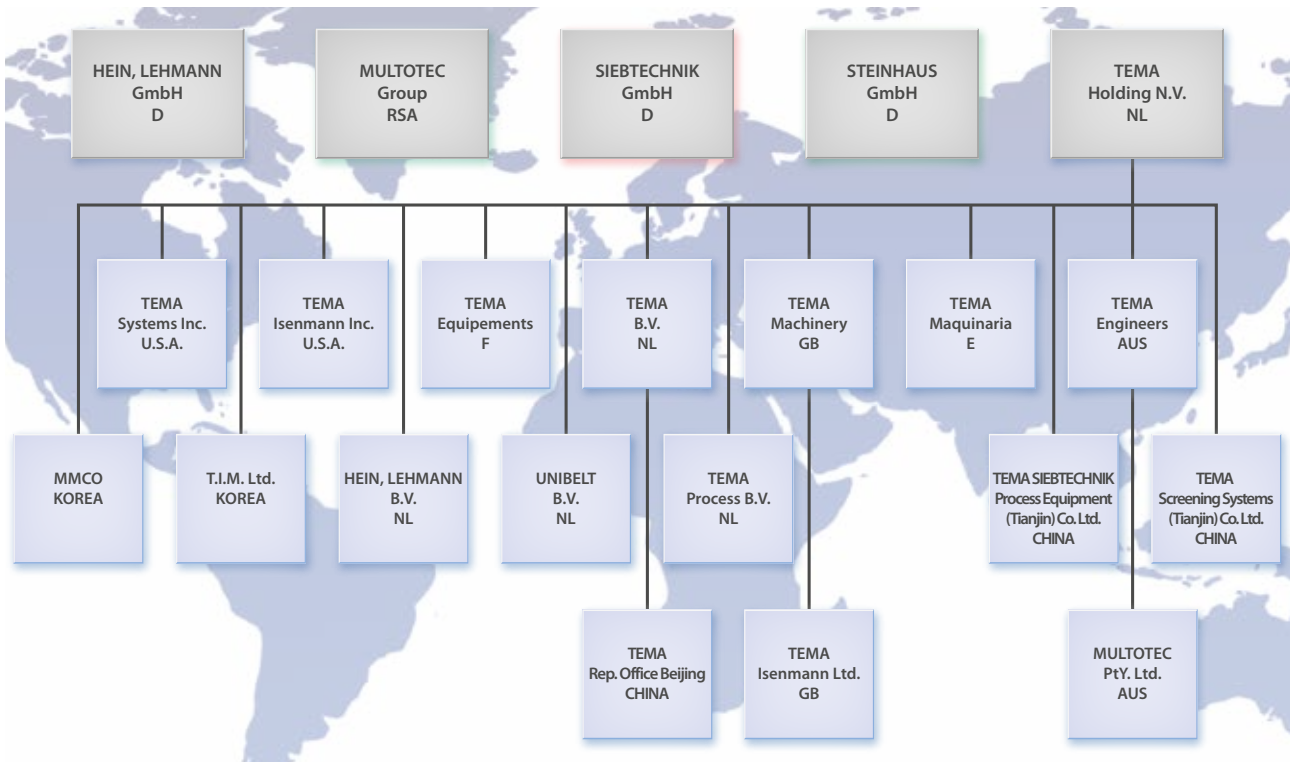


# Coal Centrifuges



for clean coal and coal slurry dewatering

# Clean coal and coal slurry centrifuges



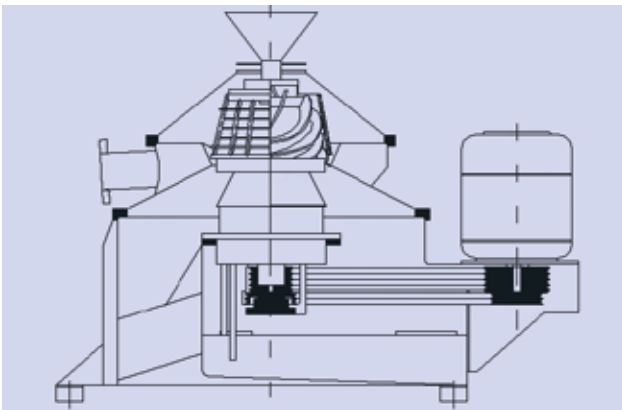
Since SIEBTECHNIK GmbH designed and manufactured the first coal centrifuge in 1957, successive design updates afterwards have significantly improved the performance of this equipment, and now, the horizontal centrifuge manufactured by SIEBTECHNIK / TEMA becomes the world standard in the field of world wide coal dewatering.

