

JAWO SAMPLING Primary Sampler



Vezin Sampler (VS)

Product





What does it do?



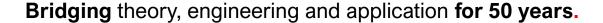
The Vezin Sampler (VS) is designed to extract increments from a vertically falling stream of material.

Representativity is ensured since a complete cross section of the free-falling bulk material is collected.

What's the benefit?

The Vezin Sampler (VS):

- Well suited for relatively small volumes of bulk material in particular powdered material with lumps up to 40 mm.
- Highly accurate and robust.
- Easy to install and operate.
- Designed for primary, secondary, and tertiary cross-stream sampling of falling streams of material.
- Equipped with an easily accessible hatch for optimal inspection and maintenance process.





How does it do it?

The VS is fully enclosed by a funnel-shaped housing which supports a gear motor driving a cutter rotating around a vertical axis. The cutter head is radially delineated with dimensions and working velocity designed to be individually optimized for each specific material. A hatch on the top of the VS allows for easy access for cleaning, maintenance, inspection, and exchange of cutter heads.

When triggered the VS extracts a representative increment per rotation which is guided directly into the sample outlet chute (oriented parallel to the main process discharge port) and continues to the next stage of the sampling process. Reject material passes directly through the VS. After each completed rotation, the cutter is parked in a safe position well away from the material flow (avoiding influx of extraneous material and crosscontamination between samples). Acceleration and deceleration from the parking position takes place well outside the cutting zone, ensuring a constant operational cutter speed.

Specifications:

Housing: Stainless Steel AISI 304/316 or painted carbon steel

Railing system: Stainless Steel AISI 304/316 or painted carbon steel

Carriage: Stainless steel AISI 304/316 or painted carbons steel

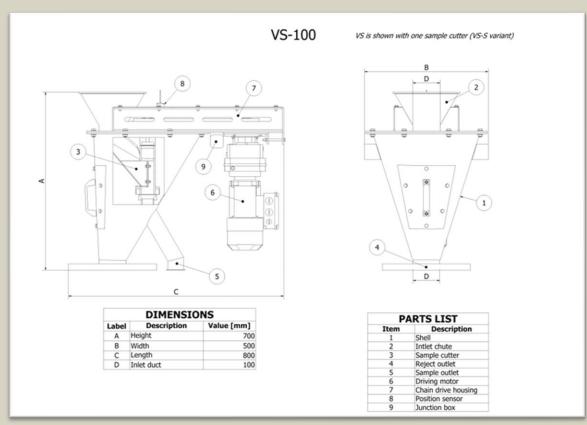
with Hardox impact plate

Instruments: Inductive Position switches

Gear Motor: SEW or similar

The VS is delivered with either a local control unit or/and is controlled by a M&W central control cabinet depending on concept and preference. The M&W central control cabinet consist of motor control center, circuit breakers, PLC-system and man-machine interface.

Bridging theory, engineering and application for 50 years.



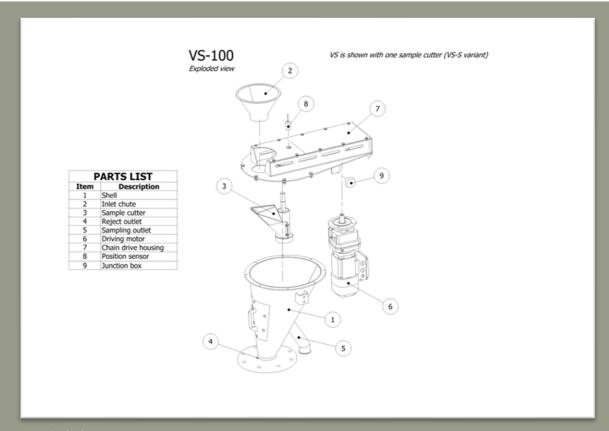
Dimensional Drawing

VS TYPES, DIMENSIONS AND WEIGHT					
Туре	Height (A) [mm]	Width (B) [mm]	Length (C) [mm]	Inlet Duct (D) [mm]	Weight [kg]
50	500	300	300	50	30
100	700	500	800	100	80
200	900	750	750	200	100
300	950	1.050	1.250	300	150
400	1.250	1.200	1.500	400	200
500	2.650	1.500	1.700	500	250

