

Waterproofing Factory "ARENA"

MANUFACTURE OF BUILDING MIXTURES FOR WATERPROOFING, REPAIR AND PROTECTION OF CONCRETE STRUCTURES



Waterproofing factory ARENA

about our Company



Waterproofing, protection

and concrete repair



Year of foundation – 2009



Principle of work: creation of engineering solutions at different stages – from design and construction to maintenance of facilities



Client-oriented approach, individual approach, selection of a constructive solution

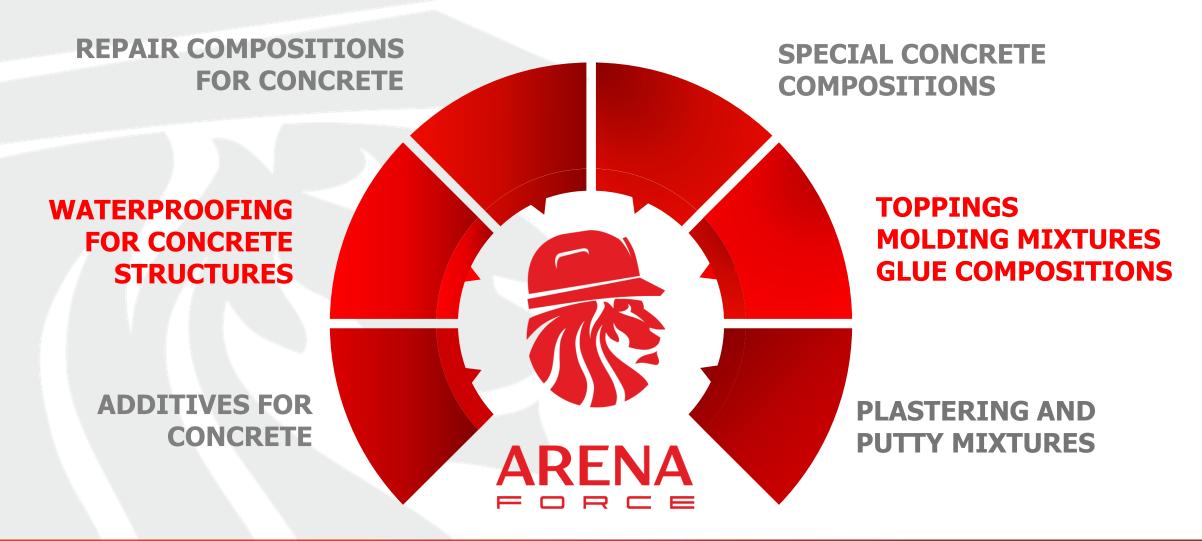


Creation of our own unique developments and the use of innovative technologies



Our own production, product delivery to all corners of the world

WIDE RANGE OF PRODUCTS





FIELDS OF APPLICATION







- ✓ mines, tunnels, foundations
- √ dams, swimming pools, reservoirs
- ✓ underground parkings
- ✓ bridge structures
- ✓ sea and river berths
- ✓ concrete dams

- ✓ sheds
- √ anderground structures
- √ basements
- √ storage of oil products
- √ vegetable stores
- √ concrete docks

- ✓ subways
- ✓ pumping stations
- ✓ Civil Defense and Emergency
 Situations structures
- ✓ concrete structures exposed to radiation



ADVANTAGES











Preserve from destruction



ARENA InMix PN

Mixture of penetrating type, works in the concrete body



ARENA SeamMaster PT

Suture waterproofing for the treatment of cracks, seams, joints and junctions



ARENA PlugMix PW

"Hydraulic plug" Instant liquidation of leaks even under water



ARENA PolyElast PE

Coating, elastic waterproofing mixture for surface treatment





Penetrating waterproofing

ARENA InMix PN

Intended for penetrating waterproofing of concrete and reinforced concrete surfaces

- ✓ penetrates with water into the body of concrete, forming in the pores and cracks water-insoluble crystals, the concrete base does not require drying
- ✓ increases the water tightness of the concrete itself by more than 3 steps
- ✓ for at least 400 cycles increases frost resistance and air resistance (alternation of alternating moistening and drying cycles)
- ✓ blocks pores and microscopic cracks in concrete with an opening up to 0.4 mm
- concrete becomes becomes waterproof, regardless of the direction of water pressure
- ✓ The surface of the processed structure remains in its original state, but acquires the property of "self-healing"





