

YOUR PERSONAL GLASS EXPERT



LEADING INNOVATION

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ABOUT US

Alumall GmbH is an international manufacturing and trading company that offers modern complex solutions of materials for facades and interiors, as well as for related areas in construction.

It also specialises in development and promotion of modern trends in facade glazing, as well as it offers traditional options of facing for facades made of flat rolled aluminum and aluminum composite panels.

Alumall GmbH focuses on a wide presentation of high-quality glass products and it's constituent elements in a strategic partnership with AKMA Company, in particular, insulating glasses of various types and applications for their further use in window glazing of building objects, as well as in interior design and in solutions for transport glazing.

A headquarter of the company is in Hamburg, Germany.

AKMA is one of the leading EAEU companies in the glass products market. The company was founded in 1991, currently it is one of the largest glass processors.

Output of the processed glass: 2,000,000 m²/year

Output of the hardened glass: 1,000,000 m²/year

Finished-product output*: 120,000 pcs/year

Total area of the plant: 4,2 ha

Manufacturing buildings: 10

Industrial divisions: 14

Equipment fleet: < 300 units

Number of employees: ≈ 1000 people

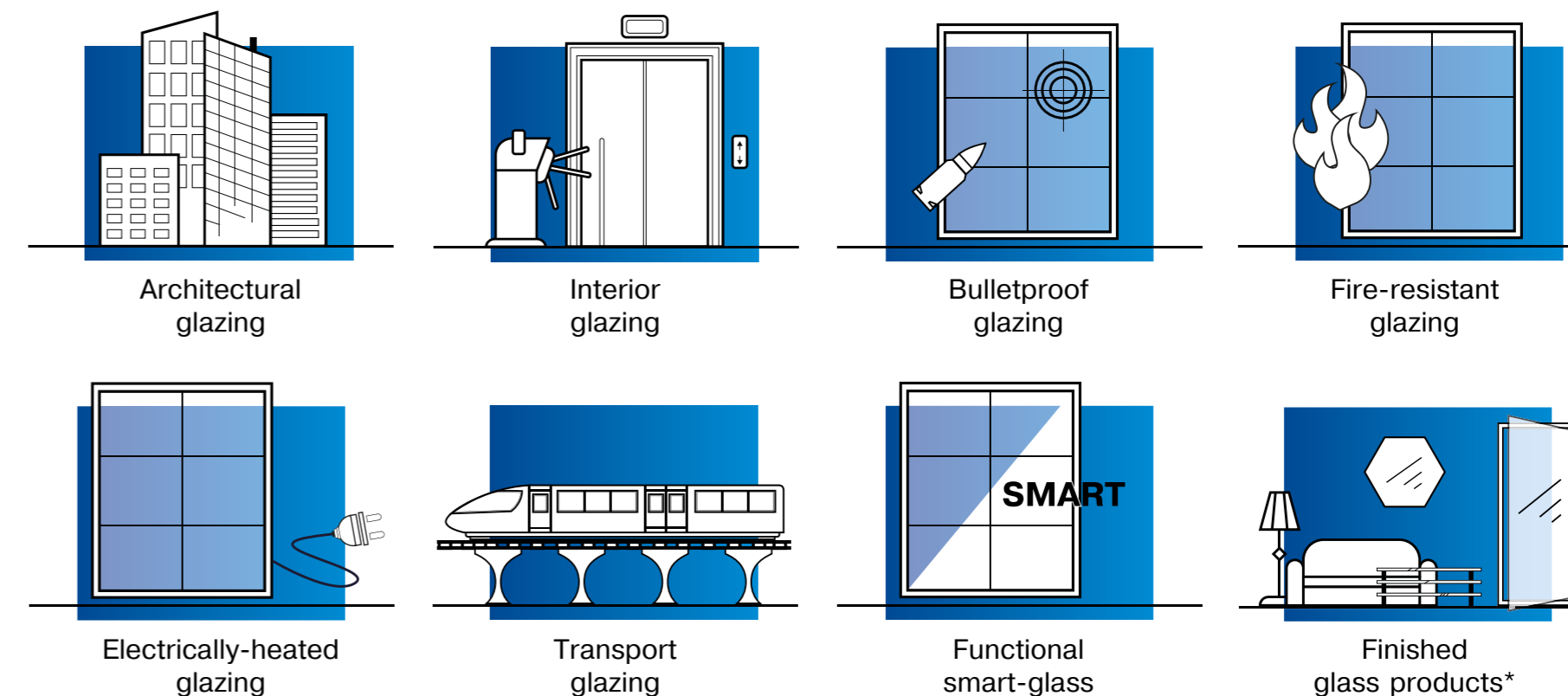
OUR ADVANTAGE

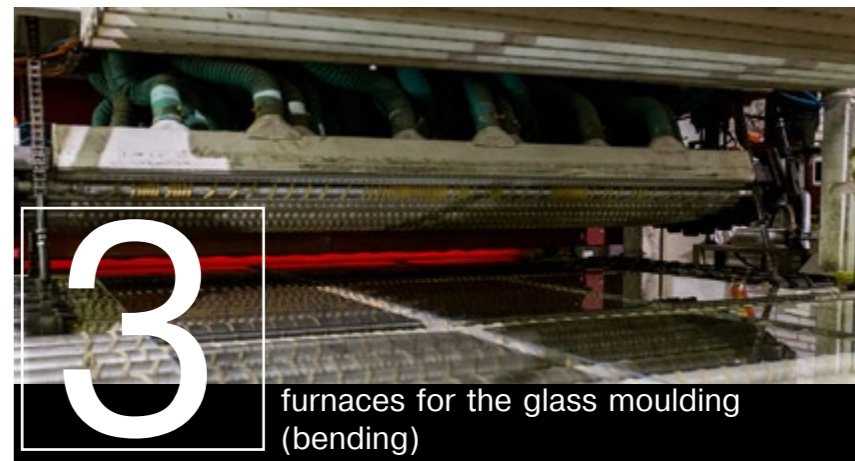
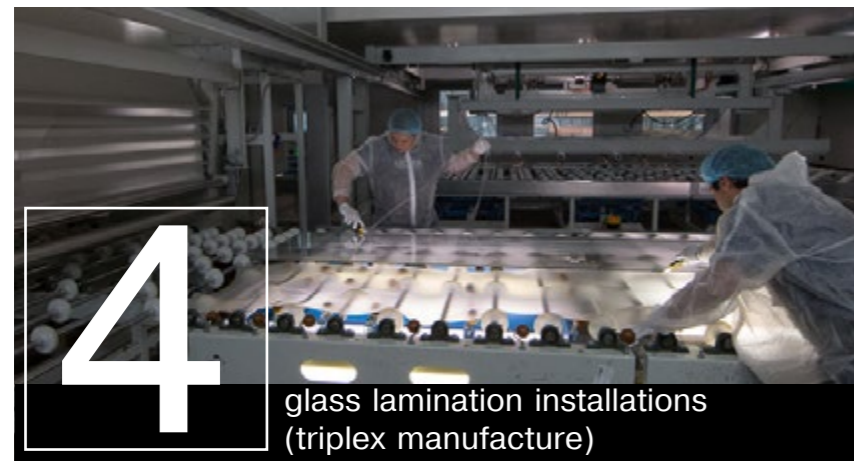
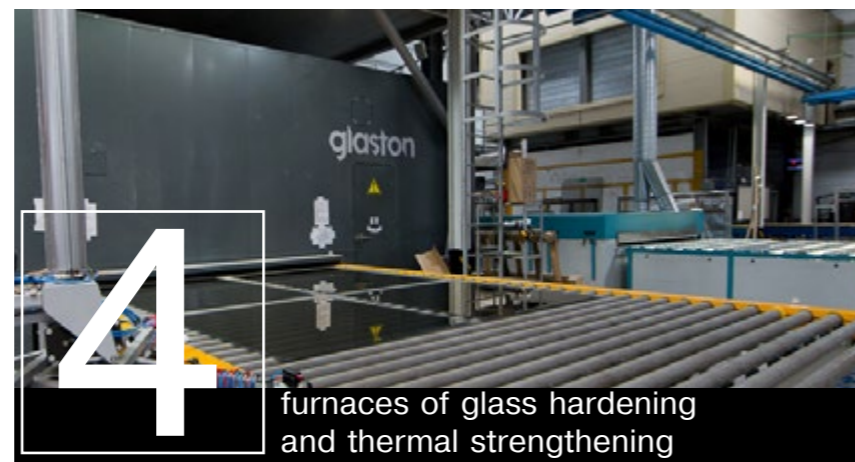
Annual investments in manufacture and employees' professional development allow to expand continuously a range of services and to offer our customers the innovative and exclusive products of high quality meeting all international standards.

*Glass doors, shower partitions, furniture, skinali, mirrors.

BUSINESS AREAS

AKMA Company has its own production facilities to manufacture the widest range of products of the sheet glass, but the prevailing areas are manufacture of the glass products for architectural and interior glazing, as well as the high-tech glass.