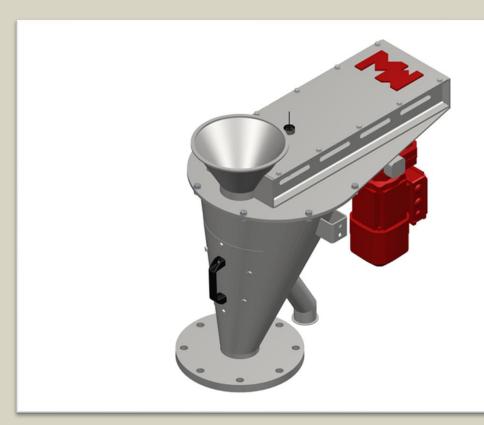
The table consist of indicative values from the previous projects



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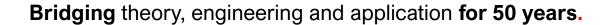
Exploded view



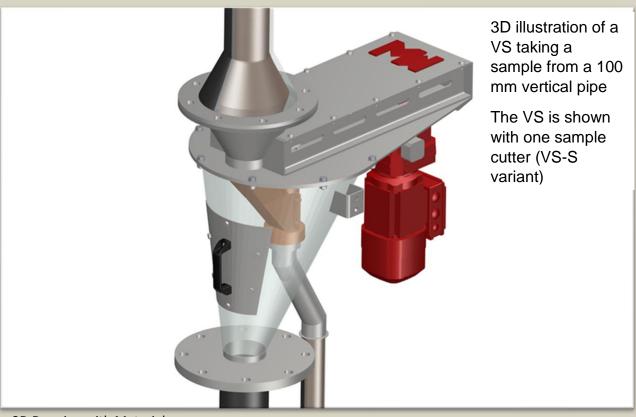
3D illustration of a VS made for taking samples from a 100 mm vertical pipe

The VS is shown with one sample cutter (VS-S variant)

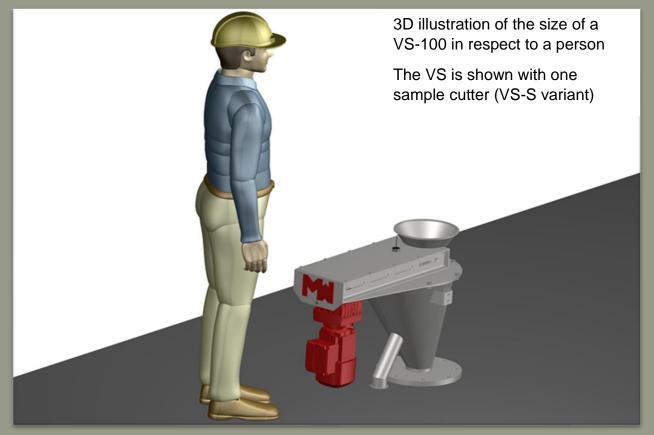
3D Drawing







3D Drawing with Material



Illustrative drawing



Variants/Options.

Variant 1 (Standard)

The Vezin Sampler Single (VS-S) has one cutter that extracts one representative increment per rotation.

Variant 2

The Vezin Sampler Dual (VS-D) has two opposing cutters which enables extractions of two representative increments per rotation.

Option 1

The M&W central control cabinet can exchange signals with the client's control system.

Option 2

Both VS-S and VS-D can include a Mixing Tank (VS-SMX/ VS-DMX) located immediately after the outlet to ensure a reduction of the heterogeneity of the extracted samples. See separate product description of the VSMX.

Option 3

The Vezin Sampler can be delivered with a proximity sensor to monitor the rotation of the cutter.

Nota Bene 1

Vezin Samplers can be calibrated with respect to the client's material(s) and local sampling conditions. M&W offers clients a facility for quantitative assessment of the performance of the VS on the client's own material(s), following one or several types of tests, the Replication Experiment test, or variographic characterisation of process sampling performance.



Variant 1











What is the standard?

M&W JAWO Sampling equipment and sampling systems operate in accordance with approved international material standards such as ISO, ASME, GOST, EN as well as DS3077 (2013). All sampling equipment and solutions aim for compliance with the principles laid down in the Theory of Sampling (TOS) and gives our customers reliable knowledge of the material properties such as moisture content, particle size distribution, mineral proportions, and content grade essential for commercial, operational, and technical characterization.

About M&W.



Mark & Wedell A/S (M&W) is a global mechanical/electrical engineering and manufacturing company. M&W serves a solid and growing international customer base within the global mining-, minerals-, metals-, power generation- and big science markets.

We develop, engineer, and produce high quality mechanical and electrical machines, instruments, and solutions. Our brand JAWO and unique knowhow is well recognized in our markets and among our customers due to more than 40 years of experience.

M&W JAWO



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