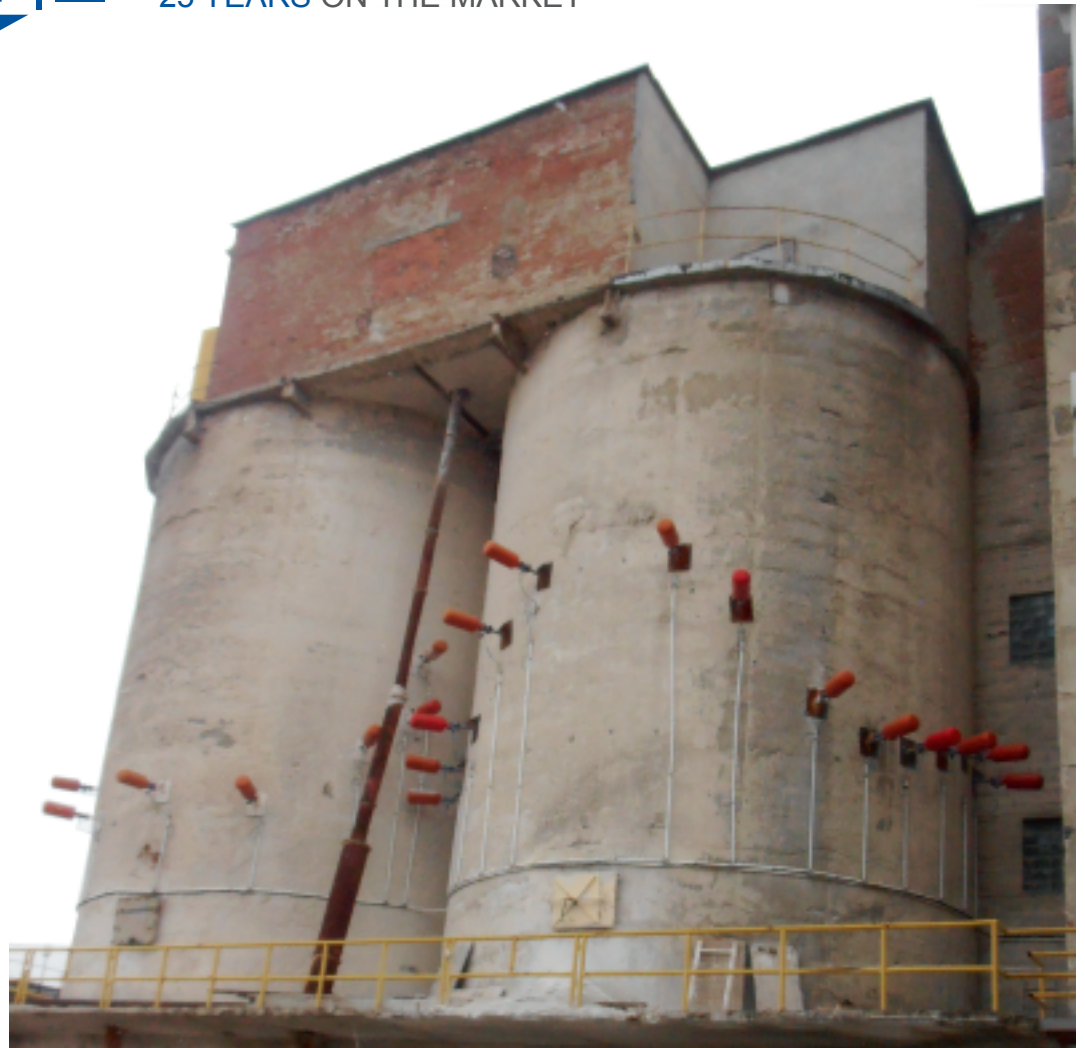




ISTA-3™ AIR CANNONS

OUR EXPERIENCE IS MORE THAN 1000 PLANTS
25 YEARS ON THE MARKET

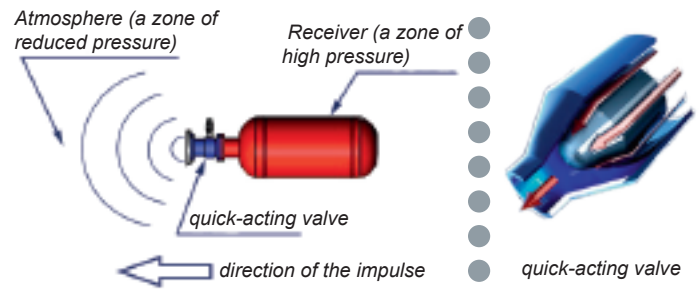


Pneumatic impulse system based on ISTA-3 aircannons
is an effective solution of hang-up of loose material problems

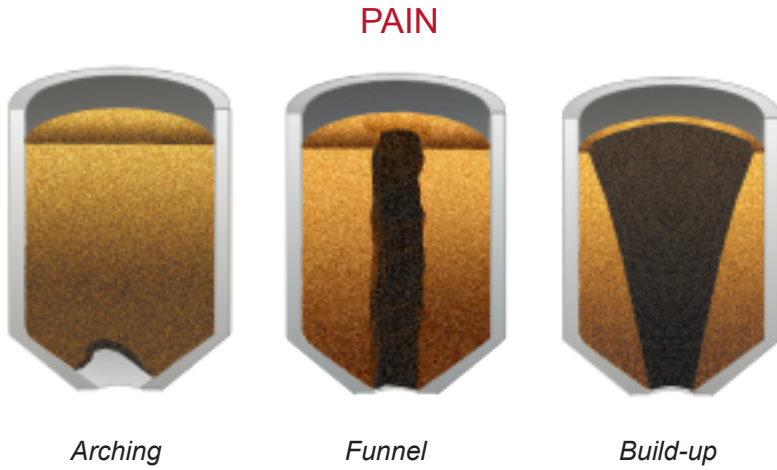
www.ista-pneumatics.ru

The concept of an effective work of the ISTA-3 air cannons

ISTA LLC has invented and patented **quick-acting pneumatic valve** in Russia, USA and Germany, based on SVT[®] technology (speed valve technology), which is more effective than other turns the energy of the compressed air into the impulse.



The pain and solutions



blow to the body of the bunker

- Sledgehammer
- Industrial Vibrators
- Magnetic impact device

The photo shows damaged walls of the bunker, which are encouraged by mechanical effects



ADVANTAGES OF THE AIR CANNONS ISTA-3

Air cannons act directly on the bulk material inside the bunker

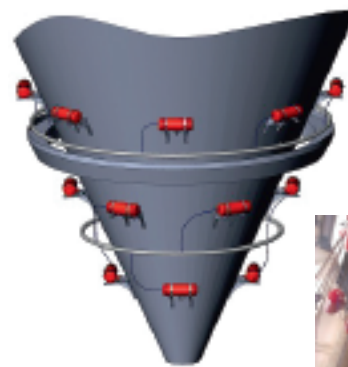
