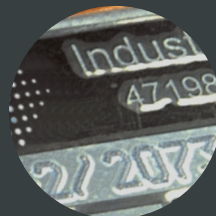
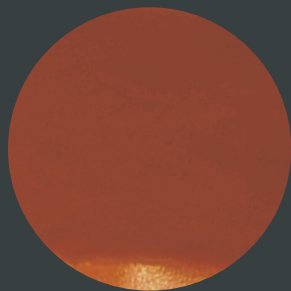


VSR BLASTER® AIR CANNONS

FOR PNEUMATIC ACTIVATION
OF BULK MATERIALS
IN SILOS, BUNKERS AND
PROCESSING PLANTS.



Industrietechnik GmbH

A photograph of an industrial air cannon system. On the right is a large orange cylindrical tank labeled 'VSR BLASTER Luftkanone'. To its left is a grey horizontal pipe assembly with a yellow warning triangle (flame symbol) on its vertical section. The background is dark.

VSR BLASTER®

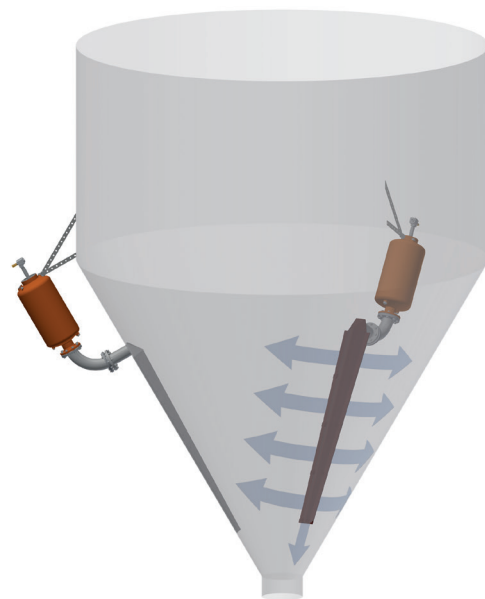
THE PULSE OF YOUR PRODUCTION

Maximum System Availability

Process Reliability. Future Readiness.

Material blockages, build-ups and unplanned downtime are the biggest enemies of efficient production.

With VSR BLASTER® air cannons, you keep bulk materials moving and ensure the continuous flow throughout your system – powerful, precise and reliable.



Eliminate Discharge Disruptions

The VSR BLASTER® removes bridging, ratholing, and build-ups using targeted shots of compressed air – reliably, safely, and without manual intervention. Suitable for use in silos as well as in preheaters, flue gas ducts, and ATEX environments.

Maximum System Availability

Our robust air cannons ensure uninterrupted 24/7 operation while minimizing maintenance effort and unplanned downtime.

Future-Ready for New Materials

Whether for circular economy processes or alternative fuels, the VSR BLASTER® prepares your system for the demands of today and tomorrow.

Stable Processes for Consistent Quality

A continuous material flow ensures stable dosing, reproducible results, and high product quality.

Technical Excellence for Your Success

Rely on technology proven worldwide. The VSR BLASTER® is more than just a component – it's your assurance of a continuous and reliable production flow.

REQUEST NOW & SECURE YOUR OFFER!

**Contact us today for a
personalized analysis of
your system.**

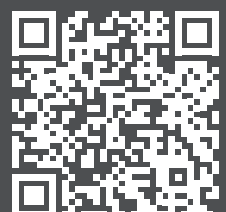
VSR Industrietechnik GmbH

**Am Alten Schacht 6
D-47198 Duisburg**

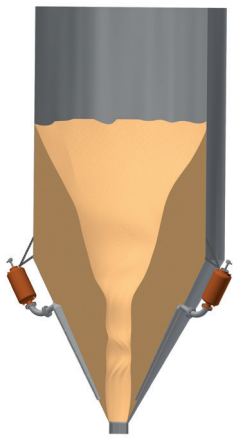
**TEL.: +49 (0) 2066 9966 30
info@vsr-industrietechnik.de**

www.vsr-industrietechnik.de

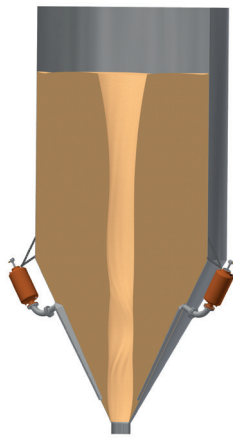
**HERE IS THE
DIRECT LINK
TO OUR WEBSITE:**