Penetrating waterproofing

ARENA InMix PN

Application area

- monolithic and composite concrete / reinforced concrete structures
- dams, swimming pools, hydroconstructions
- waterproofing of cellars, parking lots, bunkers, bomb shelters
- waterproofing of monolithic and composite septic tanks, wells, water tanks, including drinking water
- floor slabs, foundation slabs, cast foundations
- increases the service life of any concrete structures





seam sealing

ARENA SeamMaster PT

Intended for waterproofing of cracks, seams, communications inputs and joints

- high crack resistance and watertightness
- high adhesion to the substrate
- the mixture solution is non-shrinkable
- quick fixing strength of the mixture
- perfectly combined with penetrating waterproofing mixture ARENA InMix PN
- does not contain chlorides and sulfates, which can provoke corrosion of reinforcement and concrete





seam sealing

ARENA SeamMaster PT

Application area

- cold seams of monolithic structures
- junction of concrete and reinforced concrete structures
- any cracks in monolithic concrete structures with an opening of more than 0.4 mm
- inputs of communications and power elements
- for sealing technological holes in monolithic walls after removing the clamping bolts





"Hydraulic plug" leaks liquidator

ARENA PlugMix PW

Intended for instantaneous stop of active leaks

- √ instant setting (20 seconds)
- √ high water resistance at least W14
- ✓ the effect of expanding the already grasped mixture in the presence of water at the place of application of the mixture
- √ high adhesion with a repaired surface
- √ high frost resistance and air resistance
- ✓ works under water
- ✓ is not washed out.





"Hydraulic plug" leaks liquidator

ARENA PlugMix PW

Application area

- elimination of active filtration of water through concrete, brick, stone structures
- elimination of active leaks directly under water
- the ultrashort setting time of the mixture allows it to be used in the knots, where the remaining materials are washed out until it sets
- a mixture is also used to create a hydraulic lock on the communications leads, allowing the remaining space to be covered with more durable repair compounds





Coating, elastic waterproofing mixture

ARENA PolyElast PE

Intended for surface waterproofing of concrete and stone structures

- ✓ high water resistance to W18, efficiently operates with direct water pressure
- ✓ high frost resistance (up to F400) and air resistance (alternating cycles of humidification and drying)
- forms an elastic waterproofing concrete membrane, capable of perceiving insignificant deformations of the insulated surface
- high compressive strength, at least 45 MPa and adhesion to the substrate, not less than 2.8 MPa
- one-component, covered with water, applied to a moistened base
- economical and easy to apply





Coating, elastic waterproofing mixture

ARENA PolyElast PE

Application area

- waterproofing pools
- waterproofing of containers for storage of liquids, including for drinking water
- waterproofing of monolithic and composite foundations before backfilling of soil
- protection of concrete, stone, brick structures against moisture and aggressive media
- waterproofing of bathrooms (the material can be applied directly to the plasterboard, in the future, the installation of ceramic tiles directly on the waterproofing membrane)
- Protection of junctions of the blind area of buildings to the walls include asphalt covering
- waterproofing of hard roofing and its adjoining to metal, brick, asbestos cement structures



Comparison of the surface before and after mixture application ARENA PolyElast PE







treated with ARENA PolyElast PE in 1 coat

- original view
- ✓ untreated tile surface
- ✓ passes water
- ✓ uneven edges
- ✓ cracks

- ✓ waterproof concrete elastic durable membrane
- ✓ retained aesthetics, selected texture
- ✓ simplicity of application (brush with a maklovice)



INTEGRATED ADDITIVES FOR CONCRETE

FIELDS OF APPLICATION



- √ mines, tunnels, foundations
- √ dams, swimming pools, reservoirs
- ✓ underground parking
- √ bridge structures
- ✓ sea and river berths
- √ concrete dams



- √ treatment facilities
- √ underground structures
- √ basements
- √ storage of oil products
- √ vegetable stores
- √ concrete docks



- √ subways
- pumping stations
- Civil Defense and Emergency Situations
- ✓ concrete structures susceptible to chemical attack
- concrete structures exposed to radiation