Effective and do not destroy the bunker

Draw up the CUSTOM DESIGN



Our customers with a normal air handling operate air cannons ISTA-3 for **20 years** and more

Up to 20 years of operation
8 000 equipped bunkers
More than 1 000 regular customers



We are ready to create tailored solutions from the simple one to enterprise APCS integrated.

Each order **customer's design** and all necessary documentation is included.

The complete set of certificates and permits are allowed to use the devices in ANY MANUFACTURE

Air cannons ISTA-3 is easy to maintain!!!



ISTA LLC manufactures a line of air cannons with a different power

THE OPTIMAL SOLUTION TO ANY SILO OR BUNKER

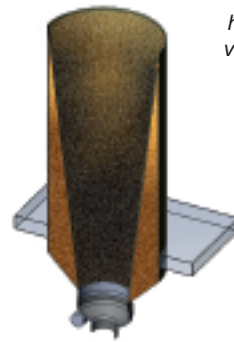


Combination of air cannon system with other methods (for example with vibrating bottom)



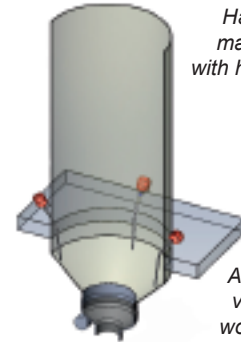
Vibrating bottom eliminate hang-up of loose material at the bottom of a hopper mainly while hang-up on vertical walls still exist.

