



For the Glass Industry:  
**Clean Water by  
Centrifugal Force**



**STA**

Centrifugal Liquid Recycling



Centrifugal Separators, semi-automatic



Self-cleaning Centrifugal Separators and  
Central Water Treatment Systems



Microfilter Systems



# Clean Water, without Chemicals

...but with physics: STA Centrifugal Separators clear grinding water, coolant and other process liquids reliably and without use of consumables. Purely due to the high rotor accelerations and the fluid-dynamical design finest particles are effectively separated and discharged as dry residues.

Sludge emptying is either done fully automatically or, on the semi-automatic models, with almost a flick of the wrist.

For more than 20 years STA Separators have been robust, safe and easy to use machines.

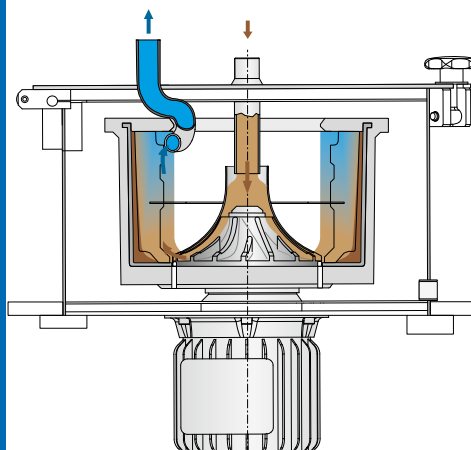


Separator U-15



## Time is money, Space is scarce

and costs for consumables and disposal are a thorn in your side: Use your capacities for glass production and not for digging out and cleaning large precipitation tanks. Let our machines do the cleaning – they are built to do the job with unmatched efficiency, using minimum space and no chemicals, nor filter disposables. Their enormous rotor accelerations of about 2,000 g are applied effectively on the glass particles, achieving high grade efficiencies for particles sizes even down to 1 to 3 microns.



### Centrifugal Separator U-15

- fluid-dynamically designed accelerator hub
- low-noise and low-maintenance direct drive
- acceleration 1.960 x g
- motor power 4 kW, volume flow 120 l/min
- sludge capacity 12 kg





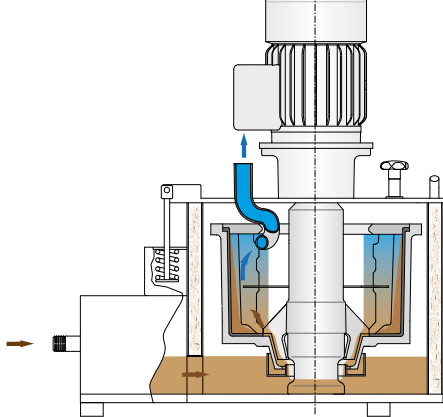
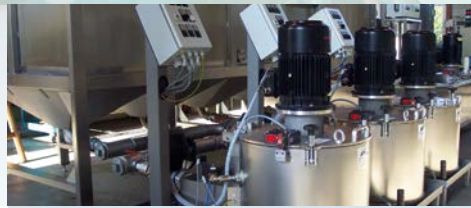
Separator S-15



Separator U-15  
with AquaCyclone AC-1000

**The ideal machine tank:  
U-15 with AquaCyclone AC-1000**

- 1000 litres Cyclon Tank with precipitation enhancement
- For direct connection of one or more glass working machines
- Recommended maximum flow rate 400 l/min (24 m<sup>3</sup>/h)
- Integrated lifting station, the machine's flat tanks are obsolete
- With machine supply pump, or alternatively easy integration of existing pump on site
- Anti-clogging and anti-wear suction connection for Centrifugal Separator
- With large maintenance flange
- Minimum space requirement: footprint only 1 m x 1,75 m



**Centrifugal Separator S-15,  
auto-priming**

- low entry level
- pre-acceleration by auto-priming, optimal separation efficiency
- direct drive with clutch
- noise and vibration damping with double casing, silicon sand filled
- acceleration 1.960 x g
- motor power 5,5 kW, volume flow 170 l/min
- sludge capacity 12 kg

Clean water will improve the grinding performance and increase life of coolant, tools and the machine. The separated sludge is perfectly compressed and doesn't require further drying. STA Centrifugal Separators help saving water, time, disposal costs and loads of space.

