



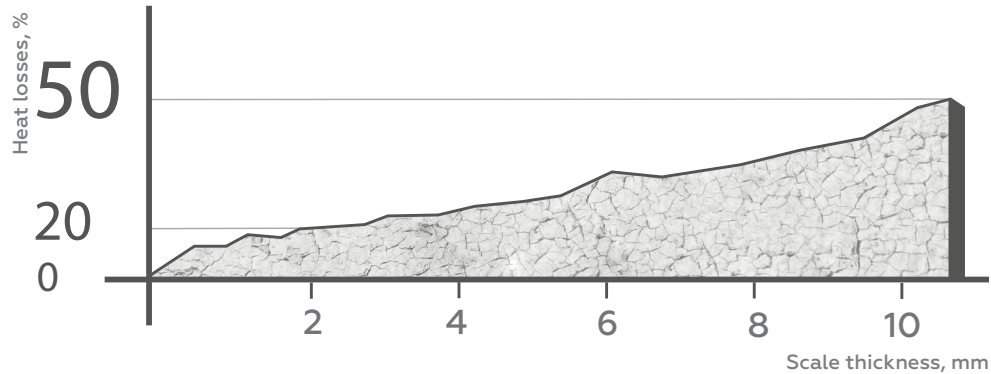
WATER TREATMENT TECHNOLOGIES
SCIENTIFIC RESEARCH AND DESIGN INSTITUTE



POLYPHOSPHATE FREE

www.svod-as.com

HEAT LOSSES DURING TRANSFER THROUGH A HEATING SURFAC



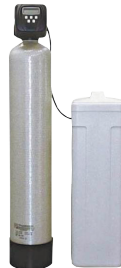
EXISTING WAYS OF PROTECTION FROM SCAPS

POLYPHOSPHATE FILTER



The active substance is a polyphosphate salt. Granules of polyphosphate, dissolving in water, bind the ions of calcium and magnesium - thus preventing their loss in the form of a precipitate on heating.

SODIUM CYCLE FACILITY



Principle of operation: extraction from water hardness ions - calcium and magnesium, and replace them with sodium ions.

MAGNETIC FILTER


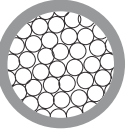




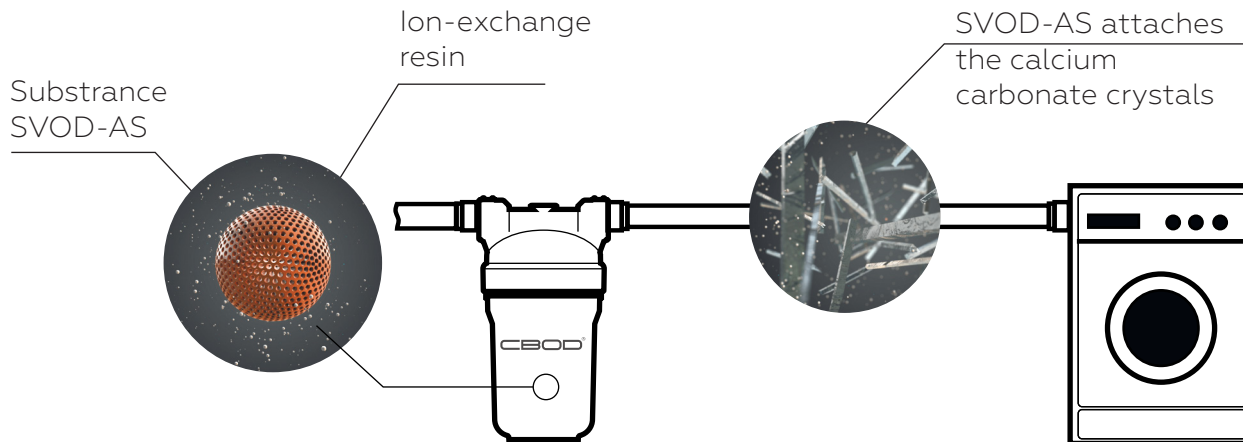
Magnetic filters affect on calcium bicarbonate ions, not allowing them to join together to form calcium carbonate in the form of calcite - scale

COMPARISON WITH OTHER SCALE PROTECTION METHODS

Water softener (sodium cycle) and polyphosphate filler filter are the traditional ways to do away with scale.