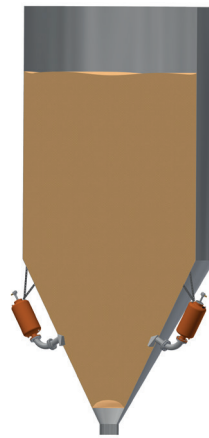
TYPICAL PROBLEMS & SOLUTIONS



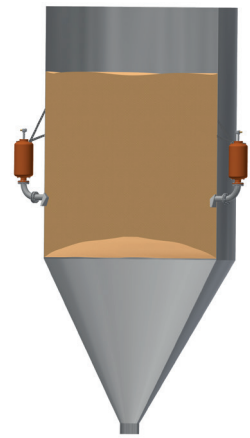
Funneling



Ratholing



Bridging



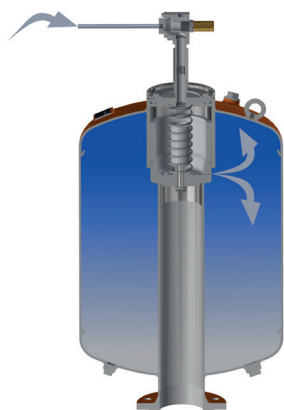
Arching

Effect

The VSR BLASTER® air cannon releases a powerful blast of compressed air directly into the critical areas of silos, hoppers, and heat exchangers. This powerful burst of energy breaks up material build-up and overcomes static friction, restoring the free flow of material under normal gravity.

Air is discharged directly into the material through a straight nozzle or, alternatively, through a Fan Jet Blow Nozzle or an Isobaric Sword Nozzle to distribute or concentrate the force in specific areas.

HOW THE VSR BLASTER® WORKS



Filling

Compressed air is supplied to the quick exhaust valve through a small filling and control piping via a 3/2-way hand valve or solenoid valve. The diaphragm in the quick exhaust valve closes the 18 mm outlet. The compressed air flows along the diaphragm into the piston chamber. The outlet pipe is closed by a piston, which is pre-tensioned by a spring. The compressed air flows through the piston into the vessel which is then filled. When the operating pressure is reached the vessel is ready for use as required.



Release

When the control valve is switched, the air supply is interrupted and the control line is vented. The diaphragm in the quick exhaust valve returns to its original position and vents the piston chamber. The pressure acting on the annular surface of the piston lifts it off and the air then acts on the entire piston surface, which is more than twice the size of the discharge cross-section. The piston retracts abruptly and, after only a short way, fully opens the entire flow cross-section without any throttling losses. The stored air is then released explosively within milliseconds through the discharge pipe into the silo. Finally, the piston is pushed back into its initial position by the preload spring, preventing material from entering the pressure vessel when the system is depressurized.

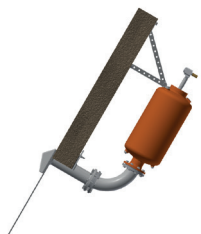
AIR CANNONS MOUNTING DETAILS

VSR BLASTER® air cannons can generally be installed on all types of bunker constructions. In silo batteries, they are mounted beneath the silos, while in stockpile discharge systems they are installed in the discharge tunnel.

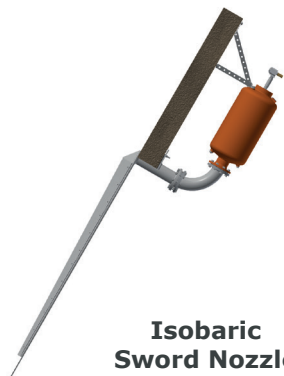
Holes are drilled in the walls near the critical low-flow zones. Pipe sockets are fixed in these openings, using flange plates in the case of concrete walls.

On the inside, these are connected to pipe extensions or discharge nozzles. On the outside, the air cannons are then flange-mounted, if necessary with pipe bends, and secured with suspension devices.

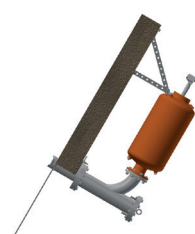
Depending on the specific application, the air is discharged either directly or through angled outlets, Fan Jet Blow Nozzles or Sword Nozzles.



