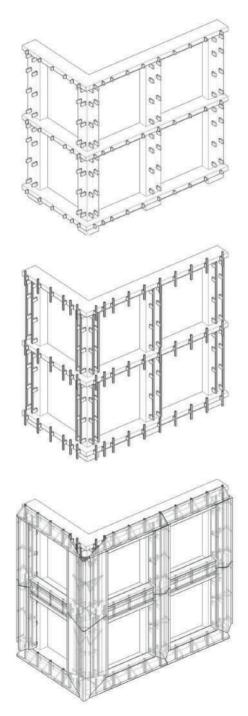
The project of Astana EXPO 2019 Architects: SPS GROUP SPS group implements Consulting Services to Architectural practices at the pre-planning stages, Façade Engineering services to Property Developers at the pre-construction stages, and Design Development for select Façade Contractors at the assembling stages. Our holistic approach can start with technical sketches of early stage façade concepts and can finish with a detailed model of the assembled façade.

The project of Astana EXPO 2019
Architects: SPS GROUP



SPS group apply Parametric modeling to assist the façade design of complex building envelopes.

Parametric design techniques provide the ideal tools to complement the optimization process and realize the architectural vision. Following optimization, the façade model can be populated with intelligent parametric modules. These adaptive modules designed to meet the façade specification are embedded with the actual manufacture information necessary to complete the manufacture and installation of the final façade. This embedded information is permanently linked to the design model changing automatically through design iterations.





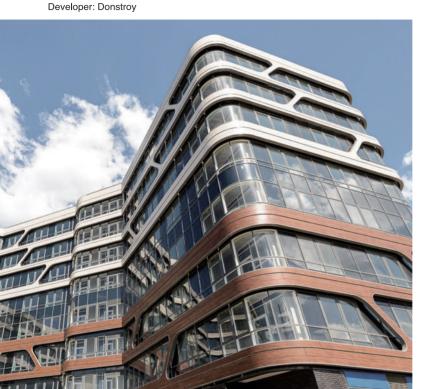
Residential complex SIMVOL , 2017

Architects: Mosproekt - 3 General contractor: Englobal Developer: Donstroy



Residential complex SIMVOL, 2017

Architects: Mosproekt - 3 General contractor: Englobal



SPS Group offers complex solutions on designing, manufacture, and assembling of the whole façade of a building to architects and customers, translucent structures included. Depending on the region, we perform works on arranging translucent structures by our efforts only or with engaging of specialized contractors. In 2018 SPS Group was awarded a status of Premium Partner of Schüco company, a world leader in the scope of profile system engineering for translucent façades.

SIMVOL residential complex (Moscow) - the whole cycle of works on design, manufacture and mounting of both translucent structures and ventilation façades lining.