Here is the comparison between these ways and innovative concept SVOD-AS

POLYPHOSPHATE FILTER	SVOD-AS FILTER	SVOD-AS FILTER	SODIUM CYCLE FACILITY
			
<ul style="list-style-type: none">- Low capacity- Operating environment temperature up to 45 °C- It's effective if water hardness is up to 7 units- Doesn't remove existing scale- Can provoke allergic reactions, negatively affect the environment- Filtered water is undrinkable, it becomes feed water	<ul style="list-style-type: none">+ High capacity+ Operating environment up to 105 °C+ It's effective if water hardness is up to 34 units+ Removes previously existing scale delicately+ It's safe for wildlife and man's health+ Filtered water remains in accordance to all-Union State Standard "Drinking water"	<ul style="list-style-type: none">+ Compact size+ NO electrical energy consumption+ The user can install it himself+ NO water excess+ Easy service. It can be changed (after capability depletion) by user himself+ It doesn't need regeneration	<ul style="list-style-type: none">- Takes much space- Consumes electrical energy- Specialist is required for installation- Water excess up to 7% (for regeneration)- Service is required- It requires some consumable products for regeneration constantly (sodium chloride)



To the note: inhibitor (Latin inhibere - delay) - a substance that slows or prevents the course of any chemical reaction: crystallization of salts, metal corrosion, aging of polymers, etc.

ANTI-SCALE FILTER "SVOD-AS" FOR WASHING MACHINES, DISH-WASHERS AND FOR BOILERS, INSTANTANEOUS GAS WATER HEATERS



sf 100b

for boilers and
instantaneous gas
water heaters

- Protects the heating element from scale formation and other deposits. Prevents rubber sealants from early wear and tear. Prolongs service life of equipment.
- Improves clothes- and dish-washing quality. Reduces chlorine and hydrogen sulphide activity, decreases concentration of heavy metals and suspended solids.
- Saves up to 20% of electricity and up to 30% of detergent means, and they amount nearly 20 packs (0,45 kg each) of powdered laundry detergents;
- Provides reliable protection within the certified life-span or service life: 300 cycles of wash or 1 year of operation.
- Entirely excludes necessity in anti-scale agents, in such a way it significantly decreases the costs of each wash.
- Safe for human health. It is environmentally friendly.

Life span 15 000 l*

Conjoint dimensions:

3/4"

Filter performance:

1,5 - 3 m3/p.h.

Filler volume:

100 ml ± 3%

Hight:

135 mm

Diameter:

68 mm

Working pressure:

till 0,6 MPA (6 kg/cm³)

Temperature of treated water:

+5 ... +40 °C

Working temperature of water being heated: +5 ... +105 °C

*Subject to correspondence of water to GOST «Drinking water»



sf 100w

for washing machines
and dish-washers



sc 100

Changeable set for anti-scale filters "SVOD-AS" (100 ml) sc100

Instructions for use:

After dismantlement of the filter carefully remove the exhausted filler and filter pieces.

Then rinse the body and assemble by analogy changing the filler, filter pieces for new ones.

When installing into the system install new silicon pads which are included into the set.

Your filter is ready to protect You from scale again!

Set parts:

Filler "SVOD-AS" - 100ml ± 3%

Necessary pads and sealers.

FILTER WITH THE CARTRIDGE "SVOD-AS" FOR HEATING SYSTEMS

ST250

Professional anti-scale filter for heating systems with the removable cartridge SVOD-AS.

The filler SVOD-AS has proved itself for a long time as reliable protection, being unrivalled in the width and variety of application ways in provision of nonscale forming condition of operation for water heating equipment.

We have expanded the scale and have produced the flasks of new generation with connection "SMART-CONNECT" for our cartridges.

For installation of the flasks we have provided the holes for connecting with supporters from both sides of the cover (it allows to install the filter in any convenient for You position with water inlet either from the left or from the right side).

Life span 42 000 l *

Filler volume:	250 ml ± 1%
Filter performance:	1", ½", ¾"
Hight:	180 mm
Diameter:	95 mm
Working pressure:	till 0,6 MPA (6 kg/cm ²)
Temperature of treated water:	+5 ... +40 °C
Working temperature of water being heated:	+5 ... +105 °C

*Subject to correspondence of water to GOST «Drinking water»



Connection options



ST250(L½), (L¾)

Brass thread
connection diameter 1/2" or 3/4"



After the expiration of the
resource filter purchase
changeable cartridge "SVOD-AS"

s250

ANTI-SCALE FILTER FOR DOUBLE-CIRCUIT BOILERS AND WATER HEATING EQUIPMENT WITH THE REMOVABLE CARTRIDGE "SVOD-AS"

Anti-scale filter for double-circuit boilers and water heating equipment with the removable cartridge SVOD-AS.

The filler SVOD-AS has proved itself for a long time as reliable protection, being unrivalled in the width and variety of application ways in provision of nonscale forming condition of operation for water heating equipment. We have expanded the scale and have produced the flasks of new generation with connection "SMART-CONNECT" for our cartridges.

