

## CLEANERS FOR COARSE IMPURITIES CLEANING

### High-density cleaner SVS

This cleaner can be used for primary separation of the biggest coarse impurities in coarse contaminated waste paper processing lines. It removes quite reliably coarse impurities even from very coarsely pulped thick stocks whereby it accepts also significant variations of input parameters. At the same time the cleaner protects following equipment against damage caused by larger hard impurities. As a main advantage we can name very low energy demand presented by a very low pressure loss and a possibility of operation up to 4,5 % density of the cleaned stock. Reject nozzle is with a diameter of 100 mm.

### Type SVS-25-O

It belongs to the group of centrifugal cleaners with a free whirl and a continuous output of the screened impurities. The cleaners usually run in a row of several stations installed in accordance with actual operating conditions. It is possible to modify the bottom (reject) part and thus change it into a closed cleaner (with a collecting box).

### Type SVS-25-A, -M, -MK

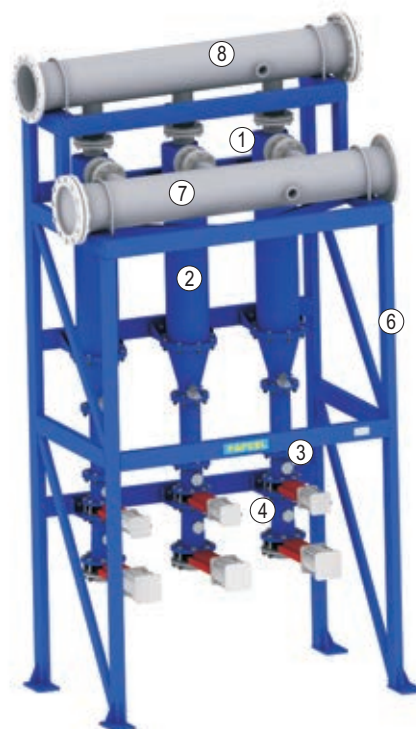
It belongs to the group of centrifugal cleaners with a free whirl and an output of the screened impurities into a collecting box. Depending on the type of the collecting box, we distinguish a manual discharge (MK) or (M), and automatic (A). A modular construction system also enables easy conversion of each version. The cleaners usually work individually.

### High-density cleaner SHL

This cleaner allows efficient and economic separation of coarse impurities both from thick and thin paper stocks. It is intended particularly for inlet sections of refining lines where it is working as a protection of all following equipment against penetration of hard abrasive impurities.



SVS-25-O



Cleaning station SVS-25-A

The main advantage is its high reliability in service, low energy consumption and the possibility to be operated up to 4,5 % density of cleaned stock. The reject nozzle is with a diameter of 55 mm.

### Main parts

- ♦ inlet body - head (1), working body (2)
- ♦ separating body with sight glass (3)
- ♦ collecting box with pneumatic gate valves (4) (automatic control)
- ♦ collecting box (manual control) (5)
- ♦ steel bearing stand when the cleaner is delivered as a station (6)
- ♦ distributing pipe of inlet (7), output (8), reject (9) flanged on both ends (in case of station)

### Material

- ♦ SHL cleaners are produced in a material combination "stainless steel-ceramics-plastics"
- ♦ SVS cleaners are fully stainless
- ♦ the collecting box version M and MK is made of grey cast iron, version A is made of stainless steel