Production complex in Verkhnyaya Pyshma Ekaterinburg

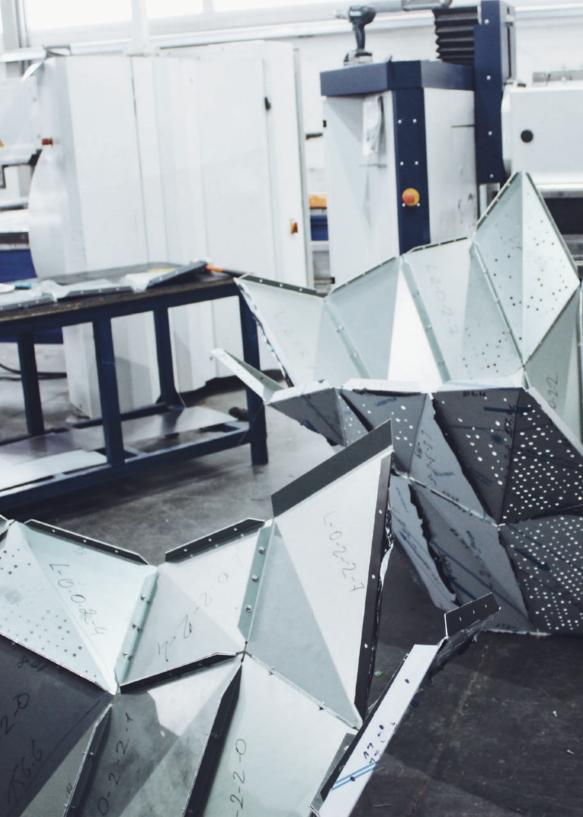


#### CNC punching machine



The production complex includes: - line of transverse and longitudinal cutting of coiled sheet metal up to 3 mm thick, 1500 mm wide, cutting accuracy: 0.1 mm; - universal benders with CNC for producing parts of various complexity from metal up to 3 mm thick, 4000 mm long, 1400 mm wide, bending accuracy: 0.1 mm; - CNC punching machines, for punching and embossing of metal; - welding equipment for argon arc welding and contact welding of steel, galvanized, stainless steel and aluminium.

Operation of sheet metal processing: - shaping, cutting, chopping; - curvilinear cutting; - radius bending; - punching, including customized cutting by openings of various shapes; - applying of convex or concave projection of preset shape; - powder painting, galvanizing, anodizing of finished products; - arc and spot welding

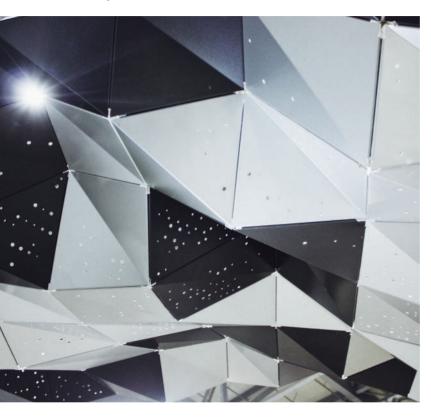




Art object at the Exibition FORUM 100+, 2018 Ekaterinburg



## Art object at the Exibition FORUM 100+, 2018 Ekaterinburg

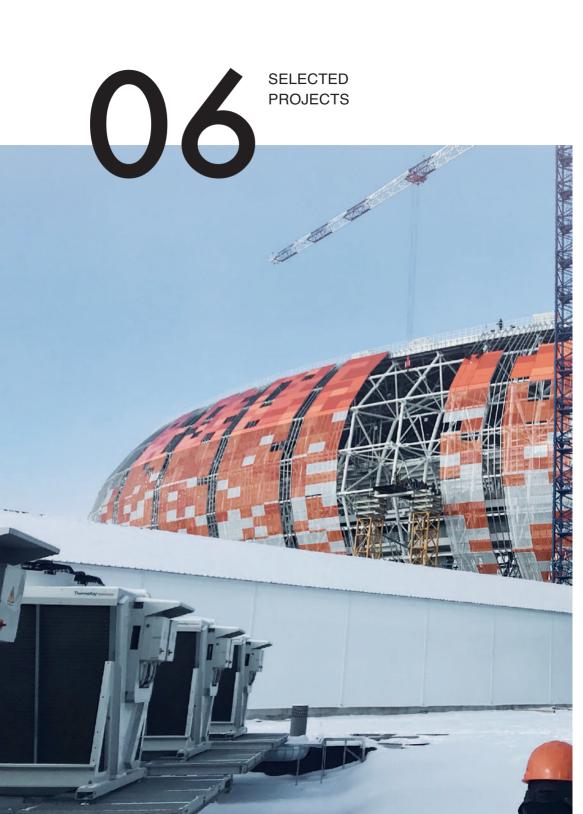


We use the participation in exhibition to improve and develop our skills and abilities in design, production and technology.

This art object we made specially for Forum 100+ in cooperation with the producer of coil-coated aluminum SEVALCON (Serbia).

It was created employing full parametric technology. All details of this object are unique. The shape of the object and all technical drawings were created by algorithmic methods. The precision of production allowed mounting all details tightly, without a technology gap.