ARENA BIMIX NS/PC

Multicomponent additive



ARENA EcoMix

Waterproofing additive

- ✓ increase water resistance of concrete at least 3 steps
- ✓ increase the grade of concrete at least 2 steps
- ✓ increase the brand frost resistance and corrosion resistance of concrete (from F400)
- √ increase the mobility of concrete
- ✓ it is added both to dry concrete mix, and to ready concrete in mixer



MULTICOMPLEX ADDITIVE

ARENA BIMIX NS*/PC**

Significantly improves the quality of the original concrete mix, increasing the properties of concrete by several orders of magnitude

- ✓ increases the water resistance of concrete more than 5 steps (W10)
- improves frost resistance and air resistance (change of alternating cycles of wetting and drying)
- ✓ saves up to 40% of cement in concrete
- ✓ allows you to achieve brand strength at 7 days
- ✓ obtaining concrete of increased strength and durability
- ✓ production of cast self-compacting concrete solutions
- ✓ increase of mobility of concrete mixture
- ✓ possibility of using in concrete for tanks with drinking water
 - * naphthosulfonate ** polycarboxylate





MULTICOMPLEX ADDITIVE

ARENA BIMIX NS*/PC**

Application area

- ✓ concrete distributing units, production of hydraulic concrete W10 +
- ✓ manufacturers of reinforced concrete products, fast-set strength, waterproof properties
- monolithic casting of building structures, fastest set of brand strength on the 7th day, reduction of construction time, early removal of the formwork
- ✓ monolithic casting of hydraulic structures
- production of structures for operation in difficult climatic conditions (sudden changes in temperature and humidity)
- ✓ Monolithic casting of structures with complex reinforcement
- ✓ Construction of waterproof screeds and floors
- ✓ Construction of caissons, septic tanks, channels, water distribution structures
- √ * naphthosulfonate ** polycarboxylate





WATERPROOFING COMPLEX ADDITIVE

ARENA EcoMix

Increases the quality of the original concrete mix, increasing the waterproofing properties by several orders of magnitude

- ✓ increases the water resistance of concrete more than 3 steps
- ✓ improves frost resistance and air resistance (change of alternating cycles of wetting and drying)
- √ reception of hydraulic concrete
- ✓ possibility of using in concrete for tanks with drinking water
- ✓ compatible with other additives





ARENA Repair Master R300

for restoration and repair of concrete structures



ARENA Repair Master R500

high-mark composition for restoration and repair of concrete structures



ARENA Repair Master R300 **LIQUID**

liquid for restoration and repair of concrete structures



ARENA Repair Master R500 LIQUID

liquid high-mark composition for the restoration and repair of particularly critical concrete structures



INDUSTRIAL APPLICATION



Repair of fences and concrete platforms

when carrying out repair and construction work to restore passenger platforms, station complexes, water drainage structures, crossings and concrete fences



Reconstruction of internal premises

when restoring the reconstruction of the geometry of various concrete structures inside buildings: staircases, ceilings and columns



Reconstruction of large objects

when repairing large concrete structures exposed to permanent aggressive environmental influences

Comparison of concrete construction before and after repair







original view

- old frame of concrete
- collapsing
- porous
- loose structure

reconstituted concrete ARENA Repair Master R500

- ✓ monolithic structure
- waterproof
- ✓ crack-resistant
- √ frost-resistant



Comparison of the concrete surface of the parking before and after repair







reconstructed surface with ARENA Repair

Master R300

- ✓ monolithic structure
- √ watertight
- ✓ flat
- ✓ durable
- √ frost-resistant

original view

- √ destroyed concrete foundation
- ✓ deep gauge
- √ loose structure of concrete
- √ heterogeneous coating





PRIVATE APPLICATION

- √easy to use
- √ excellent adhesion
- ✓ high strength in the early stages of hardening



Internal and external finishing of a private house



Restoration of the entrance to the parking lot



Reconstruction of concrete pavement of ventilation shafts



FAST HARDENING

ARENA Repair Master R300 **ARENA Repair Master** R300 **LIQUID**

for restoration and repair of concrete and reinforced concrete structures

- ✓ increased strength at the early stages of hardening
- ✓ compressive strength, 1/7/28 days, not less than 20/45/55 MPa
- √ frost resistance, at least cycles F300
- ✓ adhesion to the base, not less than 1.5 MPa
- ✓ easy to apply to vertical and ceiling surfaces
- ✓ possibility of application in high humidity conditions