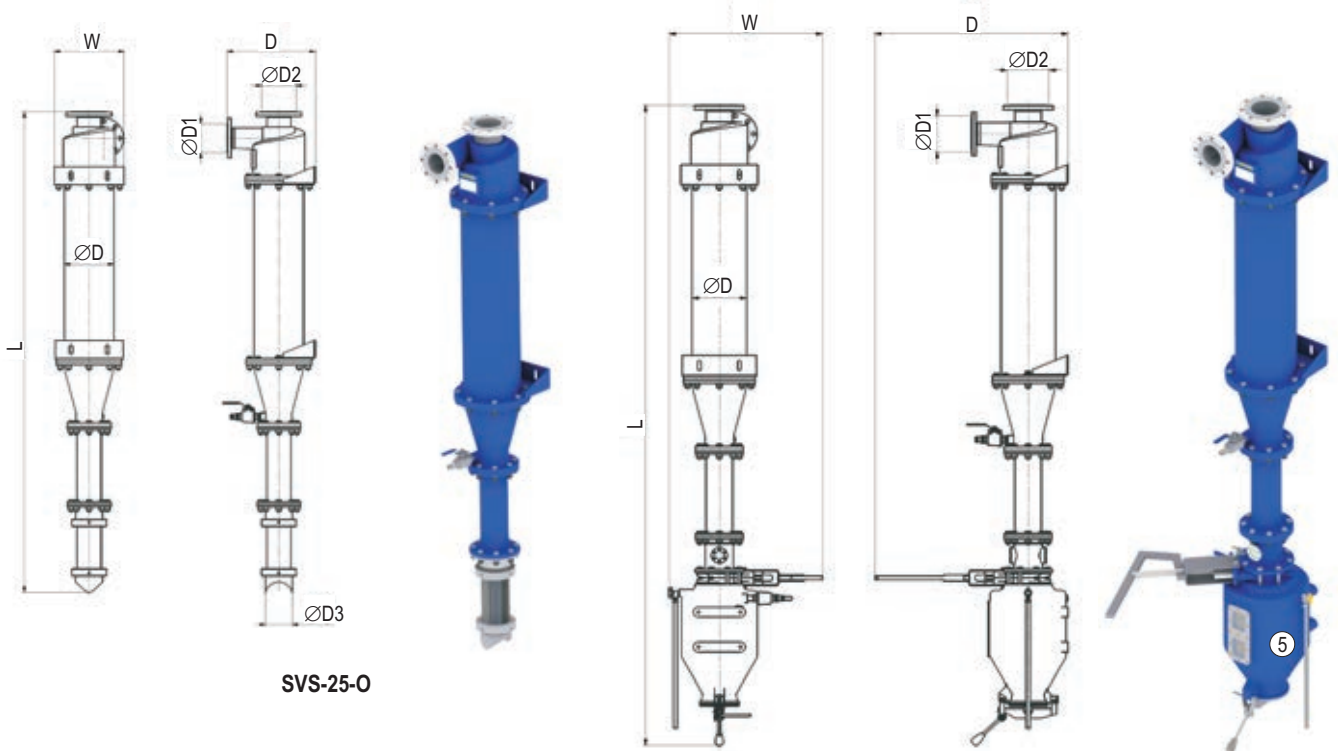
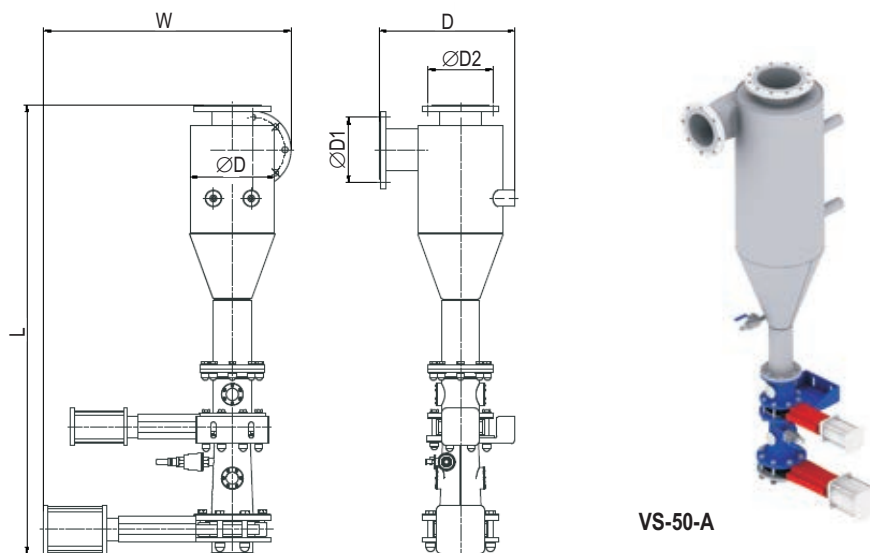
### Advantages

- ♦ low energy consumption
- ♦ low pressure loss
- ♦ simple operation
- ♦ long service life of all parts
- ♦ resistance against fouling
- ♦ high cleaning efficiency, operating flexibility and reliability
- ♦ unified unit-built design

Machine design and work safety are in compliance with EU standards.