With air cannon ISTA-3 this problem can be solved.



hang up on vertical walls

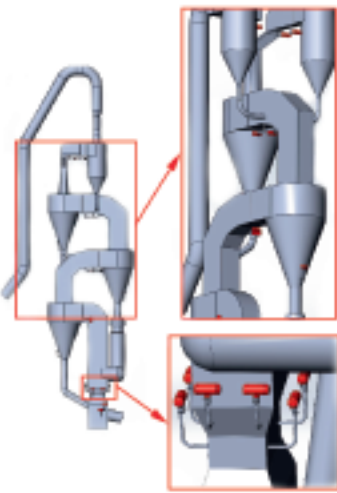
Vibrating bottom



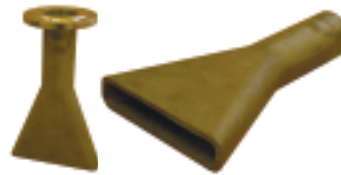
Hang up of loose material eliminate with help of air cannons

Air cannons and vibrating bottom work cooperatively

Examples of projects based on air cannons ISTA-3 for the cyclone heat exchanger



Project of LLC ISTA for cyclone heat exchanger

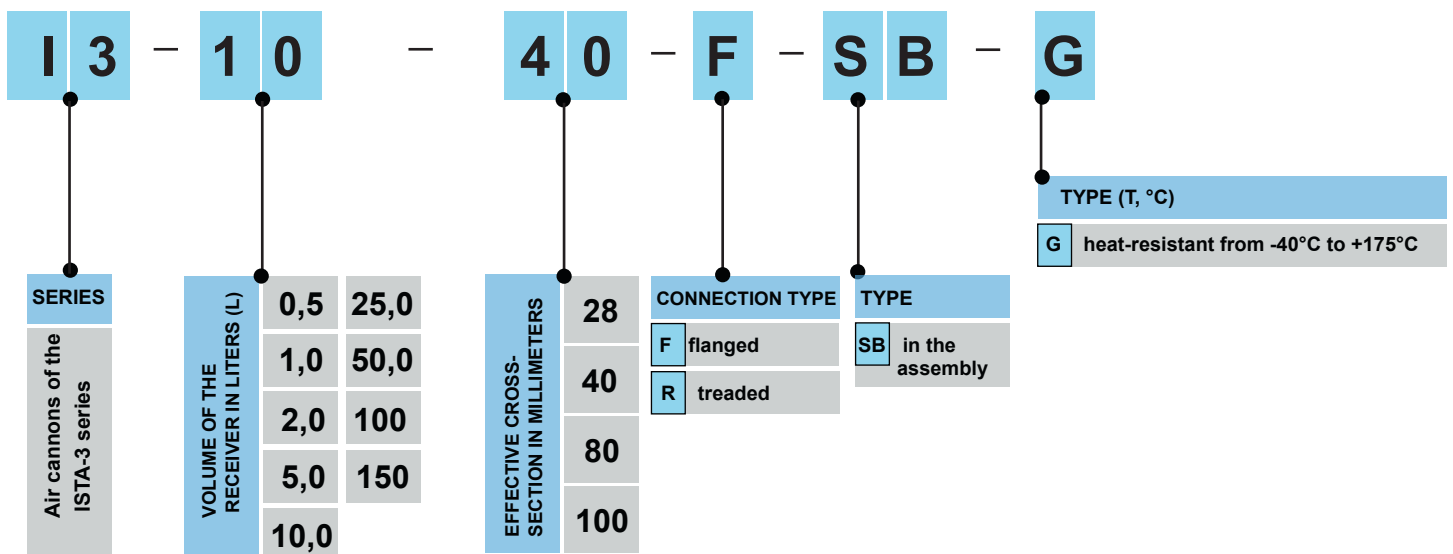


At the customer's request refractory nozzle can be supplied (it is connected with the trunk of air cannon)







Declogging system based on air cannons ISTA-3 eliminate hang-up in boilers, flue of heat exchangers and etc.