AKMA Company has a developed network of partners in more than 10 countries of the world, such as design engineering department, construction and installation organizations and glassware distributors as well.

Company's products are presented on such facilities as residential and commercial buildings, air terminals, railway stations, water and surface transport.

Convenient location of the company allows to perform shipment of the products by any ways suitable for a customer:

- availability of railway tracks in the company's territory;
- proximity to the central highways;
- possibility to ship the products by river and sea vessels.



ARCHITECTURAL GLAZING



There is an evident tendency in modern construction towards increasing of the glazing area.

Panoramic glazing permits more natural light, visually expands the space and brings special charm to interior.

Development of the glassware manufacturing techniques has changed glass characteristics and provided architects with a huge pool of possibilities:

- glass has obtained excellent strength characteristics;
- possibility to manufacture large-sized glassware;
- variety of the fixing systems.



MIXED-USE COMPLEX LAKHTA CENTER

PRODUCT DESCRIPTION The large-sized flat and curved glass panels of the triplex of complex geometrical shape with a total area of 18,000 m².

OBJECT DESCRIPTION The largest and state-of-the-art business center of Saint Petersburg with an area of 400 thousand square meters and dominant height of 462 meters has become the highest building of Europe. The project combines modern ecofriendly business offices and conference areas as well as conceptual public space.

ADDRESS Russia, Saint Petersburg, Lakhtinsky Prospect.



Photo: Joint-Stock Company Mixed-Use Complex Lakhta Center, www.lakhta.center



EXPO-2017 PAVILIONS

PRODUCT DESCRIPTION Triple-pane structured windows With multi-functional glass. Some of the glass units have a pattern (raster) applied by method of digital printing.

OBJECT DESCRIPTION Expo-2017 territory is almost 175 ha, includes exhibition pavilions, hotels, restaurants, business sites and cultural centers.

ADDRESS the Republic of Kazakhstan, Astana, Orynbor street.





