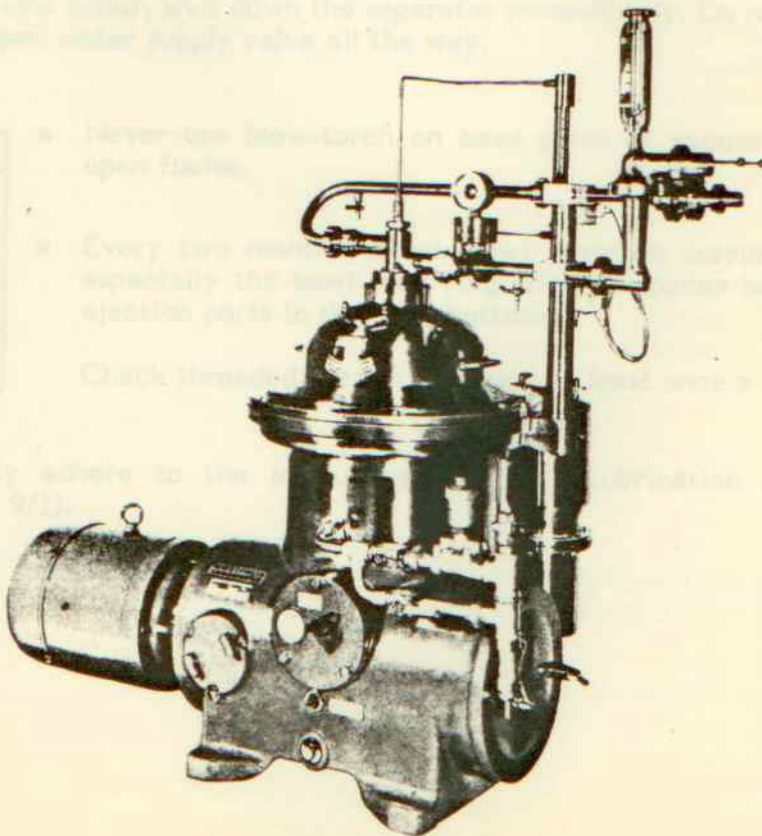


Separator with Self-Cleaning Bowl

Model SB 14-36-076

Model SB 14-36-576



Operating Safety of the Separator

The WESTFALIA Separator is a high-speed centrifuge which works reliably, provided that it is operated and looked after in accordance with our Operating Instructions.

The bowl speed has been rated so as to ensure the operating safety of the separator. It depends on the densities of the centrifugally dry solids and of the clarified liquid. If the densities exceed those shown on the name-plate of the separator, check with the factory or with authorized representatives for detailed information, since in the majority of such cases the bowl speed will have to be reduced by changing the drive parts.

When assembling the bowl, strictly adhere to the instructions of this working manual, to avoid undue unbalance **which may result in heavy damage.**

Corrosive liquids and liquids containing abrasive solids, particularly when being processed at high temperatures, may attack the bowl material after quite a short period of operation, resulting in impaired safety. To obviate the danger arising from impaired safety, keep a regular check on all bowl components.

Special attention must be given to the threads of the bowl bottom and of the bowl lock ring as well as to the area between the sludge ejection ports in the bowl bottom.

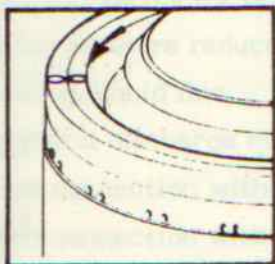
We, therefore, recommend in your own interest to have your separator inspected by WESTFALIA service engineers at regular intervals. Such inspections will keep your separator working reliably and prevent undesirable shut-downs.

If bowl repair proves necessary, please advise us in time. We shall then check with you how to avoid interruption of operation.

Important Hints

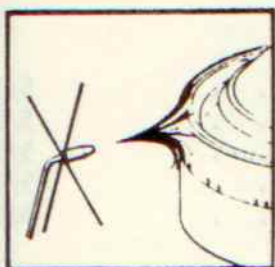
The forces resulting from the high speed rotation of the bowl put great strain on the bowl material. To avoid the risk of impaired operating safety be sure to strictly adhere to the instructions of this manual regarding assembly, starting, shutting down and maintenance of the separator.

- Do NOT loosen any part of the separator or of the feed and discharge connections before the bowl has stopped completely.



- When assembling the bowl, be sure to strictly adhere to the instructions given in sect. 4.1 in order to avoid undue unbalance. The bowl must not be started before it is **completely** assembled.
- Be sure to tighten bowl lock ring thoroughly; the "O" marks on bowl bottom and bowl lock ring must be in line with each other.

