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# ELECTROLYSIS TECHNOLOGY OF WATER TREATMENT



# Electrolysis of water purification technology able to:

- protect your equipment from scale and oxygen corrosion process
- work on water for complete disinfection and bacteriological treatment
- reduce the consumption of the coagulant at filter stations etc.

Problems of	Objects	Water consumption	Technology solution	Description of technology
Scaling and deposits on the heating surfaces of boilers and heat exchangers	mini-boilers, car washes, office and shopping centers, individual heating in apartments and cottages	Up to 25 m3/ h	Mini-RAU	Guaranteed full protection of heat equipment and industrial cooling systems from oxygen corrosion and scale are significantly lower (10%) reduction in fuel consumption, improve environmental performance, there is no need for chemical water treatment hot-water boilers, reusable increases their service life without repairs
Scaling and deposits on heat exchange surfaces of heating and cooling industrial equipment	Boilers, compressor stations, refrigeration equipment, equipment of metallurgical and engineering plants.	25-300 m3 / h	RAU	
Scaling and deposits	Turnaround cycle industrial cogeneration plants and thermal power plants	From 1000 - 10,000 m3 / h	EPSE	Guaranteed full protection of heat equipment from scale, lower unit costs (heat, electricity, etc.), reduction of production costs.
Biological and bacteriological contamination of drinking water	Food production, schools, hospitals, offices and shopping centers, apartments and houses	1 -1000 m3 / h	ELYZ	Allows to ensure complete disinfection of water for standards of hygienic requirements for drinking water intended for human consumption without the use of chemical provides an improvement under other parameters, making the water much better for the consumer .
Biological and chemical contamination of sewage and groundwater mining	Mines, water wells	1 m3 / h and higher		
Consumption of coagulant	Filtration plant	of 100-500 I/h	ESARK	Technology activate the coagulant in water filtration systems and significantly reduce (up to 50% the cost of clean water through the use of activation of coagulant solution.



## Model of equipment:

- 1. Power and control.
- 2. Graphite / ORTA anodes.
  - 3. The reactor module.

#### **PROTECTION AGAINST SCALE AND MINERAL SEDIMENTS**



#### **REGIONAL SPORTS COMPLEX "LOCOMOTIVE", DONETSK**







Assembling RAU at boiler in the RSC "Locomotive", Donetsk

#### **DONETSK RAILWAY STATION**



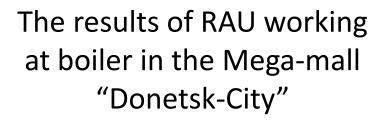




## RAU at boiler in the Donetsk Railway Station

#### **MEGA-MALL "DONETSK-CITY"**









#### ILYICH IRON AND STEEL WORKS, MARIUPOL, DONETSK REGION





Examining the work of first RAU prototype protecting the steam heat exchangers for hot water on «Ilyich iron and steel works»

Scale deposit occurs in the reactors RAU, but not in the pipes and equipment



The type of deposition of scale into reactors of RAU after 2-3 weeks of work





# Weight scale extracted from the RAU is about 25 kg



Type of sediment - friable

#### MINI-RAU FOR INDIVIDUAL CUSTOMERS

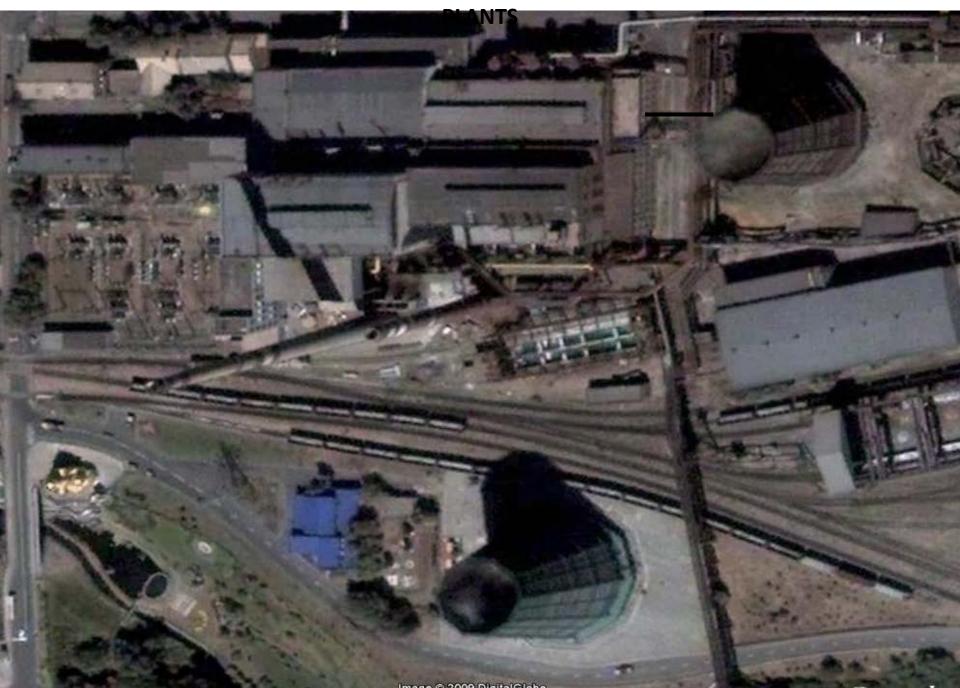




Mini-BAU designed to protect against scale of pipes and appliances in homes, cottages, etc.

The results of the work after 4 days at the cottage

## CURRENT CYCLES OF INDUSTRIAL ENTERPRISES, POWER PLANTS AND THERMAL POWER



#### TECHNOLOGY 'EPSE' PROTECTION-TURNAROUND CYCLE INDUSTRIAL ENTERPRISES



The project design and installation of «EPSE» 5000 m3/h at a negotiable cycle at thermal power station and steam blowing (HPP-PVA) at «Donetskstal»-Iron & Steel Works»

#### PROTECTION OF BIOLOGICAL AND BACTERIAL CONTAMINATION OF DRINKING WATER, MINE WASTE AND GROUND WATER



#### Chocolate Factory «Kraft Foods», Trostyanets, Sumy region





Bacteriological water purification technology "ELIZ" for cycle for the production of chocolate «Kraft Foods», g.Trostyanets



# ANALYSES OF WATER BEFORE AND AFTER "ELIZ", GORKY MINE, GORLOVKA, DONETSK REGION.



The analysis results confirm the ability of technology to ensure complete disinfection of water for industrial purposes and for human consumption.



The Corporation "PromEconomService" deals with scientific and technical development and introduction of new energy-saving and nature-conservative technologies.

The Corporation "PromEconomService" carries out:

 inventive activity, creation, use and introduction of technologies, inventions, utility models;

Icensing activity on all the aspects of intellectual property rights;

•carrying out works providing usage and application of energy-saving and natureconservative technologies;

•design, production, assembling, checkout, after-sales service of the licensed technologies and inventions.

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