For installation of the flasks we have provided the holes for connecting with supporters from both sides of the cover (it allows to install the filter in any convenient for You position with water inlet either from the left or from the right side)

Life span 70 000 l*

Filler volume:	400 ml \pm 1%
Filter performance:	1", 1/2", 3/4"
Height:	316 mm
Diameter:	115 mm
Working pressure:	till 0,6 MPA (6 kg/cm ³)
Temperature of treated water:	+5 ... +40 °C
Working temperature of water being heated:	+5 ... +105 °C

*Subject to correspondence of water to GOST «Drinking water»



After the expiration of the
resource filter purchase
changeable cartridge "SVOD-AS"

The cartridge data set is suitable
for all types of similar flasks - 10"

s400

ST400



Connection options



ST400(L1/2), (L3/4)

Brass thread

connection diameter 1/2" or 3/4"

SVOD as BIG BLUE

BB 100



Life span
2500 m³

BB 20



Life span
525 m³



CARTRIDGE

BB 10



Life span
262 m³



CARTRIDGE

Anti-scale filters (BB) are designed to protect the surface of heat exchange from corrosion and scale (and remove previously formed), as well as to purify water from heavy metals and impurities. BB filters are suitable for professional use. It is advantageous to use them in large heating systems, where the payback is provided by a large resource.

All the flasks and cartridges it maybe to purchase separately.

ECOFILTER against scale for washing machines

Effective, environmental friendly!

Balanced formulation of hardly soluble pills allows to strive for stopping of corrosion process and formation of scale on the THE (Tubular Heating Element) and in the washing machine's drum.

It is very easy to use. If you set up it you can forget about scale for 10 months and forget to use additional emollient. After termination of service the filter and filler are exchanged. They gladden customers and washing machine their care and preserving!

Resource 300 washes

Filler volume:

Temperature of treated water:

Working temperature of water being heated:

Working pressure:

Filter performance:

Working lifespan:

100 ml

+5...+30 °C

+5...+90 °C

till 0,6 MPA (6 kg/cm³)

3/4"

10 months



400 ml



200 ml

**At the end of the filter life,
purchase a filler against
the scale for filters**

It suits for analogous flaks of any producers

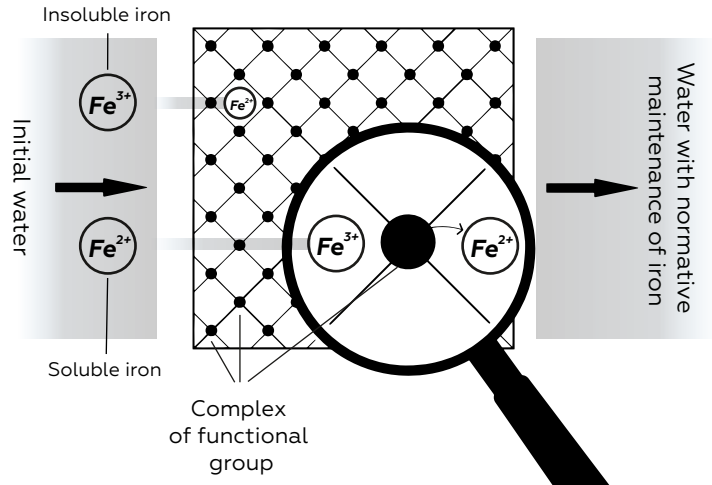
SVOD[®]

DEFERRIZATION

Iron is obligatory component part of natural water, as it enters in the complement of different soils and breeds water flows on that. High maintenance of iron in plumbing is related to different reasons. In plumbing these admixtures get as a result of corrosion of pipelines or use on the stations of водоподготовки of ferriferous coagulants, and in artesian waters - in investigation of ferriferous minerals. The table of contents of iron in a drinking-water must not exceed 0,3 mgs/l.

PRINCIPLE of ACTION of filters "SVOD" DEFERRIZATION

A unique filler for the filter is an inert, hydrophilic, structured material with a developed surface. The source material is treated to form on its surface a complex of functional groups. The number of these groups allows for the maximum extraction of iron compounds in any form (iron oxides, iron salts and other compounds). As water passes through the filter, the functional group capture and transfer iron to water-insoluble compounds, which are mechanically filtered out and remain on the surface of the filtering element. Thus, the filter reduces the content of iron in water up to normative parameters (0.2 - 0.3 mg/l) and also removes manganese.