BUSINESS CENTER PARK HUAMIN

PRODUCT DESCRIPTION Double-pane and triple-pane windows with a wide removal of multi-functional spaying along the perimeter and subsequent application of decorative edge by ceramic paints.

OBJECT DESCRIPTION The large-scale business center with an area of about 200 thousand square meters with a dominant of the complex consisting of two buildings. Modern offices, restaurant, a hotel and apartments will be arranged here.

ADDRESS Russia, Moscow, Wilhelm Pieck Street.



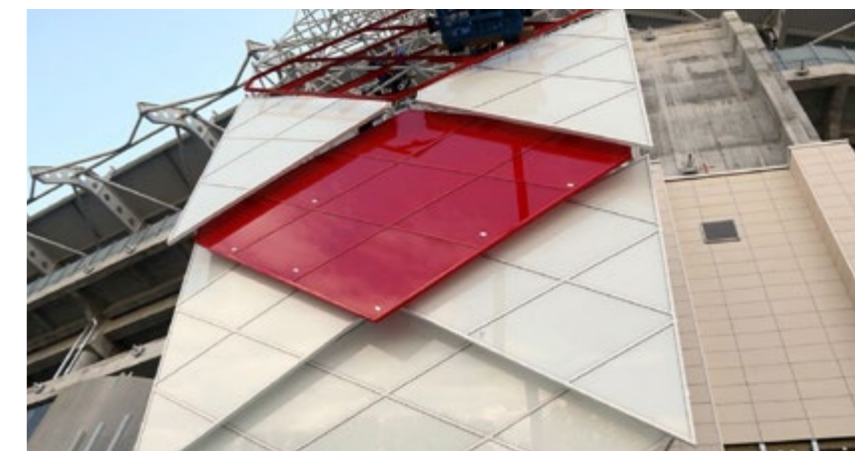


OTKRYTIE ARENA STADIUM

PRODUCT DESCRIPTION Glass panels based on the multi-layer heat-strengthened glass colored by ceramic paints by method of roller printing.

OBJECT DESCRIPTION Otkrytie Arena is a home stadium of Spartak football club. The stadium of the 4th UEFA category, built in August, 2014, with a capacity of 45 thou. people and at the cost of 14.5 bln rubles.

ADDRESS Russia, Moscow, Volokolamskoye Shosse.





SHOPPING AND LEISURE CENTER AFIMALL CITY

PRODUCT DESCRIPTION Glass panels of the monolithic reverse painted hardened glass. The pattern is made by ceramic oven baked paints by method of digital and roller printing.

OBJECT DESCRIPTION City is located in the center of the largest and the most ambitious investment business project in Europe – Moscow International Business Center Moscow City. Total area of AFIMALL City is 283, 182 square meters.

ADDRESS Russia, Moscow, Presnenskaya Naberezhnaya.





INTERNATIONAL AIRPORT PLATOV

PRODUCT DESCRIPTION Architectural glass units consisting of the triplex laminated by noise absorbing film Trosifol sound control sc+ and single-thickness multi-functional glass providing high light transmission and protection against excessive solar energy.

OBJECT DESCRIPTION The terminal with an area of 50,000 m² with through put about 5 million passengers per year is the largest infrastructure project of the Rostov Region. Construction was included in the Federal Program of Preparation for World Cup-2018 in Russia. Total project budget is over 45 billion Rub.

ADDRESS Russia, the Rostov Region, the Aksai District.



THE CENTER OF OCEANOGRAPHY AND MARINE BIOLOGY “MOSKVARIUM”

PRODUCT DESCRIPTION Glass units and monolithic hardened glass with print of ceramic paints Side One on the first position made by method of silk-screening.

OBJECT DESCRIPTION Research education and entertainment center, including:

- aquarium ;
- center of swimming with dolphins;
- audience hall for 2,300 seats;
- marine animals show.

ADDRESS Russia, Moscow,
Prospect Mira.





BUSINESS COMPLEX VREMENA GODA (THE SEASONS)

PRODUCT DESCRIPTION Glass units and monolithic glass with digital and silk -screen printing made by oven baked ceramic paints.

OBJECT DESCRIPTION Modern business complex. Due to the bold architectural design the business complex blended in the surrounding landscape. Print on the glass helped to transform simple geometrical forms, to make them more integral, not dampening the individuality of each object.

ADDRESS Russia, Saint Petersburg, Sverdlovskaya Naberezhnaya.





RHYTHMIC GYMNASTICS CENTER

PRODUCT DESCRIPTION Structured double-pane windows with multi-functional hardened glass, the part of which is additionally decorated by silk-screen printing.

OBJECT DESCRIPTION The largest Rhythmic Gymnastics Center in Russia. Glass facade is edged by the wave-shaped roof, which repeats the main gymnasts' attribute – gymnastic ribbon .

ADDRESS Russia, Moscow, Luzhniki.