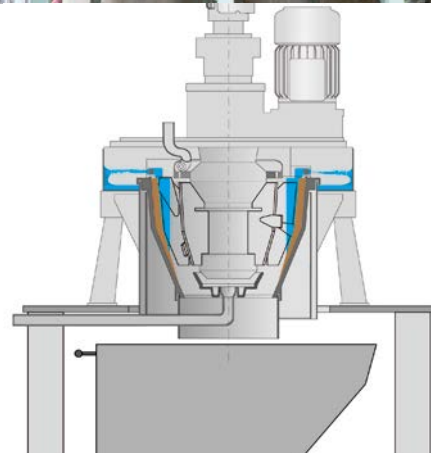
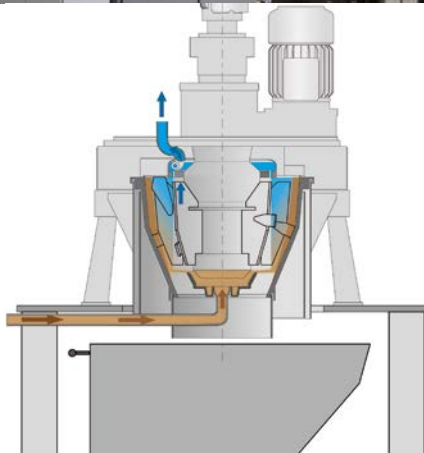
By making flocculation chemicals completely obsolete there is no more clogging of grinding wheels or system pipings, the water stays free from salt and your machine stays free from rust.



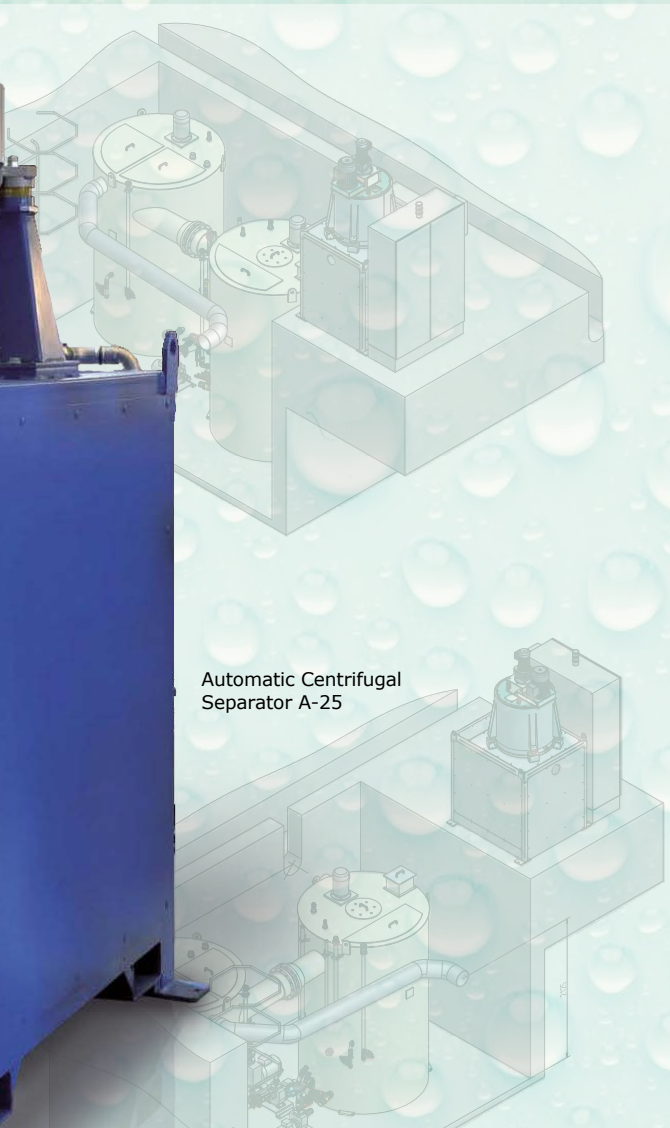
# Your grinding shop is something special?

We will build your water treatment installation so it fits. With STA Engineering you will get a system that suits your needs, and at the same time you will benefit from our expertise in process water cleaning and recycling, so you can be sure that it will work well and reliably throughout many years.