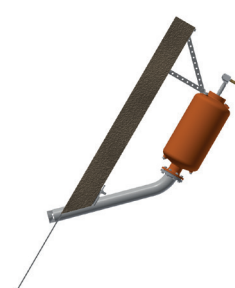
**Fan Jet Angle
Nozzle**



**Isobaric
Sword Nozzle**



**Rapid-Change
Nozzle**



**Spreader
Nozzle**

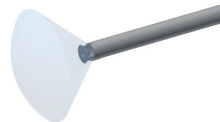
NOZZLE OVERVIEW

Nozzles for the cold sector

up to 300°C
DN 50/100/150



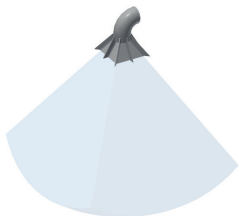
Outblowpipe



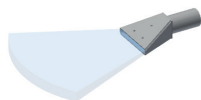
Spreader Nozzle



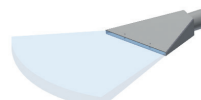
Fan Jet Angle Nozzle



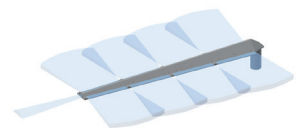
Square Slot Nozzle



Fan Jet Blow Nozzle



Fan Jet Blow Nozzle asymmetric



Isobaric Sword Nozzle

Nozzles for the hot sector

up to 1200°C
DN 100/150



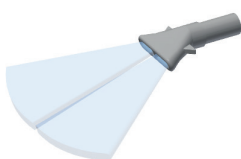
Outblowhead TG



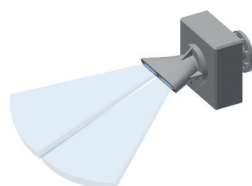
Fan Jet Angle Nozzle TG



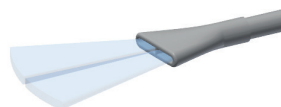
Fan Jet Angle Nozzle TG with WDS2



Fan Jet Blow Nozzle TG



Fan Jet Blow Nozzle TG with WDS2



Fan Jet Blow Nozzle TG asymmetric



Outblowhead for Rapid-Change Nozzle

CONTROL & SUPPLY

For the VSR BLASTER® to deliver its full performance, precise timing and a reliable media supply are essential. We provide a modular system tailored exactly to your requirements – from simple sequencing to fully automated process integration.

Modular Media Supply & Conditioning

Air preparation can be customized depending on the environment and product. Options include standard filters, heavy-duty lubricators, nitrogen generators, and FDA-compliant filtration. Monitoring is ensured through sensors for pressure and consumption, maintaining consistent process parameters and complete documentation.

Intelligent Control System

Sequential activation of the air cannons (individually, in cycles, or bottom-to-top) enables gradual material loosening without compaction. Triggering can be manual, time-controlled, or fully automated via external signals. Connectivity supports all common voltages and bus systems, with all components integrated into an easily accessible control cabinet.

Professional Installation & Piping

Durable and low-maintenance piping solutions. Materials include compression fittings, PA tubing, or complex piping systems. Designed for compatibility with temperature, UV exposure, and chemical conditions, and easily integrated into existing compressed air networks.

Optional: Color-coded piping for improved clarity.



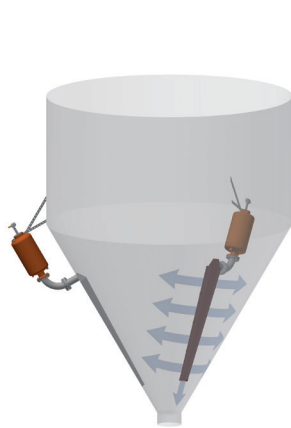
DIMENSIONS & SIZES

Type = Volume (l)	VB 12 IV	VB 20 IV	VB 33 IV	VB 50 IV	VB 75 IV	VB 100 IV	VB 150 IV
Ø A	DN 50	DN 50	DN 50	DN 100	DN 100	DN 100	DN 100
B	516	516	773	822	1022	825	1000
B1	230	230	230	230	230	230	230
Ø C	Ø206	Ø276	Ø276	Ø360	Ø360	Ø500	Ø500
Weight (kg)	16	19,4	27	60	70	88	101,5

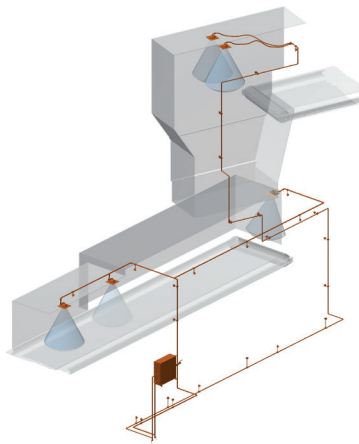




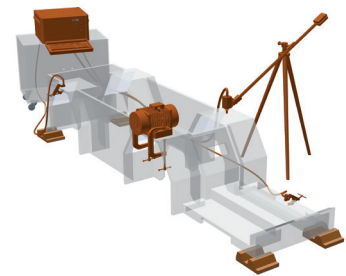
PRODUCT OVERVIEW:



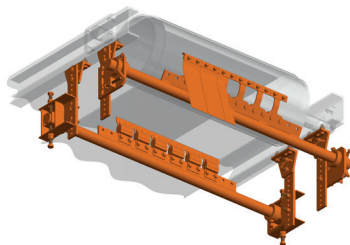
VSR BLASTER® air cannons for eliminating discharge problems and build-ups in both cold and hot operating areas.



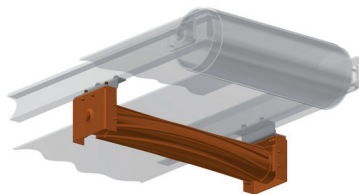
DUSTEX® dust suppression systems and mobile mist cannons for industrial dust control and suppression.



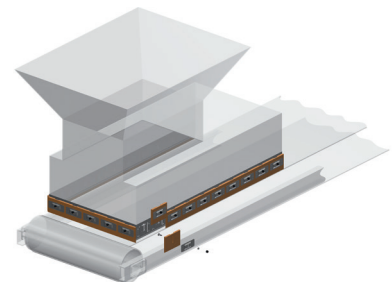
VIBMATIC® residual stress relief through vibration. The environmentally friendly alternative to thermal stress relieving.



VIBREX® conveyor belt scrapers ensure clean and safe transport of bulk materials and optimal belt cleaning.



LINEX conveyor belt tracking roller ensures precise, centered belt alignment and prevents belt misalignment.



CAREX sealing systems for transfer chutes ensure clean and dust-free conveyor belt transfers.

**WE'VE
GOT YOU
COVERED.**



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