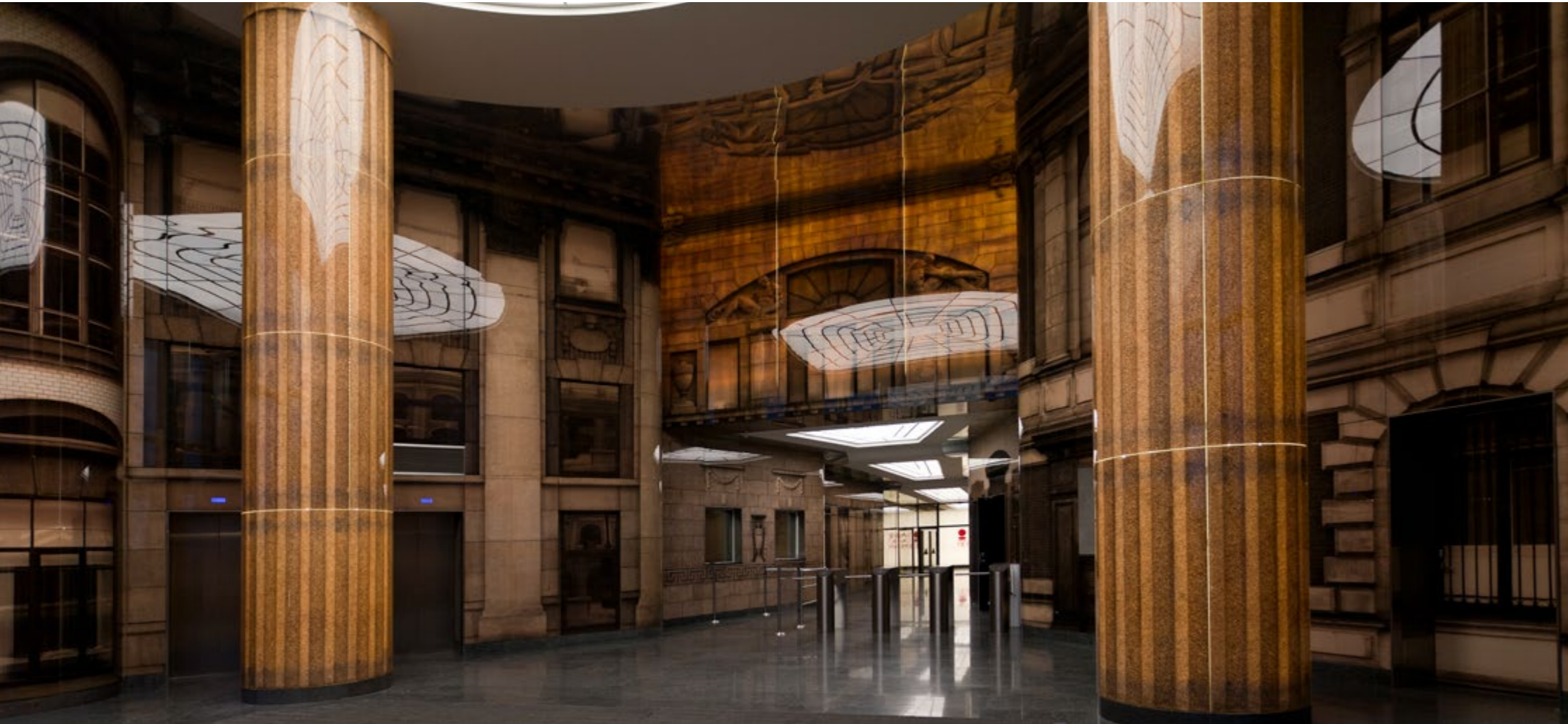


INTERIOR GLAZING

Interior finishing by glassware has a number of exclusive advantages.

Firstly, it is high durability: the hardened glass products are difficult to damage, they are resistant to chemical effect, preserve the unchanged appearance for years.

Secondly, due to the variety of the glass decoration methods (colour printing, sandblasting, diamond engraving, the possibility to apply decorative and structural inserts and many other things), one may create the real pieces of art.



HEAD OFFICE OF OJSC BANK SAINT PETERSBURG

PRODUCT DESCRIPTION The large-sized glass panels based on the multi-layer hardened glass with the pattern applied by ceramic paints by method of digital printing.

CONCEPT Creation of the original interior in the style of the historic bank architecture. Having laid emphasis on connection with time, the space has taken shape of the modern materials and forms.

ADDRESS Russia, Saint Petersburg, Malookhtinsky Prospect.





BUSINESS COMPLEX VREMENA GODA (“SEASONS”)

PRODUCT DESCRIPTION Triplex of the hardened glass with digital printing by ceramic oven-baked paints and hidden structured inserts for its installation.

CONCEPT Interior decoration of the business center logically continues the exterior concept. Glass panels depicting columns, fretworks, arches and ornaments of the snow-covered pine branches generate special mood.

ADDRESS Russia, Saint Petersburg, Sverdlovskaya Naberezhnaya.