Football stadium Mordovia Arena, 2018 General contractor: PSO Kazan

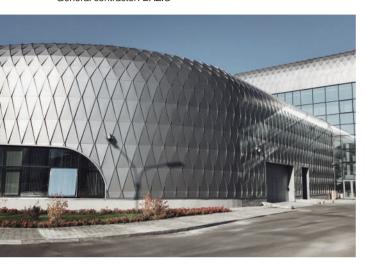
ENERGY PAVILION



Kazakhstan General contractor: BAZIS

Energy pavilion at the Astana Expo, 2017

Energy pavilion at the Astana Expo, Kazakhstan, 2017 General contractor: BAZIS







AIRPORT
BOLSHOE SAVINO



Perm airport, 2017 Architects: Asadov bureau General contractor: ACONS The surface of the coating on the side of the main façade is curved in a smooth arc like a sail or an airplane wing, and above the sides it is made smooth, as if cut off by a huge blade. The curved part of the coating is made of U-shaped profile, which is secretly attached to the metal sheet. The result is a texture that resembles the structure of a tree. Smooth parts of the coating were made of polished metal sheets



Perm airport, 2017 Detail of ceiling

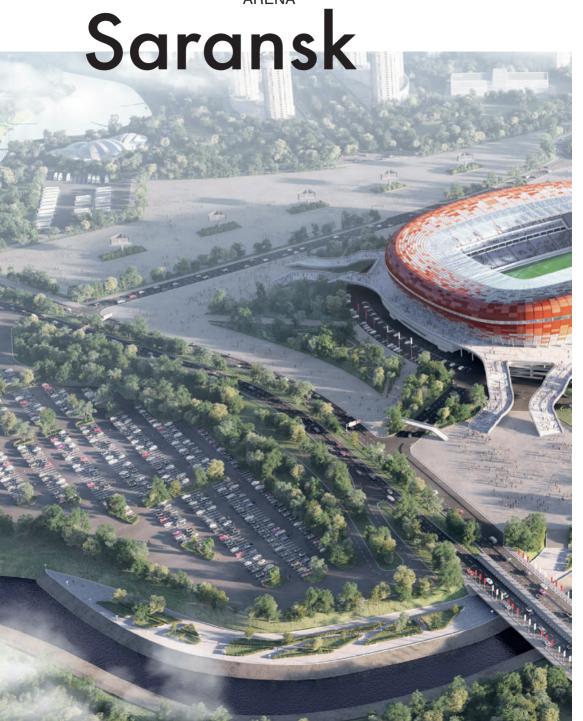


Perm airport, 2017 Architects: Asadov bureau General contractor: ACONS

The new terminal of the Perm airport Bolshoe Savino was built in 2017. We provided a full complex of façade services: design, production & mounting.

All technical decisions were conformed by Architect's visions.

MORDOVIA ARENA



Football stadium Mordovia Arena, 2018 General contractor: PSO Kazan





Aluminum perforated panels Mordovia Arena, 2018 General contractor: PSO Kazan

Façade of the Mordovia arena has been completed less than 6 months, from the design to the finishing of its installation. The façade consists of 8712 unique aluminum panels.

The design was carried out on a fully parametric 3D model, after which the production drawings have been developed automatically.

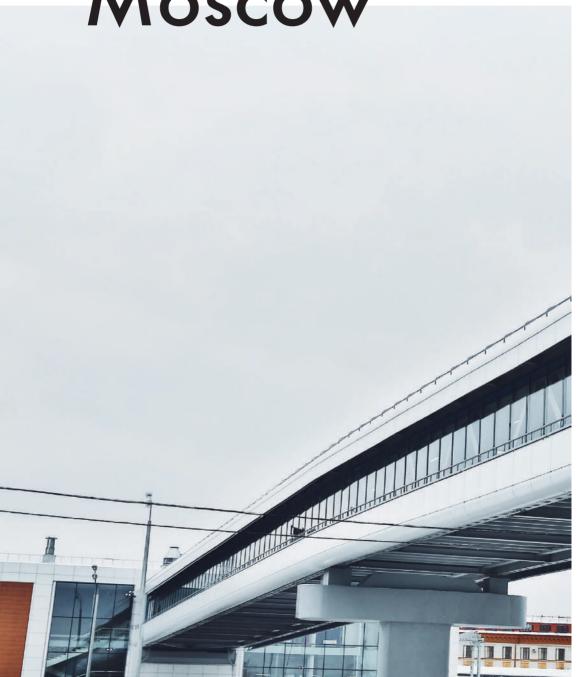
Accurate planning of all stages of the project, technology design, fast work of our production allowed us to complete the project on time.