**TECHNICAL PARAMETERS**

Type	Optimal throughput (l/min)	Consistency (max. %)	Max. inlet pressure (kPa)	L x W x D	Ø D	Connection sizes (mm)			Weight (kg)
						Ø D1	Ø D2	Ø D3	
SVS-25-O	1.800 - 2.400	4,5	300	2.645 x 385 x 485	260	DN100	DN125	100	205
SVS-25-A	2.000 - 2.500			-				290	
SVS-25-M	2.000 - 2.500			-				290	
VS-50-A	7.000 - 8.500	4,5	300	2.620 x 1.050 x 795	500	DN200	DN250	-	285
SHL-25-O	1.700 - 2.000	4,5	350	2.460 x 375 x 485	260	DN100	DN125	55	120
SHL-25-A	1.800 - 2.100			-				170	
SHL-25-M	1.800 - 2.100			-				190	


**SVS-25-O**
**SVS-25-M**

**VS-50-A**

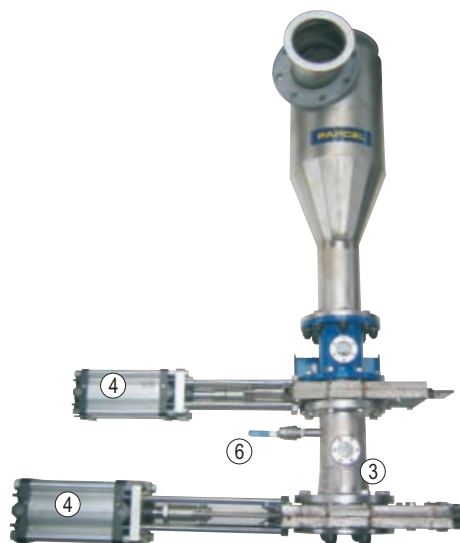
## SAND TRAP

**Sand traps OP** are designed for removal of sand and larger impurities in coarse contaminated waste paper processing lines directly behind the primary cleaning stage and then in any following cleaning points during separation of impurities at insufficient separation of sand from paper stock. They provide considerably higher protection of following equipment (pumps, secondary cleaners, etc.) against contingent damage.

Sand traps work independently or in pairs according to actual on-site operating conditions. They differ from each other only in size and throughput. They belong to a family of centrifugal cleaners working with a free whirl and automatic discharge of impurities into an over-pressure collecting box, being permanently rinsed by water (OP-25, OP-30) or mechanical discharge of impurities (OP-40). The sand traps OP-25, -30, -40 provide effective and also economical separation of specifically coarse impurities also from very coarse pulped stocks.

### Sand traps OP are designed for:

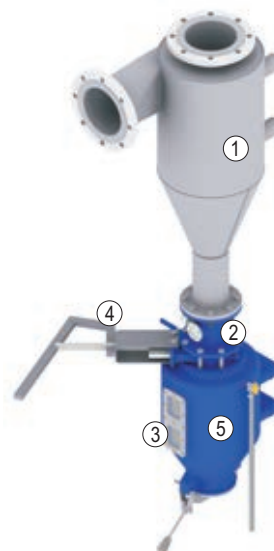
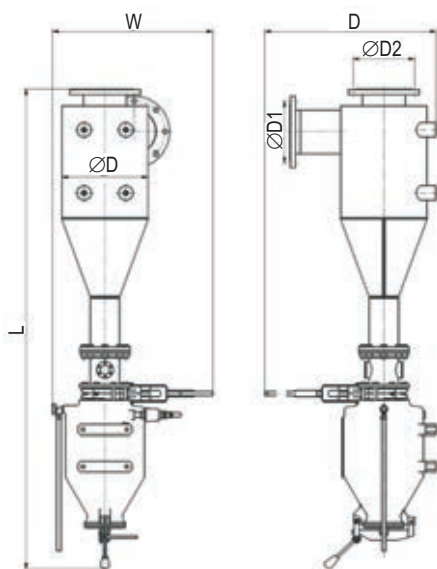
- ♦ protection of all consequent machinery in stock preparation line against penetration of hard and abrasive impurities
- ♦ economical cleaning of coarse impurities from highly contaminated paper stock
- ♦ separation of coarse impurities in lines based on waste paper and in wood refining lines
- ♦ individual work or work in pairs



Sand trap OP-25-A

### Main parts

- ♦ input body with working cone (1)
- ♦ separating body with separating filler (2)
- ♦ sight glasses (3)
- ♦ pneumatic gate valves (4)
- ♦ collecting box (5) with valve of rinsing water (6)



### TECHNICAL PARAMETERS

Type	Optimal throughput (l/min)	Consistency (max. %)	Max. inlet pressure (kPa)	Connection size (mm)					Weight (kg)
				L x W x D	Ø D	Ø D1	Ø D2	Ø D3	
OP-25-A	1.000 - 2.000	3,0	300	1.660 x 840 x 450	250	DN125	DN125	-	150
OP-30-A	2.000 - 3.200			1.660 x 915 x 500	300	DN150	DN150	-	155
OP-40-M	2.000 - 3.000			2.305 x 770 x 1.020	400	DN200	DN200	-	215

## Design

Each sand trap consists of a cylindrical inlet part and a conic part that turns gradually into a bottom cylinder and is finished by a separating body of a coarse impurities reject. There is a collecting box OP-A installed under it with an automatic controlled gate valves (OP-25, OP-30) or an OP-M with a manual discharge (OP-40).