Completed jointly with ART-Glass, LLC



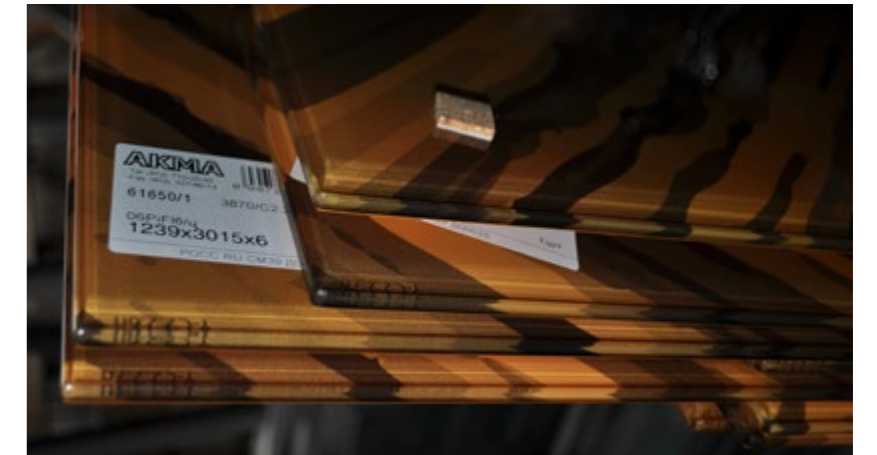
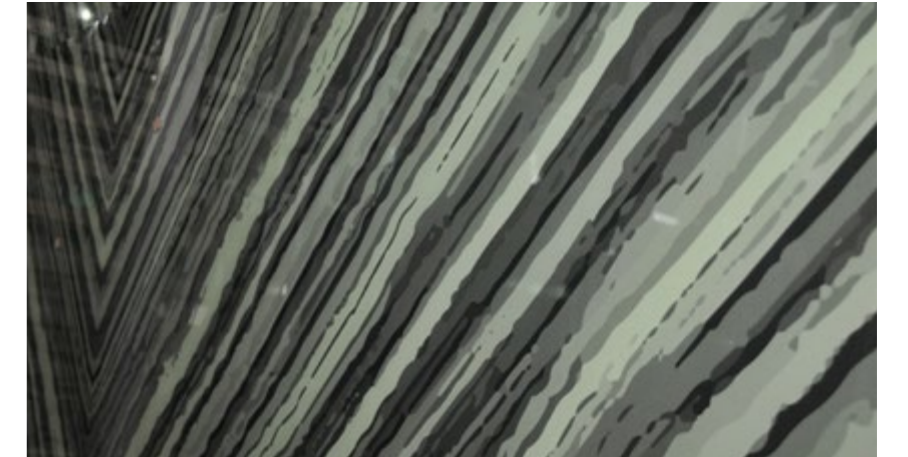
Completed jointly with ART-Glass, LLC

FIVE STARS RESIDENTIAL COMPLEX

PRODUCT DESCRIPTION Reverse painted hardened monolithic glass (cellulose dope) with the pattern applied by the method of digital printing, which is covered by the sole-coloured coat of paint, by means of roller painting of glass.

CONCEPT Designer finishing of the residential complex halls repeats the decoration of its facades. All five houses of the complex are made in a single ornament, but each has its own colour composition.

ADDRESS Russia, Saint Petersburg, Zhukov Street.





OBVODNY KANAL METRO STATION

PRODUCT DESCRIPTION Reverse painted hardened monolithic glass with the pattern applied by the method of digital printing by the oven baked ceramic paints.

OBJECT DESCRIPTION The metro station is executed in the style of industrial architecture, the walls are decorated by the glass-ceramic panel with the Obvodny Kanal panorama of the late 19th century. The total length of composition is 360 meters.

ADDRESS Russia, Saint Petersburg, Ligovsky Prospect.



TRANSPORT GLAZING



AKMA Company manufactures products for glazing of the metro train carriages, glass units for “Sapsan” and “Lastochka” trains, glass units for tram-cars, trolley buses and buses, as well as the glass and glass units for marine, river and specialized vessels.

The company has all required certificates for the manufactured glassware.

The product range includes: monoglass, triplex, glass units, triplex in the glass unit composition.



HIGH-SPEED TRAIN EVS1/EVS2 SAPSAN VELARO RUS

PROJECT High-speed electrical trains manufactured by Siemens company going between Moscow and Saint Petersburg as well as Nizhny Novgorod. Maximum train speed is 250 km/h.

PRODUCT DESCRIPTION Double-pane bent glass unit with two triplexes of the tinted hardened glass.

SPECIAL FEATURES Resistance to 600 J vibrational load, provision of the passengers' security in the saloon, noise reduction.