Steel and aluminum substructure Mordovia Arena, 2018 General contractor: PSO Kazan



MCC IZMAYLOVSKAYA STATION





The transport hub MCC Izmylovskaya station, 2016 Architects: ATB Architects

In 2016 in Moscow was open new Metro line Moscow central circle includes 31 stations. This project is of the highest importance for all Muscovites, as helps to unload the most overloaded stations of the Moscow Metro and in-city and suburban railway terminals. Moreover, the new change facilities enable passengers to reduce duration of a trip.

The Moscow Central Circle is a qualitatively new impulse to the development of public transport in Moscow, which meets the highest environmental, technical and social standards.

The envelope of 5 stations was designed and produced by SPS group.

Most of MCC stations created by a single principle: white aluminum panels frame big glass surfaces. Architectural idea was to create a dynamic image, and it expressed within using curved panels.

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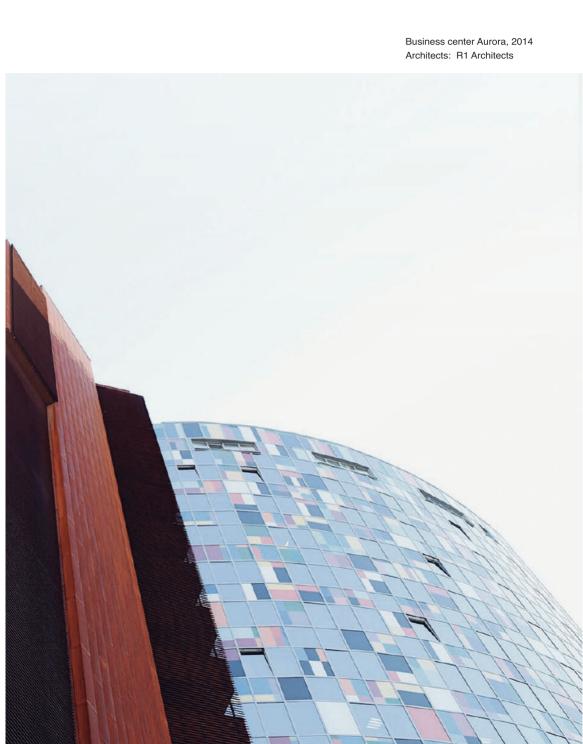


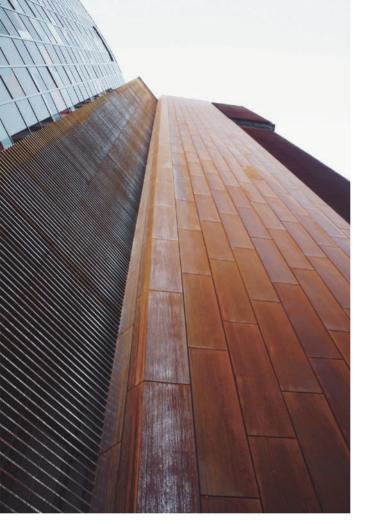
The transport hub MCC Izmylovskaya station, 2016 Architects: ATB Architects



## Ekaterinburg







Bussines center Aurora, 2014 Architects: R1 Architects

Façade cladding of business center "Avrora" in Ekaterinburg is made of CORTEN steel. A ventilation screens and other façade details is also made of CORTEN. This material is using in interior too.

It creates good architectural contrast between rude rusty metal and glossy surface of the glass.

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## **CONTACTS:**



www.met-form.ru

# SPS o GROUP **STROYPROFIL**

SPECIAL PROJECT SOLUTIONS