

VSE



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SIMEX
• patented •

SCREENING BUCKETS WITH ADJUSTABLE SIZE OUTPUT

category

8 - 50 TON



Midi Exc.



Exc.



Backhoe

models

VSE 10 | VSE 20 | VSE 30 | VSE 40 | VSE 50



Designed for **separating different-sized materials directly on the work site**, Simex VSE screening buckets for excavators are unique for their easy loading, very simple operation, and high productivity. The exclusive Simex patent allows instant adjustment of output size of the screened material in only seconds via a control in the operator cabin.



A PRODUCTIVITY
Shafts are composed of elements with varying-sized disks that produce an intense whirling of the material to be screened.

B INSTANT ADJUSTMENT OF OUTPUT SIZE
With a simple control in the cabin, the Simex designed and patented mechanism allows the shafts to be distanced or closed by means of a hydraulic system. This feature makes it possible to vary the output size of the screened material instantly.

Alternatively, if the excavator is fitted with a double-acting auxiliary system, this adjustment is made using joysticks. Learn more on page 48.

C EASY TO LOAD
Wide mouth, shaped as standard bucket.

D FIT: NEW SCREENING TOOLS Easily replaceable screening elements, with different profiles for processing different materials. Tool replacement is quick and does not require shaft disassembly. Learn more on page 50.



APPLICATIONS

CLEARING SOIL OF DEBRIS, STONES, GRAVEL



SCREENING AGGREGATES



RECYCLING DEMOLITION WASTE



COVERING UNDERGROUND UTILITIES AND SEWERS



INSTANT ADJUSTMENT OF OUTPUT SIZE: SIMEX PATENTED



**THIRD PHASE
DISCHARGE OF
REMAINDER**

>55 mm >2.2 inch

**SECOND PHASE
5 SECONDS
MEDIUM OUTPUT
SIZE MATERIAL**

15-55 mm 0.6-2.2 inch

Changing output size
2 seconds

**FIRST PHASE
5 SECONDS
FINE MATERIAL**

0-15 mm 0-0.6 inch

With a simple control in the cabin, the operator can get three different particle sizes of the output material with the same bucket: a fine screening size of 0-15 mm, a medium particle size between 15 and 55 mm, and coarse aggregates greater than 55 mm.*

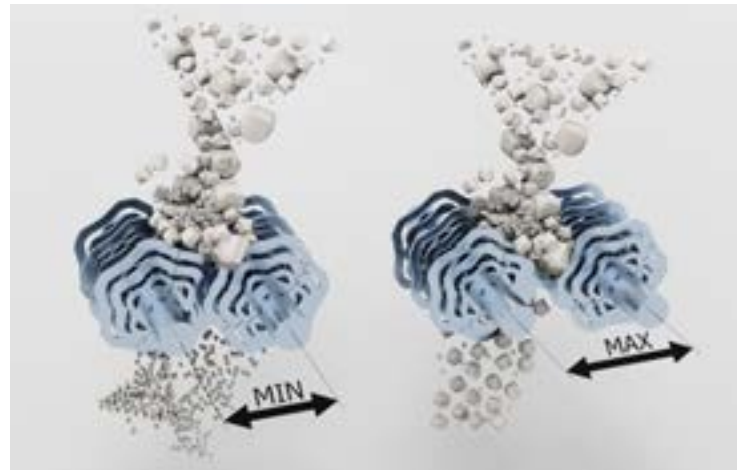
**Other sizes available on request*

With a simple control in the cabin, the Simex designed and patented mechanism allows the shafts to be distanced or closed by means of a hydraulic system. This feature makes it possible to vary the output size of the screened material in only seconds.

The patented system allows distancing and closing the shafts on which the screening tools are fixed, with a maximum travel of 40 mm, to instantly change the particle size of the screened material. This ensures the operator:

- 1. speed of execution**
- 2. considerable time saving**
- 3. high versatility**

In fact, it is possible to work on different materials, eliminating downtimes due to spacing the shafts or changing tools, as occurs with conventional systems.





