



Filter Centrifuges for Chemical Industry





HEINKEL – proud partner of the centrifugal force since 1971

A company with a long tradition

HEINKEL is a supplier of filtration and drying machinery and equipment. Their functionality, design and construction follow an integrated approach: customized, durable, cost optimized, and efficient.

A powerful group of companies

HEINKEL realizes part or full concepts for chemical synthesis plants. Individual modules are alignet, interfaces to other modules defined, and standard automation philosophies developed. The equipment is tested and fully documented to achieve a quick and trouble-free commissioning on site.

An innovative developer

HEINKEL manufactures machines and equipment for the filtration of solids in the chemical-pharmaceutical industry, the fine and special chemical industry, the food industry, as well as the recycling and environmental industries: even for extremely difficult filtering products.

A competent partner

HEINKEL offers customized service concepts and guarantees for their spare parts deliveries as well as repairs: around the clock, worldwide.

Core competence:

- Solids/liquid separation
- Manufacturing of centrifuges
- Concepts for solids separation
- Combined concepts including centrifugation and drying
- Automation concepts for centrifuges and separation systems

Horizontal peeler centrifuges

Typ H 630 C - H 1800 C



Horizontal peeler centrifuges of the sizes H 630 C – H 1800 C in chemical industry design are applied in the separation of medium and large product quantities, which are washed before drying. The machines are designed for continuous operation with high throughput.

These advantages characterize the HEINKEL horizontal peeler centrifuge:

- Wide range of applications
- High batch frequency
- High washing and extraction performance
- Low residual moisture due to high centrifugal force
- Separation by filtration or sedimentation
- Discharge via chute or screw conveyor

The following bowl designs are available:

Perforated bowl for filtration

This bowl is suited to the filtration of suspensions with crystalline and fine-crystalline products.

Siphon bowl with backflush unit

This bowl is used with fine-crystalline products. The residual heel can be dissolved using the appropriate solvent. Furthermore the residual heel can be reduced step by step and the regenerated via the backflush unit.

Non-perforated sedimentation bowl

This special design is applied to suspensions that are separated via sedimentation in the centrifugal field.

Two designs are available for solids discharge:

Solids discharge via chute

The chute is best suited to products, which can be easily discharged and which will slide easily without adhering to the chute.

Solids discharge via screw conveyor

The screw conveyor discharge allows the removal of solids, which tend to stick and cannot be discharge via a chute.

Technical Data Horizontal peeler centrifuges	H 630 C	H 800 C	H 1000 C	H 1250 C	H 1600 C	H 1800 C	
Bowl diameter (mm)	630	800	1000	1250	1600	1800	
Bowl depth (mm)	400	500	630	800	1000	1250	
Filter surface (m²)	0,79	1,26	1,98	3,14	5,03	7,07	
Nominal volume (I)	50	100	200	400	800	1350	
Maximum load (kg)	60,0	115,0	225,0	450,0	900,0	1520	
Max. speed (I/min)	2400	1900	1200	120	950	840	
Max. Centrifugal force	2000	1600	1250	1000	800	705	
Weight (kg)	4100	5000	6400	12500	20200	24400	

Vertical peeler centrifuges

Typ V 630-BC - V 1800-BC



Similarly to the horizontal peeler centrifuges a large choice of bowl designs of varying diameters is available.

The advantages of these centrifuges are:

- Flexible multipurpose design
- High washing and extraction performance
- Discharge via chute or screw conveyor

The following bowl designs are available:

Perforated bowl for filtration

This bowl is suited to the filtration of suspensions with crystalline and fine-crystalline products.

Non-perforated sedimentation bowl

This special design is applied to suspensions that are separated via sedimentation in the centrifugal field.

Peeler and solids discharge

The solids discharge is accomplished via a hydraulic peeler knife which is designed based on centrifuge size as a full size peeler or a pivot and dip peeler.

Vertical peeler centrifuges for FGD gypsums

Typ V 800-BG - V 1800-BG

In numerous power plants worldwide, FGD gypsum is dewatered using HEINKEL centrifuges. The wide choice of gypsum centrifuges with different bowl sizes allows an optimum adaptability to varying product requirements and throughput.

The advantages of these centrifuges are:



- High availability
- Minimum residual moisture through high Centrifugal force
- Maximum reduction of chloride concentrations through optimised wash process
- Alternatively in stainless steel or rubber coated
- -Through long-term experience with renowned EDC contractors in the field of FGD gypsum plants HEINKEL can guarantee a smooth, reliable and on schedule project execution.