Marking

The air cannons of the ISTA-3 series have the following markings: I3 - a series of the air cannons; 0,5 - 150 - volume of the receiver in liters; 28-100 - effective cross-section in millimeters; "R" or "F" describes the connection type, threaded or flanged; SB is the product in the assembly, G - heat-resistant from -40 °C to +175 °C.

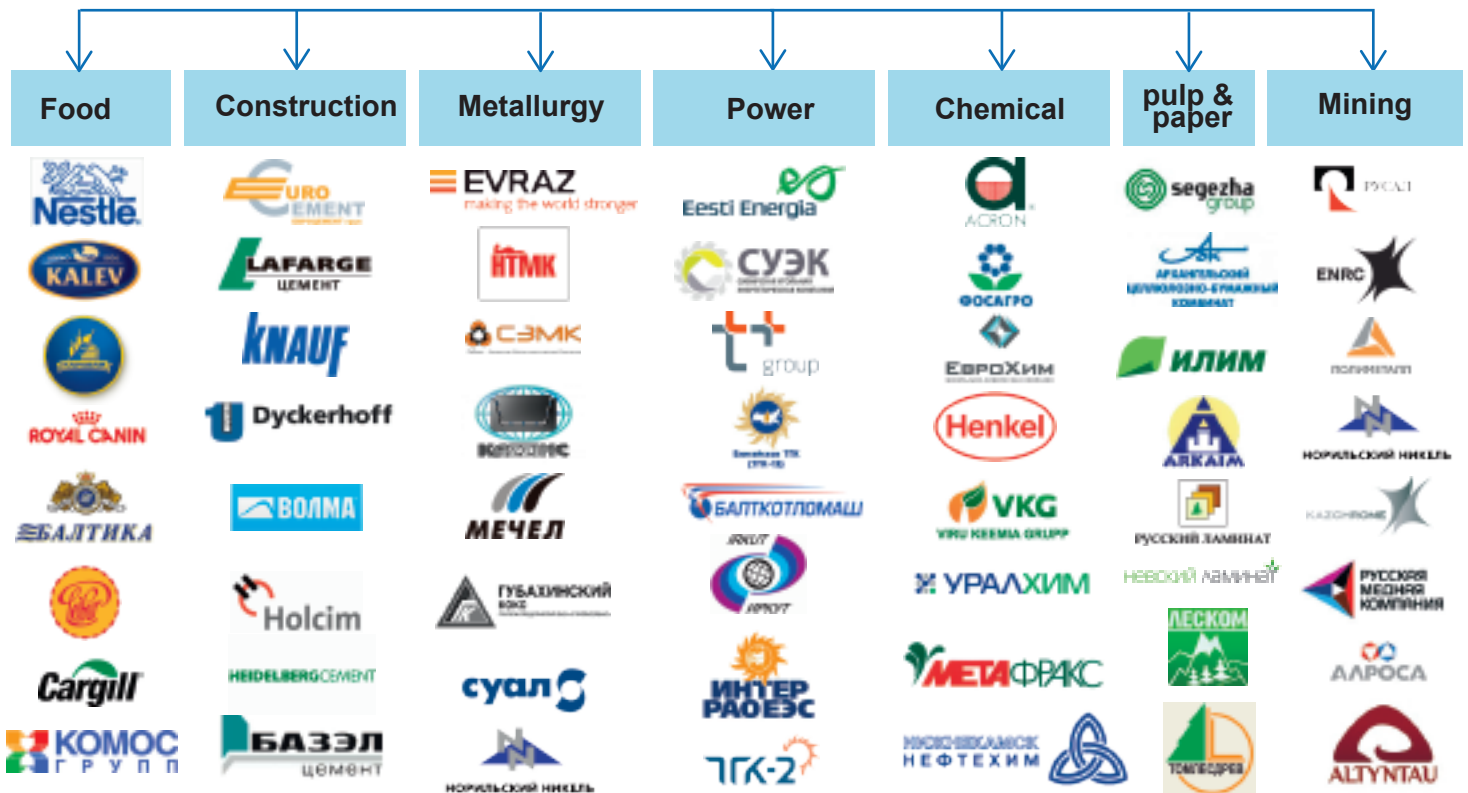


Types and sizes of the air cannons ISTA-3

Receiver capacity	0,5 l	1l	2l	5l	10l	25l
H, mm	230	170	220	280	360	760
D, mm	90	180	180	250	250	250
Weight, kg	3	1,5	3,2	4,6	6,2	17,0
Flow area,mm	40	28	40	40	40	40
View						
Vendor code	I3-005-40-R-SB	I3-01-28-R-SB	I3-02-40-R-SB	I3-05-40-R-SB	I3-10-40-R-SB	I3-25-40-F-SB

Receiver capacity	50 l	50l	50l	100l	100l	150l
H, мм	650	650	650	730	730	1700
L, мм	800	900	900	1030	1030	550
Weight, kg	30,0	53,0	53,0	65,0	65,0	75
Flow area,mm	40	80	80	80	80	100
View						
Vendor code	I3-50-40-F-SB	I3-50-80-F-SB	I3-50-80-G-F-SB	I3-100-80-F-SB	I3-100-80-G-F-SB	I3-150-100-F-SB

Industry and customer examples



Bunkers and silos

Often during transportation and storage of various bulk materials in the bunkers (silos), it occurs the hanging of the material. Bulk material hanging in bunkers makes it difficult to unload, may cause a decrease of productivity of the whole line (or even its stopping), product degeneration, which causes serious material consequences.

The ISTA-3 air cannons automatically remove formed deposits and prevent the emergence of strong hanging of the material.



Cyclones, flues, bag filters