COMPARISON WITH OTHER HOUSEHOLD FILTERS

In extraction of iron from water

GRANULAR FILTER MATERIAL 10"



- Service life up to 2000 liters
- At an iron content of over 2 mg/l it does not work

"SVOD" Deferrization 10"



- + Service life up to 70 000 liters
- + Effective with any indicator of iron

ALKALI PRECIPITATION OF IRON 10"



- Service life up to 2000 liters
- When the content of iron is more than 1 mg/l it does not work

"SVOD" Deferrization 10"



- + Compact size
- + NO energy consumption
- + The possibility of self-installation
- + NO excessive use of water
- + Affordable price
- + The possibility of independent replacement of the cartridge after the exhaustion of the life span



INSTALLATION OF DEFERRIZATION (with granular filtering materia)

- Takes a lot of space
- Requires power supply
- A specialist for the connection
- Excessive use of water up to 7% (for regeneration)
- The high price
- Service support is necessary

CONDITIONING WATER FILTER "SVOD" DEFERRIZATION WITH REPLACEABLE CARTRIDGE

FT10

Conditioning water filter "SVOD" Deferrization FT10 is designed to remove iron from tap water.

As a result of applying the filter there reduces the content of ferrous and ferric iron to the required indices (0.2-0.3 mg/l), manganese is removed in the water, prevents the formation of rusty stains on plumbing fixtures, a metallic smell and taste is removed from water.

Filter protects appliances and plumbing from premature repair

Recommended to install the purification system of drinking water after the mechanical filter.

Life span 70 000 l *

Filler volume:	400 ml± 1%
Filter performance:	1", ½", ¾"
Hight:	316 mm
Diameter:	115 mm
Working pressure:	till 0,6 MPA (6 kg/cm³)
Temperature of treated water:	+5 ... +40 °C

*Subject to suitability of water to GOST "Drinking water"



**After the expiration of the
resource filter purchase
changeable cartridge**

**The cartridge data set is suitable
for all types of similar flasks - 10 "**

Connection options



FT10(L½), (L¾)

Brass thread

connection diameter 1/2" or 3/4"

F10

FILTER AND CARTRIDGE OF CONDITIONING OF WATER

"SVOD-AS" + DEFERRIZATION

The filter is designed to protect heat exchange surfaces from scale and corrosion (including removal of previously formed ones), as well as to reduce the iron content in the water and to remove manganese from water.

The filter cartridge consists of two modules, which provides two-stage protection of heating equipment:

The first stage is deferrization module:

provides reduction of the content of iron in the water. It removes from the water insoluble (ferric) iron, also transfers the soluble (ferrous) one to insoluble form and filters it. Thus, a decrease in the iron content in the water to the required indices (0.2 - 0.3 mg/l) occurs and manganese is removed.

The second stage is anti-scale module "SVOD-AS":

provides protection of heating elements of all types from scale formation and other deposits. It destroys the previously formed scale.

As a result of applying the filter with the cartridge ST250/F5 scale is not formed, the heat exchange surface is not overgrown with rust, service life of water-heating equipment and plumbing increases, and the consumption of gas and electricity is saved.

ST250/F5

Life span 42 000 l *

S250/F5

Filler volume:	400 ml± 1%
Filter performance:	1", 1/2", 3/4"
Height:	316 mm
Diameter:	115 mm
Working pressure:	till 0,6 MPA (6 kg/cm ³)
Temperature of treated water:	+5 ... +40 °C
Working temperature of water being heated:	+5 ... +105 °C

*Subject to correspondence of water to GOST «Drinking water»

Connection options

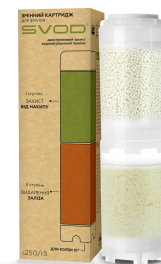


ST250/F5(L½), (L¾)

Brass thread

connection diameter 1/2" or 3/4"

The cartridge data set is suitable for all types of similar flasks - 10 "



WATER TREATMENT TECHNOLOGIES SCIENTIFIC RESEARCH AND DESIGN INSTITUTE



The Water Treatment Technologies Scientific Research and Design Institute has been established in 1999 in Severodonetsk, Lugansk oblast.

The company is specialized in development and production of the water treatment units. The set tasks are accomplished by a friendly team composed of one hundred and fifty various specialists.

The institute technical base includes the modern laboratories, design agency, research center, innovations departments and supporting services. The company maintains the quality management system in accordance with DSTU ISO 9001:2015.

During its operation the institute proved to be a reliable manufacturer of modern products meeting all environmental standards.

In 2004 the institute has become the laureate of the 100 Top Ukrainian companies rating in the Industrial Ecology, Energy and Resource Saving nomination.

SVODE

saves

*appliances
energy
environment*