- Be sure to fasten hood, feed and discharge housing, and centripetal pump firmly.
- Feed product to the separator via a strainer.
- Before feeding the liquid to be processed, close the bowl hydraulically and check bowl on leakage (see section 6.2).
- Stop product supply before each complete de-sludging.
- When strong vibrations occur, shut down the separator immediately. Do not de-sludge bowl. If the bowl leaks, open water supply valve all the way.



- Never use blow-torch on bowl parts or expose them to heat of open flame.
- Every two months, check bowl parts on corrosion and erosion - especially the bowl lock ring and the spaces between the solids ejection ports in the bowl bottom.

Check threaded area of lock ring at least once a year.

- Be sure to strictly adhere to the instructions of the "Lubrication and Maintenance Schedule" (see page 9/1).

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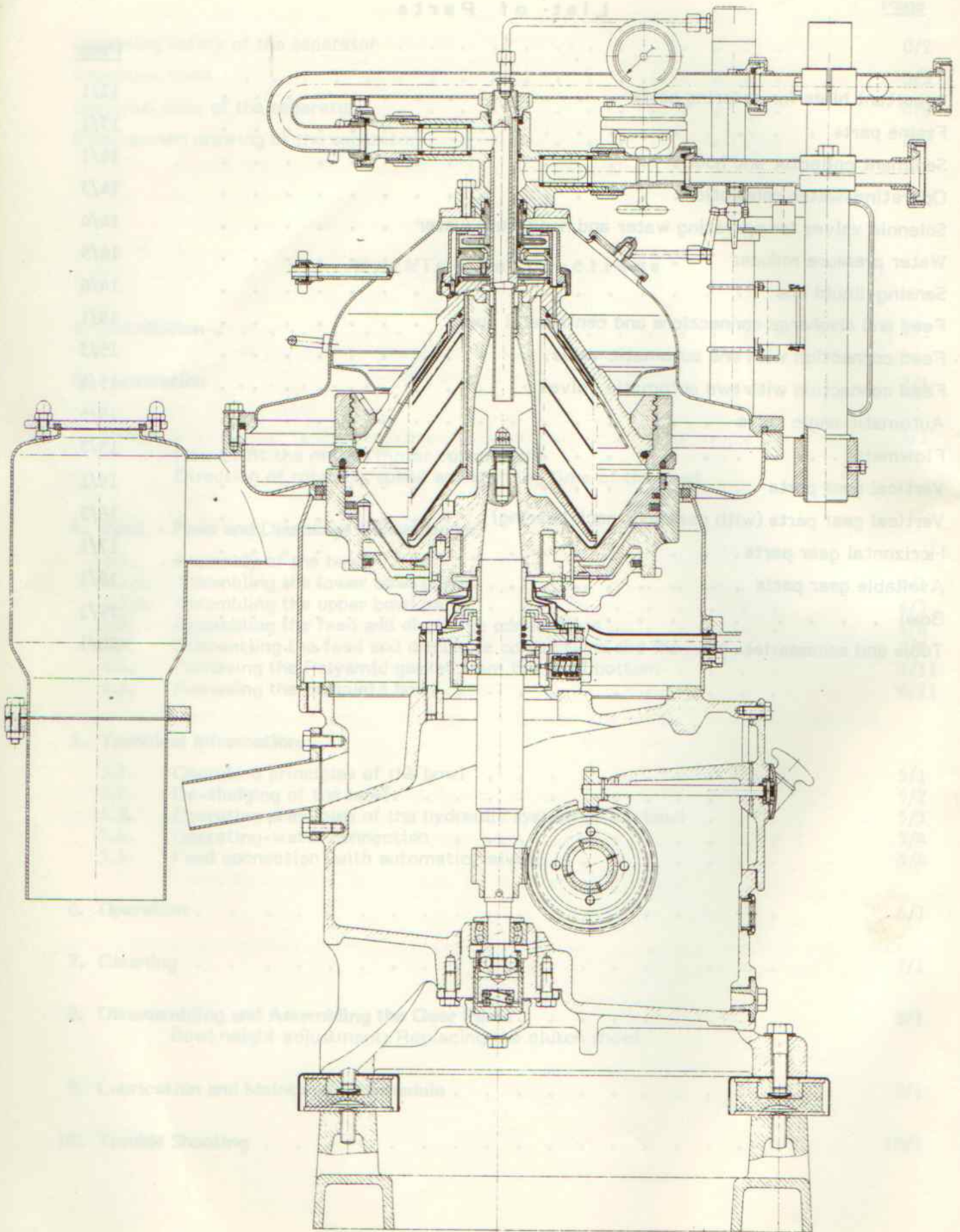
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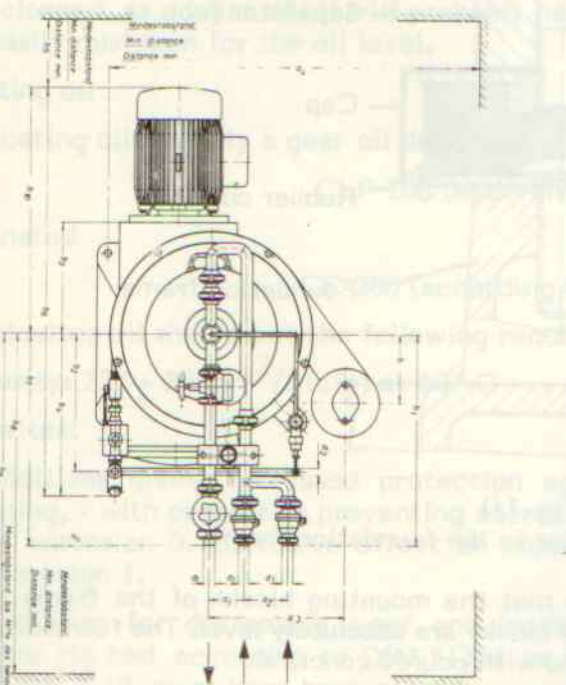
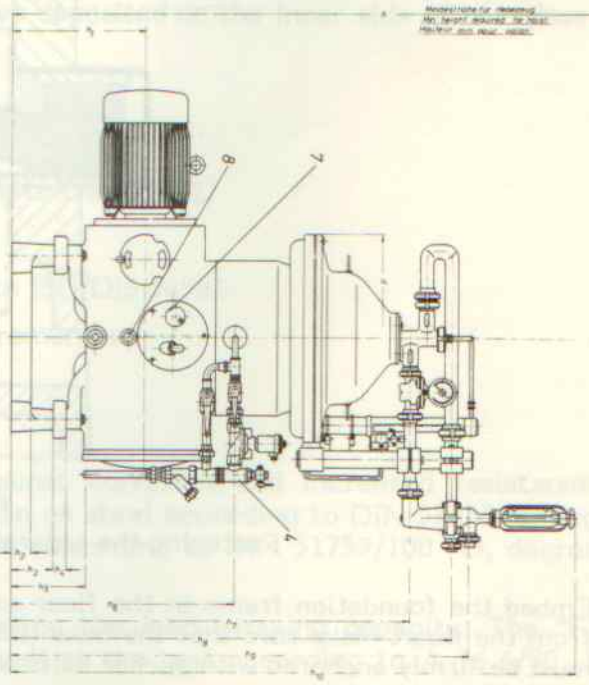
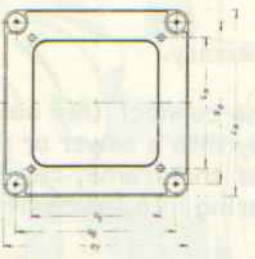
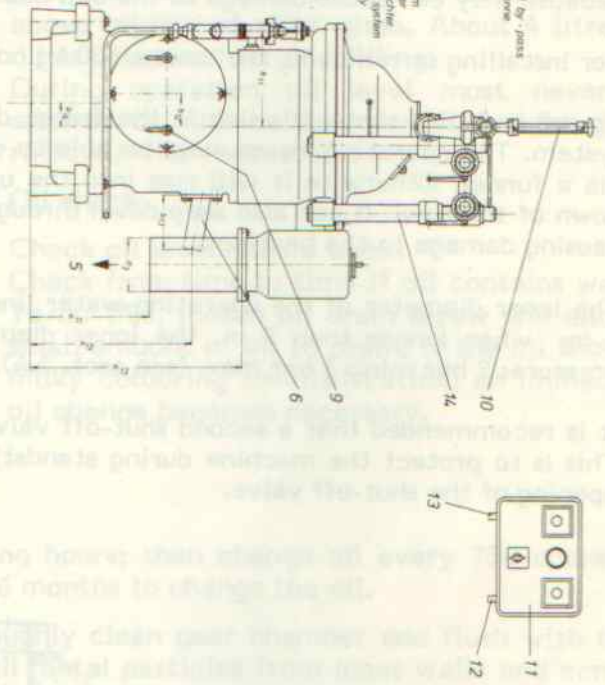
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Sectional view of the separator