PARTICLE SIZE CONTROL IN BACKFILLING OPERATIONS

In operations involving the backfilling and covering of underground pipelines, particularly in the Oil & Gas sector, managing the particle size of the material is a key factor in optimising time, costs, and the quality of the work. The **Simex VSE** screening bucket, thanks to its patented system for rapid adjustment of particle size, allows different sizes to be produced instantly on site, using the same excavated material.

A SINGLE TOOL FOR BEDDING AND BACKFILLING

During operations, the VSE bucket allows you to quickly produce materials with different particle sizes.

BEDDING LAYER

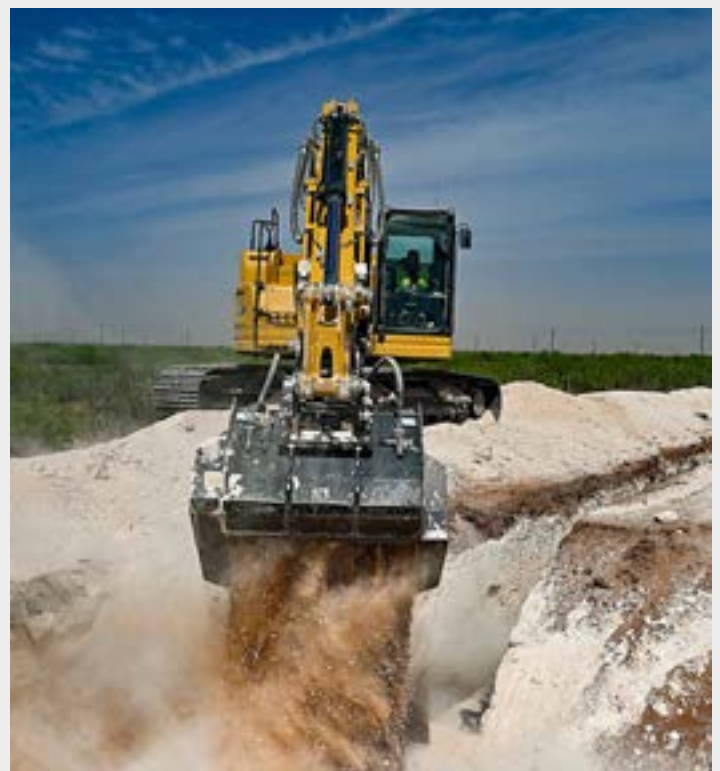
By closing the shafts, the bucket selects fine material (0-15 mm), ideal for creating a bedding layer and protecting pipes from stones and rubble.

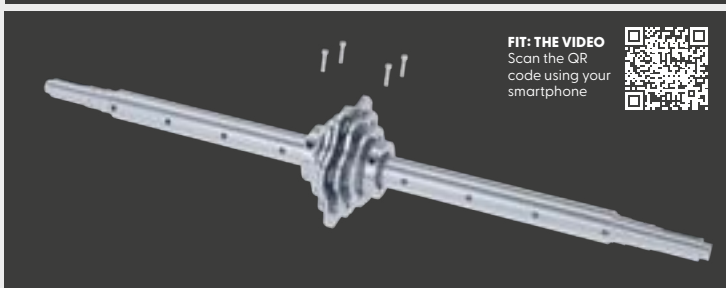
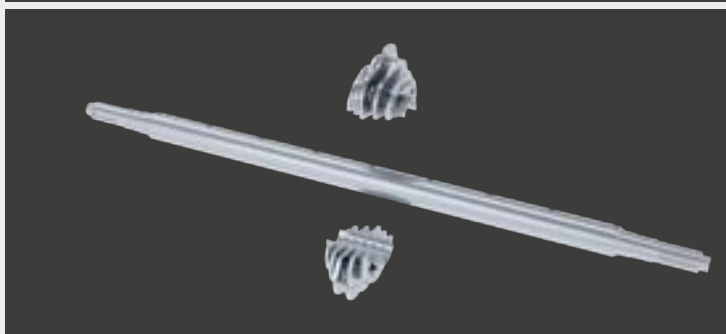
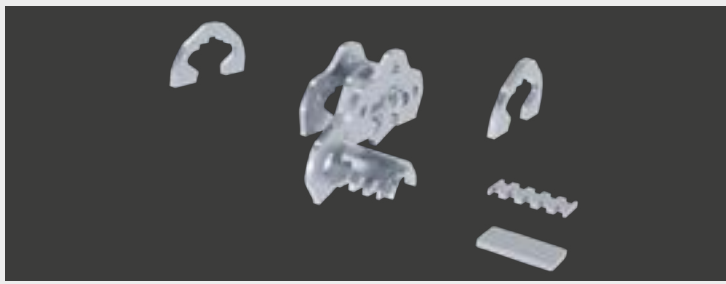
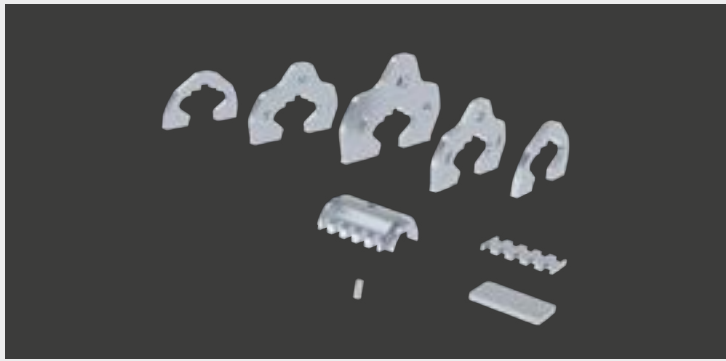
COVERING THE PIPELINE