Certain development also has been achieved in the initially designed vertical coal centrifuge along with change of customer demands. Though, these equipment models in early years played certain roles, some inherent defects in design that often caused shutdown restricted the productivity.

Since TEMA was authorized by SIEBTECHNIK GmbH in 1990, TEMA began its production of centrifuge respectively in Australia, South Africa and the United States of America. The purpose of this production is to provide better and timely service to its local customers. As of today, there are above 4000 SIEBTECHNIK / TEMA coal centrifuges operating in worldwide coal preparation plants. In order to improve the processing capacity of this equipment, SIEBTECHNIK has developed clean coal centrifuge with larger screen basket diameter.

The following pictures are the clean coal centrifuge with screen basket diameter 1650 mm now being put into operation.



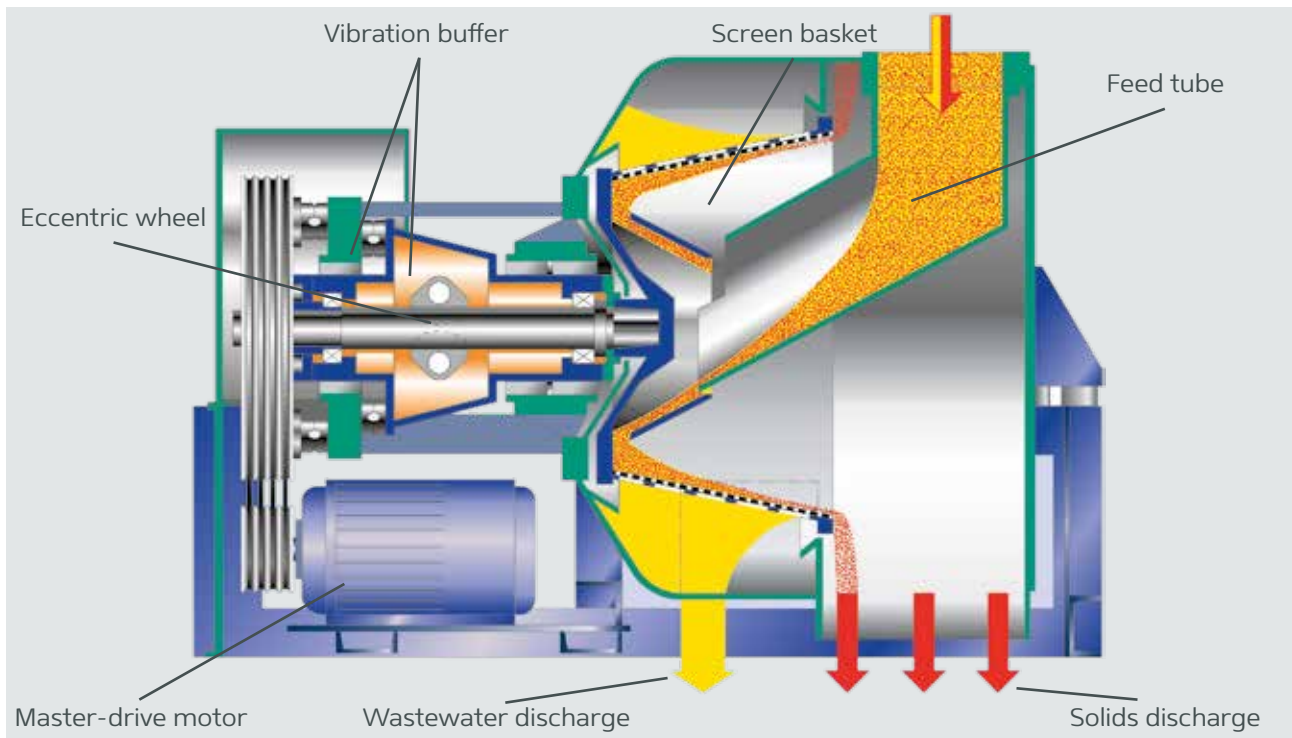


A number of design updates to vertical coal centrifuges failed to achieve ideal effect in terms of equipment overall performance, and the maintenance to it is very difficult. Now, all SIEBTECHNIK coal centrifuges adopt horizontal design, which is the state of the art technology, featured with large processing capacity and easy maintenance.