## Material

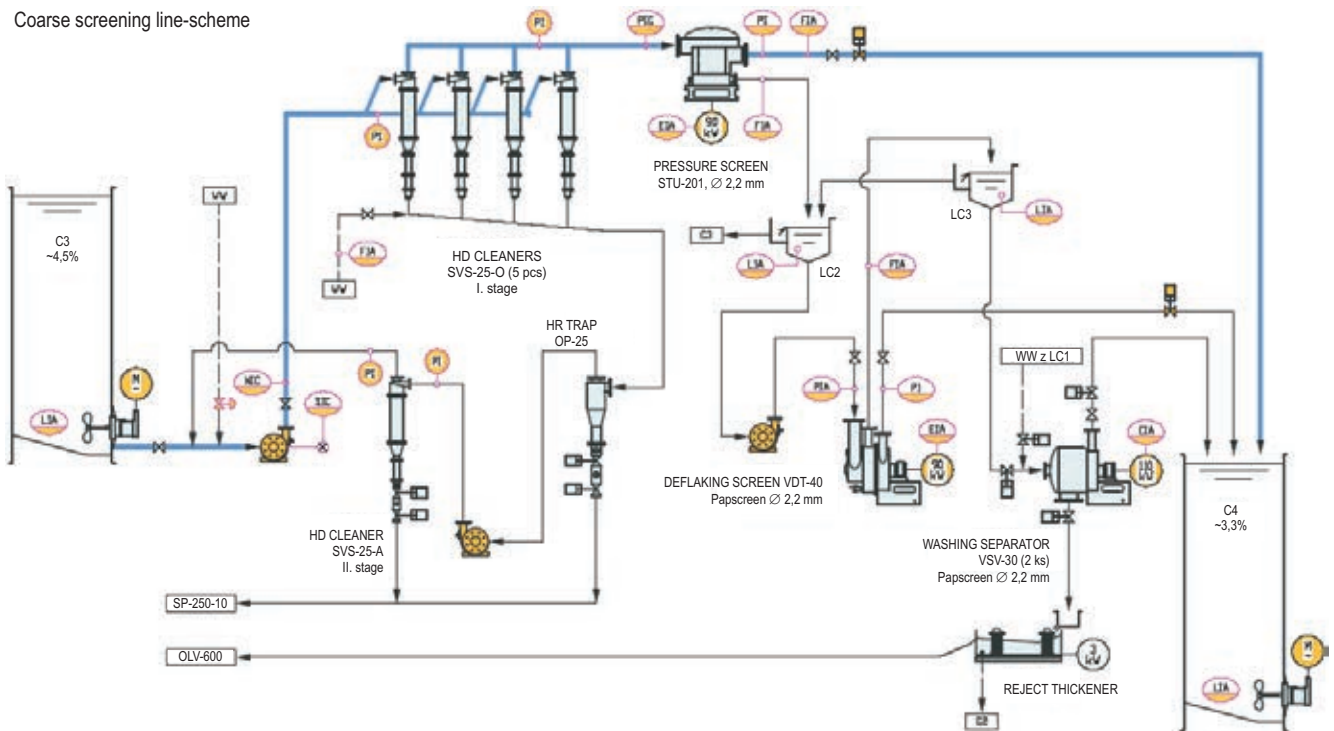
All parts coming in contact with the stock are made of stainless steel, other machine parts are made of structural steel. The collecting box version M and MK is made of grey cast-iron, A performance is made from stainless steel.

## Advantages

- ♦ low energy consumption presented by minor pressure loss
- ♦ high cleaning efficiency and reliability in service also when cleaning very coarsely pulped stocks with high content of impurities
- ♦ high resistance against clogging
- ♦ simply and easy operation and maintenance
- ♦ easy replacement of all parts
- ♦ long service life

Machine design and work safety are in compliance with EU standards.

Coarse screening line-scheme



Cleaning station SVS-25-A



Cleaning station SVS-25-M