

Steel shot VERA®

Product information



More than 90 years of success!

Our corporate history goes right back to 1912. Today, we offer you the full range of reusable abrasives. *The right abrasive for every purpose.*

Our abrasives normally fulfil the very high German requirements for the prevention of accidents BGV D26 (formerly VBG 48) and are neither toxic, carcinogenic nor do they contain free silica.

Back in 1953, our VERA® steel shot abrasive was the first of its kind on the market! 50 years of continual improvement have created a product which delivers high-efficiency performance for your abrasive blasting applications.



Blasting - is our job!

The long term experience we have gathered enables us to offer the best possible advice. Use our experience and our services to your best possible advantage:

- Screen analyses of blasting abrasive samples to optimize the operating mix and de-dusting settings
- Blasting abrasive comparison studies and endurance tests
- Blasting trials on your work pieces to determine the most suitable abrasive.
- Proposals for optimizing your blasting system.

Würth abrasives prove their quality in practical use.

See for yourself!

This catalogue is intended purely for information purposes and does not represent a guarantee of specific product characteristics in any way whatsoever.

4. Edition

50 years steel shot VERA®



There are many steel shot abrasives on the market ...

... but there is one specialist for low-carbon abrasives with extremely low tolerances which offer you a **constant and reliable top quality:**

and that's Eisenwerk Würth!

With more than 50 years of experience in producing our steel shot VERA® we can offer you an optimized product which is constantly being improved and is manufactured with innovative production techniques.

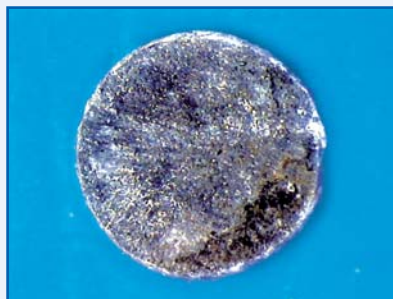
We will supply you with a practical product which is always **up to date.**

Why low-carbon?

We have been melting low-carbon steel shot VERA® since 1953. Today the steel shot is produced in a modern computerised medium-frequency crucible furnace plant.

Steel shot VERA® has a carbon content of 0.14–0.18 percent by weight, which has been successful in practice. It has a bainite structure and therefore it possesses optimum properties in terms of toughness and hardness, which are among the outstanding features of our long-life steel shot.

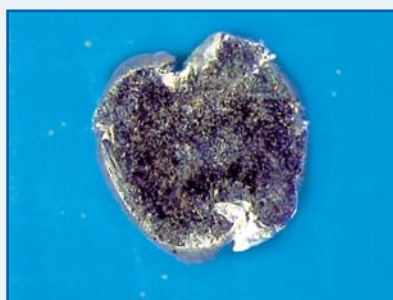
The special advantage of our analysis for the user is the hardening of the abrasive in operation through cold compaction. Within just a few cycles, the hardness increases by around 10% to 46–50 HRC, resulting in particularly effective transfer of kinetic energy from the abrasive grain to the work-piece.



View of the cold-formed grain:
Low-carbon steel shot VERA®

Low-carbon steel shot VERA® C-content 0.14–0.18 %

The hardness of the grain is defined by the carbon level. In the production process of our low-carbon steel shot VERA® granulation is followed by drying, which has a beneficial tempering effect. The grain is free from cracks.



View of the cold-formed grain:
High-carbon steel shot

High-carbon steel shot C-content 0.80–1.20 %

The hardness of the grain is defined by the tempering temperature. High-carbon steel shot abrasives are annealed after granulation (normal annealing followed by quench hardening and subsequent tempering). The grain has to form cracks, because the high carbon content produces a structure with high inner tension during the granulation process.

The right grain size for your application

Selection of the right grain size

depends on many factors. The following always have to be considered:







- required blasting result and surface
- type, design and size of the blasting plant
- number and output of the shot blast-wheels

The right operating mixture, i.e. the right balance between cleaning performance and good coverage, can be achieved by combining several different grain size ranges. Here consideration is also given to the separation grain size of the sorting device in the blasting plant.

The maxim for selecting the most profitable grain size is: "As fine as possible, and only as coarse as necessary".

Quality is our business!

Available grain sizes, comparable SAE-sizes and their uses

4,00–6,00 mm –	2,00–2,80 mm S 780	1,60–2,24 mm S 660	1,25–2,00 mm S 550	1,00–1,60 mm S 390	0,80–1,25 mm S 330
					
Shot beading					
	Foundries				
			Steel construction		
					Machinery

Our know-how - your benefit

The high original hardness of traditional steel shot results in premature grain wear because of the high level of brittleness. But in steel shot VERA®, the alloying elements are added and matched up in such a way as to *increase grain hardening during cold compaction as part of the blasting process.*

This *grain hardening* produces a *high cleaning performance* with *short blasting* times as a highly desirable consequence. The toughness of the grain is manifest in superior wear resistance.

The result: *sustained preservation of the grain size.*

This means that a high cleaning performance and low consumption rates are no longer incompatible opposites.

Both advantages come together to the benefit of economic efficiency.

Quality for your safety



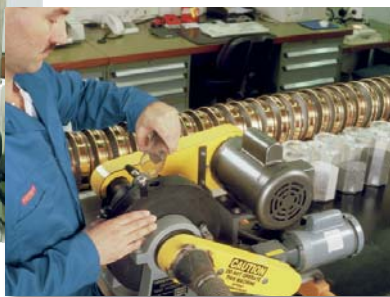
Top quality raw materials from certified manufacturers are analysed.



Controlled production conditions ensure a constant standard of high quality.



On-going analysis ensures the high quality of our products.





Packaging to guarantee optimum protection of the product.

Constant ability to deliver satisfies your needs promptly at all times.



Certificate DIN EN ISO 9001 Certified management system



Our team in Bad Friedrichshall





Our products
in use throughout the world

Our plant is located at a major junction of Europe's motorway and railway networks, also we are close to a waterway, which is leading to the North Sea ports.

This guarantees rapid, reliable delivery.

For decades now, our name has been well-known on the international market for blasting abrasives.

Our top quality products, an essential factor in modern surface technology, are exported to destinations throughout the world.



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