# HSG Vibrating centrifuge



The well-designed horizontal vibratory screen centrifuge has high-efficient and high-yield performance. It is able to provide:

- 96% product recovery rate under certain conditions
- Easy and fast maintenance
- Increased production by adjustable axial vibration amplitude
- Regular vibration generated by eccentric wheel, stable equipment operation, and more energy-saving with one vibration motor
- No special machine base for shock absorption required

Equipment durability and high production yield capacity have been considered in designing every model of SIEBTECHNIK horizontal vibratory screen centrifuge. SIEBTECHNIK is also manufacturing heavy-load centrifuges with capability of centrifuge vibration generation and control.

You may have more options if you choose SIEBTECHNIK vibration centrifuges ~ model diversified horizontal centrifuge series available in nowadays market.

Model		HSG 1000	HSG 1100	HSG 1200	HSG 1300	HSG 1400	HSG 1500	HSG 1650
Nominal capacity*	Feed size 0.5 ~ 50 mm	100 - 160	170 - 190	190 - 240	240 - 280	280 - 350	350 - 400	400 - 550
	0.5 ~ 13 mm	80 - 150	140 - 160	150 - 220	220 - 260	250 - 310	300 - 350	390 - 480
Rated motor power	kW	22	22/30	37	45/55	55/75	55/75	90/110
Length	mm	2230	2350	2450	2900	2900	3920	4500
Width	mm	1765	1990	1990	2225	2220	2630	2870
Height	mm	1710	1920	1900	2205	2245	2500	2820
Weight (appr.)	kg	3500	4200	4900	7500	7800	11000	13500

\*The actual production capacity depends on the feed size distribution and composition, normally, the more the particles are, the higher the product water content will be. The feed water content shall be less than 30%

## Advantages of horizontal vibrating centrifuges

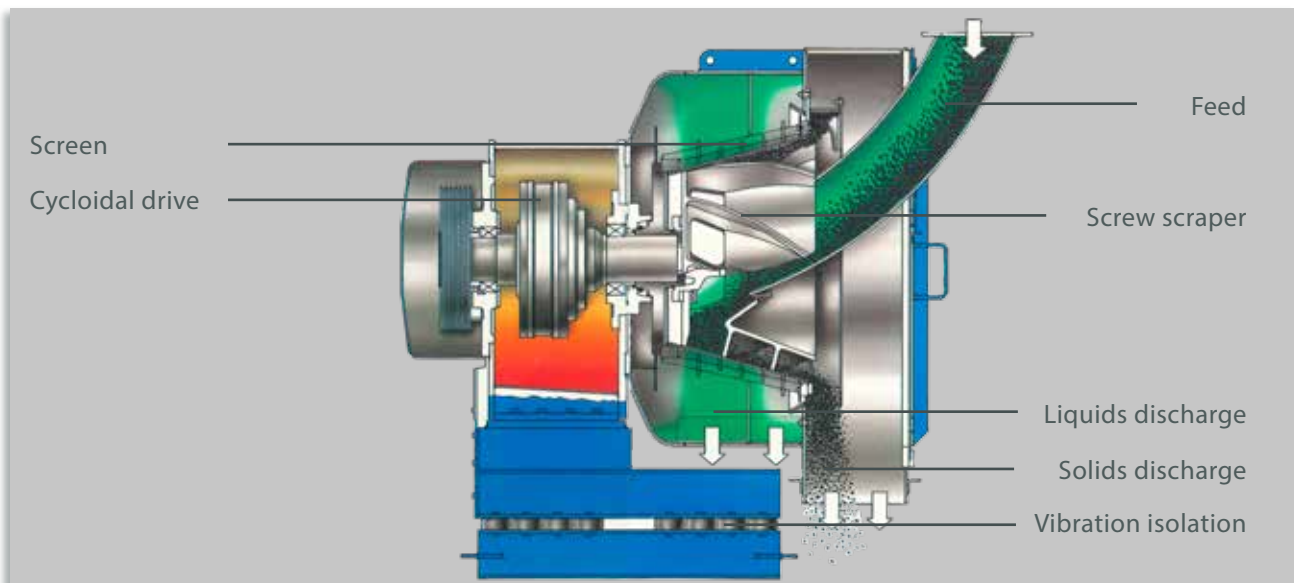
- Horizontal design
- Broader front feed door, easy access to screen basket
- Easy maintenance and service
- Vibration is provided by a single motor, and vibration times can be easily adjusted by adjusting the motor's V-shaped split belt pulley
- Separated lubrication system is able to apply oil lubrication to places where it is needed, including some monitoring and control instruments required for lubrication
- A shock absorber integrated in machine frame resulting in very low vibration level being passed onto equipment foundation
- Feed pipe installed, easy to be replaced without disassembling other parts
- Abrasion-resistant tile lining in solid and liquid chambers
- Screen basket made of non-magnetic stainless steel, enabling our centrifuge the ability to service in dense medium systems