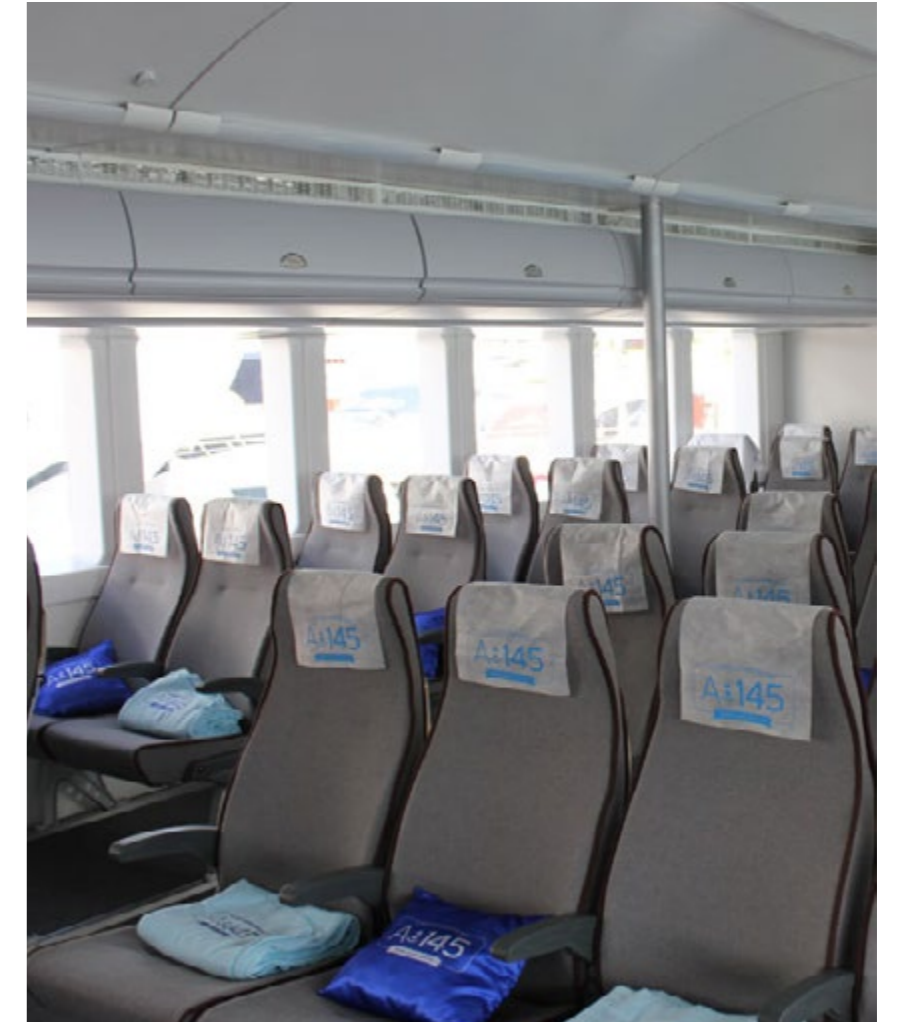


HIGH-SPEED PASSENGER CRAFT A145

PROJECT The high-speed craft intended for transfer of passengers and their luggage on the shorelines with a length of up to 250 miles at a speed of 40 knots.

PRODUCT DESCRIPTION Body-tinted hardened glass of 8 mm thickness.

SPECIAL FEATURES Tough monoglass protected against excessive solar energy reflected from water.



HIGH-TECH GLAZING

Except for the main functions glazing may be supplemented by special techniques:

- electrical heating;
- ability to resist against firearms;
- protection against electromagnetic emission (weapon);
- fire resistance;
- ability to change its transparency (smart-glass).

Glassware may be done in the form of:

- monoglass;
- Insulating glass (IGU);
- triplex of several glasses, and may have one or combine several special techniques.



PHILHARMONIA IN ZARYADYE PARK

PRODUCT DESCRIPTION 300 sq.m. of the electrically heated glass units were manufactured for roofing of the philharmonia, which allow to avoid icing field and "snow cap".

OBJECT DESCRIPTION Philharmonia in Zaryadye Park located 500 meters from the Kremlin of Moscow, has become one of the best musical grounds of the country due to unusual acoustics, architecture and technical equipment. The work on acoustics was directed by a famous engineer from Japan, Yasuhisa Toyota.

ADDRESS Russia, Moscow, Varvarka Street.



ELECTRICALLY-HEATED GLAZING



TERMINAL T2 SEGMENT OF DOMODEDOVO AIRPORT

PRODUCT DESCRIPTION Double-pane glass units with application of the multi-functional and solar-protective glass, including glass units with the electrically-heated external triplex which provides removal of snow and icing on the principal front of the building.

OBJECT DESCRIPTION Area of T2 Terminal of Domodedovo Airport is 235 thousand square meters, a seven-storey building, two storeys of which are located below the ground. The enhancement project is implemented within the current architectural concepts of the airport passenger terminal.

ADDRESS Russia, the Moscow Region.

ELECTRICALLY-HEATED GLAZING





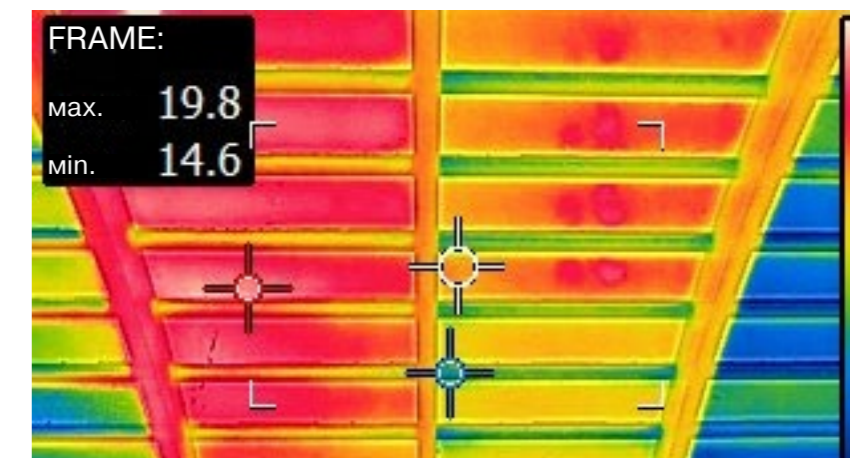
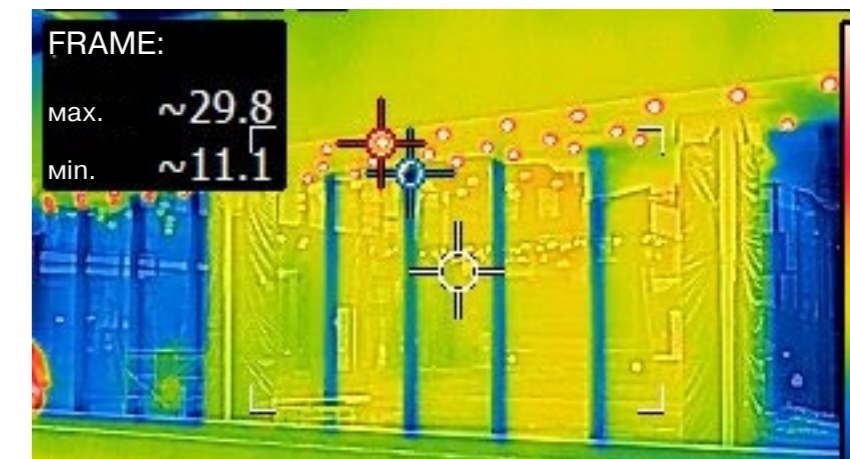
HILTON HOTEL SPA ZONE

PRODUCT DESCRIPTION Facade: electrically-heated triplex internally within the glass units (condensate removal).