HIGH QUALITY AND FAST HARDENING

ARENA Repair Master R500 **ARENA Repair Master** R500 **LIQUID**

HIGH QUALITY AND FAST HARDENING

- ✓ increased strength at the early stages of hardening
- ✓ compressive strength, 1/7/28 days, not less than 23/50/70 MPa
- ✓ frost resistance, at least cycles F400
- ✓ adhesion to the base 28 days, not less than 3.0 MPa
- ✓ non-shrinking
- ✓ possibility of application in high humidity conditions
- ✓ possibility of using in low-temperature conditions up to -10 °C (ARENA Repair Master R500 Winter)





ARENA Repair Master R300 **ARENA Repair Master** R500

Application area

- elimination of non-concrete and caverns of monolithic concrete structures on residential and industrial buildings
- restoring the geometric dimensions and strength characteristics of products in the concrete products factories, the color scale of the applied composition is indistinguishable from the color of the finished product
- structural repair and surface protection of concrete, reinforced concrete, brick and stone structures
- protection of reinforcing elements of reinforced concrete structures from the influence of aggressive media
- the device of surface waterproofing of brick and stone structures regardless of the direction of water pressure





SPECIAL CONCRETE COMPOSITIONS

OR WORK AT NEGATIVE TEMPERATURES OF UP TO -25°C

ARENA FastMix Hot30

self-heating fast-hardening composition

- ✓ high strength in the early stages of hardening: 2h 14-19 MPa, 24h 20-27 MPa.,
 28day 40 MPa
- increased frost resistance and air resistance (change of alternating cycles of wetting and drying)
- ✓ self-heating of the solution to 60°C
- ✓ high mobility of the final formulation
- ✓ Adhesion to the base 28 days, not less than 2.8 MPa
- ✓ the possibility of carrying out work with a composition in conditions of low temperatures without forced heating up to -25°C
- ✓ manual and machine application





SPECIAL CONCRETE COMPOSITIONS

FAST-HARDENING COMPOSITION

ARENA FastMix EasyHot8

self-heating fast-hardening composition

- ✓ increased strength at early curing times: 2h 6-8MPa 24h 18-20MPa
- ✓ increased frost resistance and air resistance (change of alternating cycles of wetting and drying)
- ✓ Adhesion to the base, not less than 1.5 MPa
- ✓ self-heating of the composition to 20°C
- √ high mobility
- ✓ manual and machine application





SPECIAL CONCRETE COMPOSITIONS



ARENA FastMix Hot30

self-heating fasthardening composition for work at temperatures up to -25°C



ARENA FastMix EasyHot 8

self-heating fasthardening composition

Application area

- √ filling of inter-panel joints of slabs and walls
- ✓ fast structural repair of concrete and reinforced concrete products
- ✓ repair of airfield coatings, including work at low temperatures
- ✓ grinding of junctions and cracks on concrete structures
- √ fastening of anchors in concrete structures



ARENA WallProtect CM Flexible concrete mastic







Brick wall after applying the composition



- Effectively works under direct water pressure;
- Resistant to mechanical damage;
- Has a high resistance to impact aggressive environment;
- Water vapor permeability; Efficiency;
- High adhesion and ability to perceive insignificant deformations of the insulated surface;
- Possibility drawing on a damp surface in the manual and mechanized way.
- **❖Requirements color can be matched**





WATERPROOFING STRUCTURES OF TARGETED APPOINTMENT

ARENA DryDeform WATERPROOFING HYDROGEN CORD

ARENA TopSL
Membrane-forming
impregnation
for concrete



- When the tourniquet becomes wet, it increases to 300%
- □ simple and quick application;
- prevents the release of dust from the concrete surface;
- ☐ increases surface resistance;
- ☐ resistant to wear and abrasion;
- does not require preliminary preparation;



QUALITY CERTIFICATES

and test reports



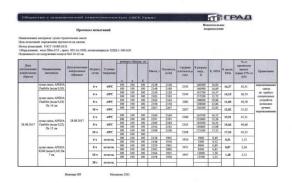














WE ARE TRUSTED















































Thank you for your attention!