Technical Data Bottom discharge centrifuges	V 630	V	B 00	V1000	V1250	V1600	V1800
Bowl diameter (mm)	630	800	800	1000	1250	1600	1800
Bowl depth (mm)	315	400	630	630	800	1000	1400
Filter surface (m²)	0,63	1,00	1,58	1,98	3,14	5,00	7,91
Nominal volume (I)	50	100	160	250	500	1000	1800
Maximum load (kg)	63,0	125	200	315	630	1250	2250
Max. speed (I/min)	1500	1335	1500	1200	950	800	800
Max. Centrifugal force	800	800	1000	800	630	575	644
Weight (kg)	1900	2200	2400	3300	4500	8200	18500



Top discharge centrifuges

Typ V 500-TC - V 1600-TC

The classical HEINKEL vertical top discharge centrifuges are a cost efficient alternative in small batch production.

The centrifuge can easily be adapted to product performance.

This makes it ideally suited to operations producing a multitude of varying products in small to medium batch sizes.

The advantages of these centrifuges are:

- Flexible design for poor filtering products
- Complete discharge of filter cake
- Gentle discharge preserving particle size
- High washing and extraction performance
- Simple design
- Effective system for removal of filter bag
- Robust and easy system for removable border ring

Technical Data Top discharge centrifuges	V 500-TC	V 630-TC	V 800-TC	V 1000-TC	V 1250-TC	V 1600-TC
Bowl diameter (mm)	500	630	800	1000	1250	1600
Bowl depth (mm)	315	400	630	630	630	630
Filter surface (m²)	0,50	0,80	1,58	1,98	2,48	3,17
Nominal volume (I)	31,5	63	160	250	400	650
Maximum load (kg)	40	80	200	315	500	800
Max. speed (I/min)	2670	1900	1500	1200	950	840
Max. Centrifugal force	2000	1250	1000	800	630	630
Weight (kg)	900	1200	1700	2400	3500	7500

Classifying centrifuge

Typ V 350-BK - V 630-BK



The HEINKEL classifying centrifuge is used for the continuous wet classification of fine to ultrafine particles in slurries, especially for TiO₂, SiC, Zr, Al₂O3, CaCO₃ or Kaolin suspended in water or glycol.

The HEINKEL Centrifuge for wet classification offers a precise separation cut for the optimized production of specific slurries. Due to its absolutely reliable operation it offers the best possible cost-benefit ratio.

The process-related advantages of this centrifuge are:

- Precise separation cut of classified particles
- Easy adjustment of separation cut
- High throughput
- Flexible multipurpose design
- Recycling of coarse particles
- Easy installation
- Low maintenance through simple design
- High performance materials resulting in low peeler knife wear
- Electrical turbulence blade
- Discharge of classified suspension through pneumatically operated siphon

Technica Classifyir	I Data ng centrifuges	V 350-BK	V 630-I-BK	V 630-11-BK
Bowl dia	meter (mm)	350	630	630
Bowl de	pth (mm)	165	400	500
Filter sur	face (m²)	0,18	0,79	1,0
Nomina	volume (I)	3,75	30	37
Maximu	m load (kg)	10	62	78
Max. spe	ed (I/min)	3600	3000	3000
Max. Ce	ntrifugal force	2535	3170	3170
Weight	(kg)	650	1800	2000

After Sales Service by HEINKEL – ensuring that everything continues to turn over smoothly.

Product Support

Wear parts

Worldwide distribution from stock
Ordering via web shop

Spare parts

Available worldwide Ordering via web shop

Repairs

Worldwide inspection on site within 24 hours, 365 days per year

Sales Support

Installation

Assembly and erection on site

Start-up

Mechanical and electrical commissioning, test runs

Training

Training of operators on function, controls and troubleshooting

Maintenance

Telemaintenance and maintenance on site.

Guarantee

Comprehensive guarantees on new machines.

Solution Support

Installation

Assembly and erection on site

Start-up

Mechanical and electrical commissioning, test runs

Training

Training of operators on function, controls and troubleshooting

Maintenance

Telemaintenance and maintenance on site.

Guarantee

Comprehensive guarantees on new machines.

Business Support

Refurbishment

Partial or complete refurbishment of used machines (of other producers as well)

Guarantee

Guarantees for refurbished machines and parts

Rental machines

Quick compensation for failed units







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