Roof: double-pane glass units of two electrically-heated triplexes with application of the multi-functional glass (removal of the snow cap and condensate).

OBJECT DESCRIPTION The hotel spa zone has a swimming-pool with panoramic glazing of the walls and the roof. To preserve comfortable temperature of the spa zone and snow removal from the roof the advanced electrically-heated glazing is used.

ADDRESS Russia, Saint Petersburg, Petersburg Shosse.





VIP-WAITING ZONE OF NURLY ZHOL RAILWAY STATION

PRODUCT DESCRIPTION Unique bulletproof double-pane glass units with the multi-functional glass. The glass unit thickness is: 120 mm, dimensions: 1000x3000 mm, weight: 800 kg each, **protection class BR6 (sniper rifle)**. Similar glass units are applied in the banking sector, premises for the high-ranking persons and other premises to which the strict safety requirements are submitted.

OBJECT DESCRIPTION A capital railroad complex represents a six-level building with a total area of 126 thousand sq. m. The railway station is able to serve up to 35 thousand passengers daily.

ADDRESS Kazakhstan, Astana, A-82.



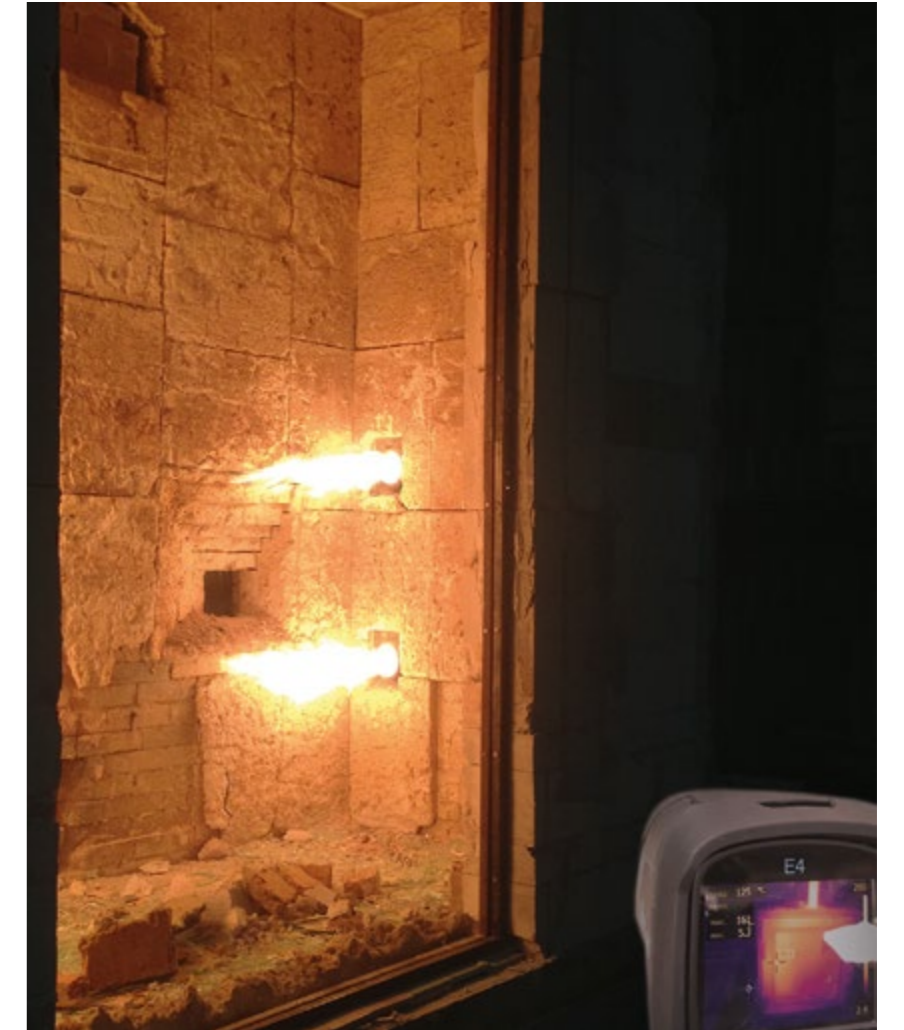


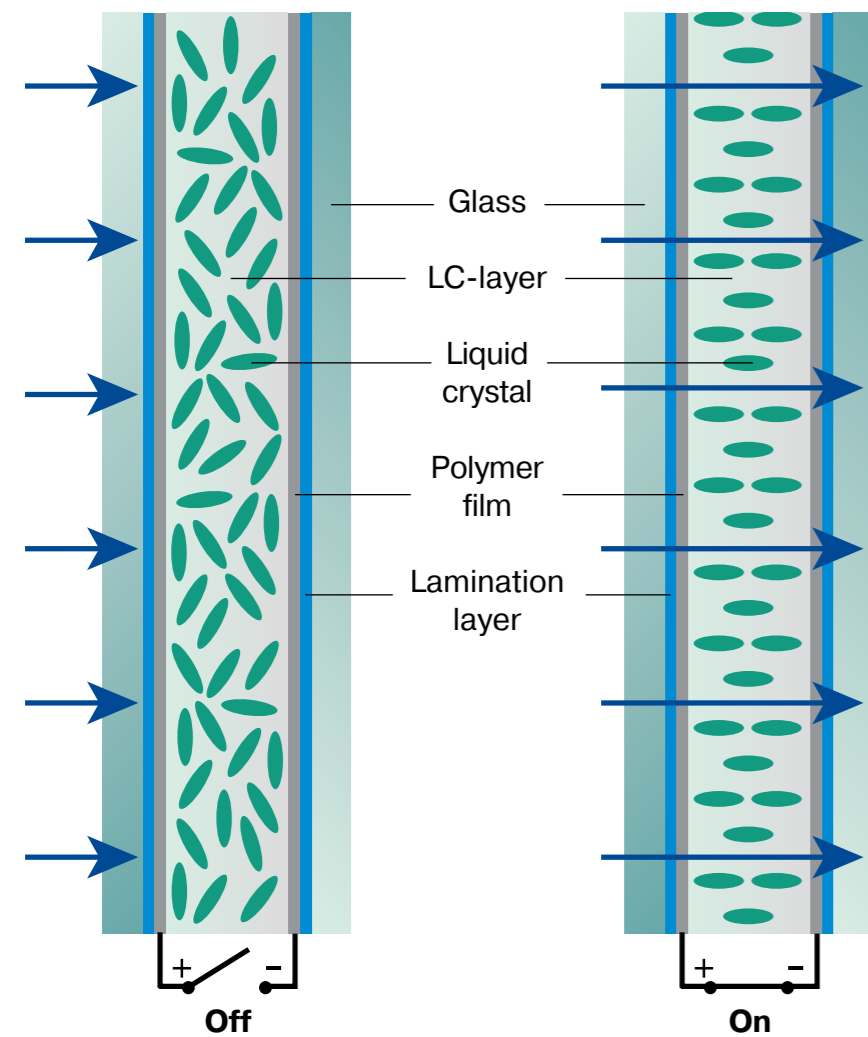
FIRE-RESISTANT GLASS TESTING

DESCRIPTION The fire-resistant (fireproof) glass prevents from fire propagation and heat transfer from the fire zone. AKMA manufactures glass of 6 and 8 m thickness, fire-resistance rating E15, E30, E45.

TESTING During fritting the fireproof (fire-proof) glass does not break but it flows from the mounting frame. The time, in minutes, required for the glass to flow from the mounting frame specifies fire-resistance.

APPLICATION Translucent protection of the escape routes; prevention from fire propagation; limitation of the fire sources; protection of people's life and material values.





SMART-GLASS TECHNOLOGY

DESCRIPTION Smart glass is the glass with variable optical properties: change of the glass transparency, light transmission coefficient, heat absorption, etc., under electric voltage supply.