# Horizontal worm / screen centrifuge

SIEBTECHNIK worm / screen centrifuge specially designed for coal slurry dewatering will receive higher coal slurry recovery rate, while maintaining the low water content of the discharged materials. Better performances of worm / screen centrifuge can be found in:

- Higher coal slurry recovery rate
- Low water content in product
- Easier maintenance than vertical model, since horizontal model is designed for no disassembling when doing maintenance
- Screw scraper adopts integrated and carbon steel lining abrasive-resistant design for achieving better durability and abrasive-resistance performance
- Even material distribution by screw scraper which eliminates the problem of unbalance
- Driven by large-torque involutes planet gear, more stable processing process, improved its ability to deal with load fluctuation when processing large quantity of feed
- SIEBTECHNIK worm / screen centrifuge will save you installation and maintenance cost while providing high operation reliability
- SIEBTECHNIK worm / screen centrifuge receives wide reputation of high-quality in the industry
- The most reliable centrifuge available in current market
- Experienced engineer and technical service team is ready to give you support whenever necessary
- Smaller size of machine base costs less installation expense than installing a vertical mode



Model		H 900 F/C	H 1000	H / CX 1200 F/C
Nominal capacity*	Feed size 0.5 ~ 1.5 mm	40 - 45	50 - 60	60 - 85
	0.5 ~ 3 mm	50 - 55	60 - 70	75 - 90
Rated motor power	kW	55/75	75	75
Length	mm	2400	2400	2400
Width	mm	2400	2400	2400
Height	mm	2000	2000	2000
Weight (appr.)	kg	3600	3850	4200

\*The actual production capacity depends on the feed size distribution and composition, normally, the more the particles are, the higher the product water content will be. The minimum solid concentration is 50%



## Advantages of worm /screen centrifuges

- Horizontal design
- Higher centrifugal force (higher to 400g) design will lead to low water content of final product
- Easier maintenance than vertical model, since horizontal model is designed for no disassembling when doing maintenance
- All drives, gears and bearings are separated from material flow area which eliminates the possibility of drives being damaged by materials
- Broader front feed door gives convenience to have easy look at and access to the scraper, screen basket and solids discharge chamber
- Gear drive with high torque maintains stable differential speed
- Separated lubrication system is able to apply oil lubrication to places where it is needed, including some monitoring and control instruments required for lubrication
- Compared with vertical coal slurry centrifuge, the production yield can be increased by 40%, in case the screen basket size and energy consumption are the same
- No special foundation is required for installation
- Smaller space for the equipment to be installed
- Since the discharge of solid materials encounters no any obstacle, there is no any block in the discharge tube
- Downtime is further shortened due to simplified maintenance/inspection and fast disassembling design
- All parts that may be subject to wear & tear by product are lined with special ceramic tiles for achieve longer service years



# Delivery Program

## Screening Machines Process Equipment

circular and elliptical motion screens  
double counterweight screens  
multideck horizontal screen  
round screens  
jigs

## Sampling Systems, Airtube Systems, Size Reduction Machines, Laboratory Equipment, Control Screening Machines and Automation

individual units and complete installations  
for sampling and sample preparation  
airtube systems  
jaw crushers  
roller mills  
hammer and hammer impact mills  
eccentric vibrating mills and ball mills  
control screening machines  
analytical screening machines  
splitter  
testing drums  
automation

## Centrifuges

scroll-screen centrifuges  
pusher centrifuges  
sliding discharge centrifuges  
vibratory centrifuges  
decanter centrifuges