Using the same rapid control, the operator opens the shafts to obtain medium-sized material (15-30 mm), perfect for backfilling the trench.

REJECTION OF UNSUITABLE MATERIAL

Larger-sized material is automatically separated and excluded from reuse.





FIT: THE VIDEO
Scan the QR
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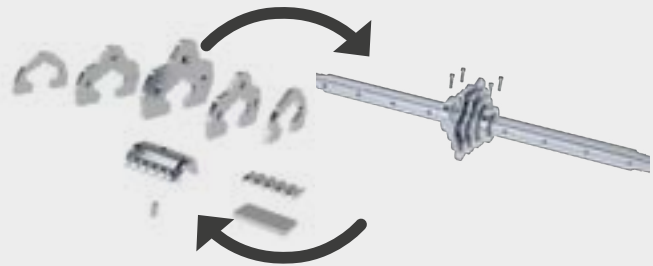


FIT: THE SIMEX-PATENTED TOOL SYSTEM

All models in the VSE range benefit from the FIT screening tools, Simex patented, which allow the operator to get the best bucket configuration for the intended use and the material to be screened.

1 UP TO 75% LESS IN MAINTENANCE COSTS

The system features independent screening elements, which can be dismantled and replaced individually. The tools are then fixed to the shaft by means of clamps and two screws, with no welding. All this means saving up to 75% on maintenance costs (compared to the previous system). Replacement, in fact, does not require shaft disassembly: each element can be replaced individually, in a few minutes, directly on site.

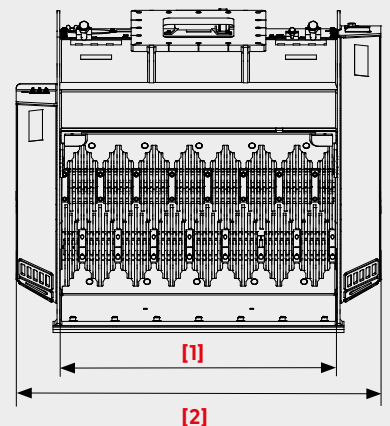
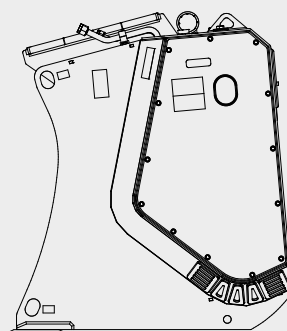


2 HIGH PRODUCTIVITY EVEN WITH MOIST SOILS

Screening shafts are composed of disks of different diameters that interlock perfectly thus producing an intense whirling of the material. Moist material is easily screened, without the risk of sticking to the screening tools or the inside walls of the bucket.