APPLICATION Actively applied in decorating the interiors, space zoning, transport glazing. Smart glass may be transformed into multimedia screens for image transmission.



QUALITY STANDARDS

High quality of the output products is provided, inter alia, by the quality of the purchased raw materials. AKMA Company works based on the professional materials and raw materials of the leading global producers. In addition, the incoming tests of each supply are carried out in the company's laboratory.



CERTIFICATION

AKMA Company has all required quality certificates for the products. To keep the certificates updated the company carries out the tests constantly in the accredited independent laboratories.



CE

BS EN 12150-1:2002
Safety Glass for intended use as per annex ZA

Declaration of performance

THIS IS TO CERTIFY THAT

AKMA LLC
pr. Bakunina, d. 29, lit. A, pom. 17H
191144, St. Petersburg

HAS CONFORMED TO EN 12150-1:2002

BY

SUBMITTING GLASS SAMPLES FOR TESTING TO
BS EN 12150 pt 1

TESTING TO:	NOTIFIED TEST HOUSE:	PRODUCTS:	TEST REPORT NO:
BS EN 12150-1	TUV Rheinland Nederland B.V	float glass 4, 5, 6, 8mm	89210503-01 d.d. 07/03/2017

A TECHNICAL FILE HAS BEEN PRODUCED CONTAINING THE TEST REPORT AND PERFORMANCE INDICATED PAPERS FOR ALL COMPONENTS

Name: Alexey Kinder
Position: Director
Place and date: AKMA LLC 13/06/2017

Signed:

CE

BS EN 1279:2002
Glass in buildings insulated glass units

Declaration of performance

THIS IS TO CERTIFY THAT

AKMA LLC
pr. Bakunina, d. 29, lit. A, pom. 17H
191144, St. Petersburg

HAS CONFORMED TO EN 1279-3 ANNEX ZA

BY

(a) SUBMITTING SAMPLES OF INSULATING GLASS UNITS
FOR TESTING TO BS EN 1279 PART 3
AND SUCCESSFULLY MEETING ALL REQUIREMENTS

Please refer to Test Report No: 89210503-6 d.d. 16.05.2017

System Description: FGC1

ITT conducted by: TUV Rheinland Nederland B.V.

(b) PRODUCING A TECHNICAL FILE CONTAINING THE TEST REPORT AND PERFORMANCE INDICATED PAPERS FOR ALL COMPONENTS

Name: Alexey Kinder
Position: Director
Place and date: AKMA LLC 13/06/2017

Signed:

Alumall GmbH

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