- 1 Schanderpui - Zuluuf
Screen
Alimentation
- 2 Werkbongers - leze Spouwtoren - Zuluuf
Discharge or flush - water feed
Alimentation en eau de décharge ou de lavage
- 3 Schanderpui - Afbuif
Liquid discharge
Sortie du liquide
- 4 Schanderpui met Afgevoerdruif and Afvoersysteem
Operating water connection with screened valve and by-pass
Système d'alimentation d'eau de commande avec valve électromagnétique et de -passe
- 5 Fasetstaf - Afbuif
Switch discharge
Sortie des moteurs solides
- 6 Schanderpui - Afbuif niet met eenen Rolveringsysteem
Screened discharge without roller ring system
Schanderpui - Afbuif met eenen Rolveringsysteem
Screened discharge with roller ring system
Operating water must be able to discharge freely into sewer or sudge tank e.g. via a funnel
Le pas river le conduit de sortie de l'eau de commande avec un rigou à eau de commande ou bien dans un réservoir à l'évacuation, exemple d'écoulement en entonnoir
- 7 Umlaufkontrolle
Revolucion indicator - die
Indicateur des révolutions
- 8 Durchsicht
Oil sight glass
Viseur d'huile
- 9 Rinse
Rinse
Fusée
- 10 Durchflussschleuse
Flowmeter
Débitmètre
- 11 Steuerung
Timing unit
Programmateur
- 12 Zählung/Zeit/Impuls
Counter
Ligne d'alimentation (réseau électrique)
- 13 zu dem Ventil
to valve
vers les valve
- 14 Steuerleitung
Control line
Ligne de commande



Ø	mm	inch
Ø 1	105	4.12
Ø 2	120	4.72
Ø 3	406	15.98
Ø 4	1 100	43.31
Ø 5	792	31.18
Ø 6	4 460	174.80
Ø 7	555	21.85
Ø 8	300	11.81
Ø 9	635	25.00
Ø 10	630	24.80
Ø 11	305	12.01
Ø 12	150	5.91
Ø 13	73	2.87

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OPERATING INSTRUCTIONS

1. Installation

When installing the separator, make sure that sufficient room is available (at least 300 mm) to mount and to remove the motor and to remove the horizontal drive shaft which is to be pulled out towards the brake side of the frame.

Take care that the foundation of the separator cannot receive vibrations from other machines, because they can cause damage to the ball bearings.

For installing or removing the bowl a 500 kg hoist will be necessary.

Do **not** install a shut-off valve in the frame drain and do **not** connect this outlet to a piping system. The operating water must be able to discharge freely into a sewer or sludge tank, e.g. via a funnel. Otherwise it will rise into the upper section of the frame, resulting in slowing down of the bowl. It can also seep down through the neck bearing into the bearing housing, thus causing damage to the bearings.

The inner diameter of the operating-water line should be 1/2" when the line is not longer than 3 m; when longer than 3 m, the inner diameter should be 3/4". Required operating-water pressure: 2 bar min., 3 bar max. (see sect. 5.4).

It is recommended that a second shut-off valve be installed in the operating-water supply line. This is to protect the machine during standstill against inrush of water caused by unintended opening of the shut-off valve.

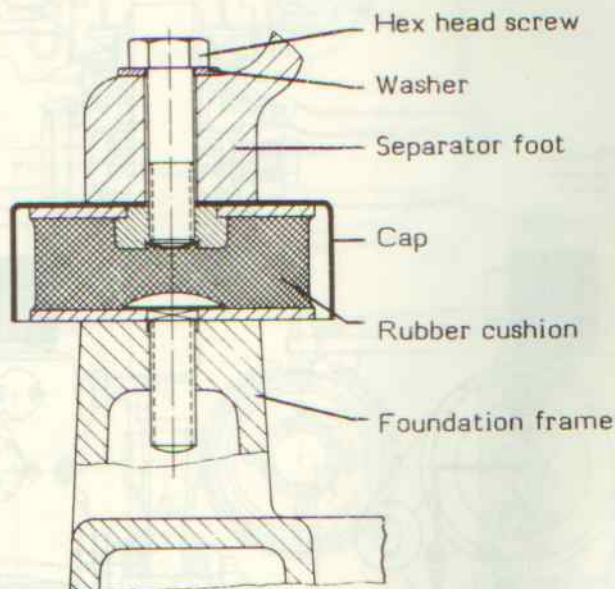


Fig. 1/1

Fastening the separator to the foundation frame

Embed the foundation frame in the floor so that the mounting blocks of the frame protrude from the floor. Make sure that the mounting blocks are **absolutely level**. The foundation frame must be firmly anchored with anchor bolts and with poured concrete.

After the concrete has set, the separator has to be fastened to the foundation frame as shown in Fig. 1/1. To absorb vibrations, a rubber cushion has to be put between each separator foot and mounting block.