The exhaust gas, contained various small particles, passes through the mechanical cleaning stages, for example in the units such as cyclones. Gas passes through the cyclone, with deposits accumulating in the various internal parts of the housing, which subsequently reduce the speed of the gas flow and, consequently, the cleaning.

Systems based on the ISTA air cannons allows automatically eliminate such deposits, impulsive clean the bag filters, effectively unlock the flues without stopping the production or switching to a backup cleaning system.

Heat exchange surfaces of boiler units

During the combusting the various types of fuel in boilers, combustion products contain ash small parts, which settle down on the radiation and convective surfaces of the boiler units heating and heat exchangers. These deposits significantly reduce the heat transfer, and accordingly the efficiency of the installation.

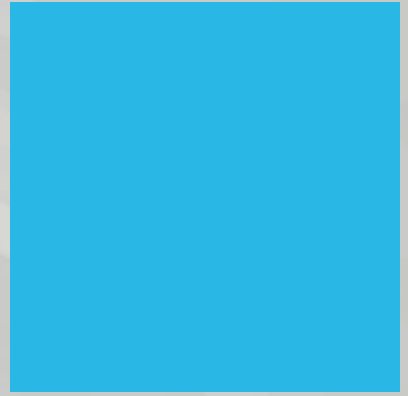
The use of the ISTA-3 aircannons makes it possible to replace the labor-intensive expensive dangerous manual operations for cleaning the boiler heating pipes, reduces dramatically the number of boiler stops for preventive measures, and increases the efficiency of the unit.



Combining the system



If at the facility, equipped with an industrial vibrator, vibrating bottom or polymer spraying, the problem of bulk material hanging is not solved completely, we recommend to do without its dismantling, and to supplement the existing system with the ISTA-3 tm air guns. Such a combined systems produced good results on a number of facilities.



Contacts:



195220, Saint-Petersburg, Gjatskaya street, 27A



8 (812) 294-84-48; 8-812-456-04-53



ista@ista-pneumatics.ru