3 MULTIPLE CONFIGURATIONS AND REPLACEABLE DISKS

The system allows multiple configurations depending on the materials to be screened. Simex offers 4 configurations, but others are possible thanks to the interchangeable disks that make up the screening tool. The new tools are backward compatible with the previous system.

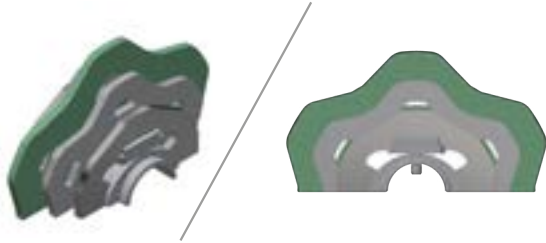


FIT: AVAILABLE CONFIGURATIONS:

RECYCLING CONFIGURATION

Indicated for: dry soils, with dry clay, gravel, silt, and peat.

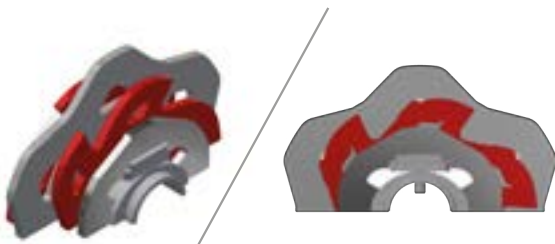
Recommended application: backfilling excavations and pipelines. Selecting demolition aggregates.



MIXED CONFIGURATION

Indicated for: moist soils, mixed with stones, gravel, and clay. Light crushing of demolition waste.

Recommended application: screening plant waste, soil remediation of debris, stones, and roots. Selecting demolition aggregates.



DISREGGATION CONFIGURATION

Indicated for: topsoil, plant waste, clay, and peat.

Recommended application: Screening and aeration of compost, growing medium for the landscape and horticultural sector.



AGGRESSIVE CONFIGURATION

Indicated for: separating damp and wet material that tends to adhere to stones, roots, and demolition waste.

Greater crushing thanks to the presence of only toothed elements.

Recommended application: screening and separation of plant waste, clayey soils, very moist or wet demolition waste.



TECHNICAL DATA		VSE 10	VSE 20	VSE 30	VSE 40	VSE 50
Recommended excavator weight (*) (**)	ton	8 - 13	12 - 18	16 - 30	30 - 45	35 - 50
	lbs	17500 - 29000	26000 - 40000	35000 - 66000	66000 - 99000	77000 - 110000
Mouth width [1]	mm	860	1100	1260	1340	1420
	inch	34	43	50	53	56
Total width [2]	mm	1220	1485	1650	1835	1880
	inch	48	58	65	72	74
Bucket capacity (SAE)	m ³	0.40	0.70	1.00	1.80	3.00
	y ³	0.52	0.92	1.30	2.35	3.90
Screening area	m ²	0.56	0.80	1.00	1.36	1.36
	y ²	0.67	0.96	1.20	1.63	1.63
Instant adjustment of output size		yes	yes	yes	yes	yes
Available output size		0-15/ 0-55	0-15/ 0-55	0-15/ 0-55	0-15/ 0-55	0-15/ 0-55
Shaft travel	mm	40	40	40	40	40
	inch	1.6	1.6	1.6	1.6	1.6
Number of screening shafts	no.	2	2	2	3	3
Operating weight (***)	kg	965	1400	1845	2725	3500
	lbs	2125	3080	4060	6000	7715
Required oil flow	l/min	90 - 125	100 - 150	165 - 220	180 - 280	180 - 280
	gpm	24 - 33	27 - 40	44 - 58	48 - 74	48 - 74
Maximum oil pressure	bar	250	250	250	250	250
	psi	3600	3600	3600	3600	3600

* The operating load permitted for the excavator, when added to the weight of the standard bucket, must match or exceed the weight of the crusher bucket at full load. ** The installer is responsible for ensuring that the equipment meets the excavator's specifications and weight requirement. *** Without mounting bracket. Simex does not accept responsibility or liability for the information provided. Technical modifications may vary without prior notice.