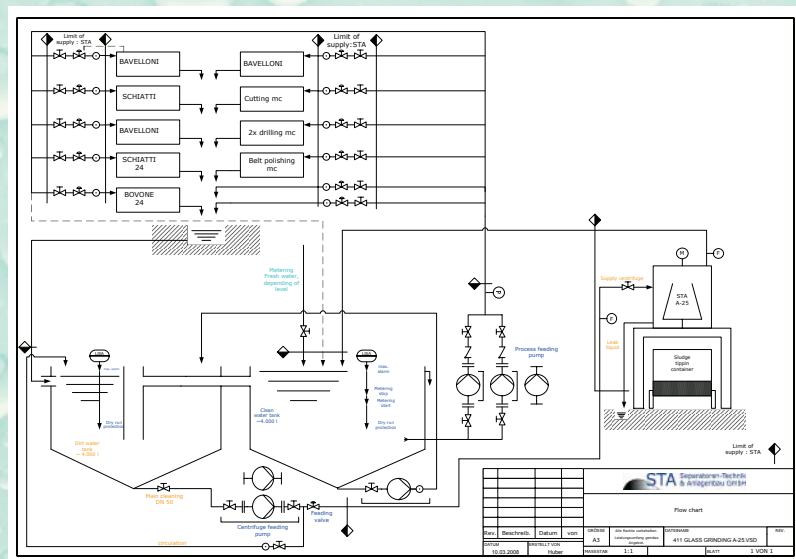
We combine our self-cleaning Centrifugal Separators with our proven cyclone tank systems; we design energy-saving ways of process supply with pressure feed-back and frequency inverter controlled pumps.







Automatic Centrifugal Separator A-25

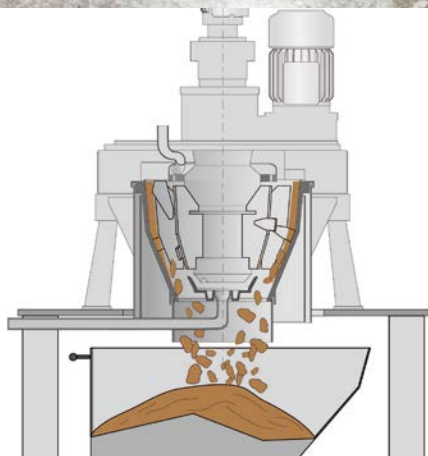


### Automatic Centrifugal Separator A-25

- frequency converted drive, available with energy recovery
- motor power 11 kW (15 kW), volume flow 170 l/min (250 l/min)
- acceleration 1.960 x g
- noise and vibration damping with double casing, silicon sand filled
- flow rate up to 250 l/min (15 kW version)
- easy to operate with graphical 6" touch display
- redundant speed and vibration monitoring

### Tough enough

Our long-term experience in glass grinding explains the specifically rugged design of our high-performance machines: All parts involved in fluid accelerating and sludge discharge are furnished with tungsten-carbide tops and anti-wear coatings. The innovative drive concept with frequency inverter technology assures maximum performance at minimum energy consumption.





# You want crystal clear water?

then make it double right: CTS is the perfect combination of grinding water cleaning with Centrifugal Separator and clear water recovery for CNC machining centre spindles or glass washers by back-flushing microfilter ClearTube.

Without any consumables and fully automatically ClearTube generates crystal clear water (NAS 7/8), even from heavily polluted grinding water. And combined with STA Centrifugal Separator the periodically back-flushed slurry is just separated together with the grinding water. Hence there is only dry sludge collected in one place. The CTS is a complete solution for any grinding water as well as spindle or wash water.

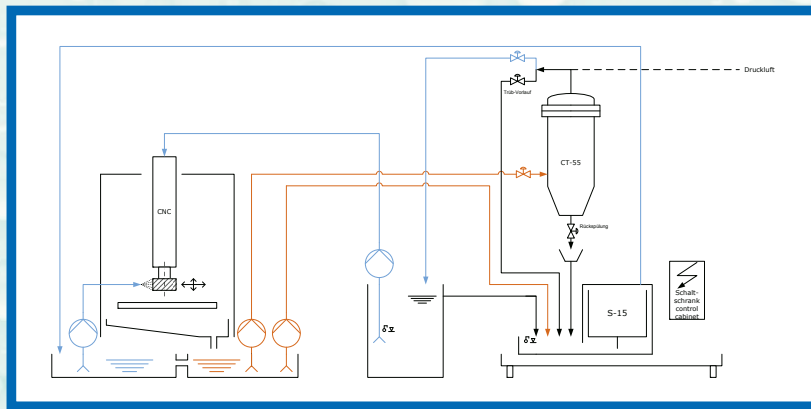
Separator S-15 with Micro Filter ClearTube



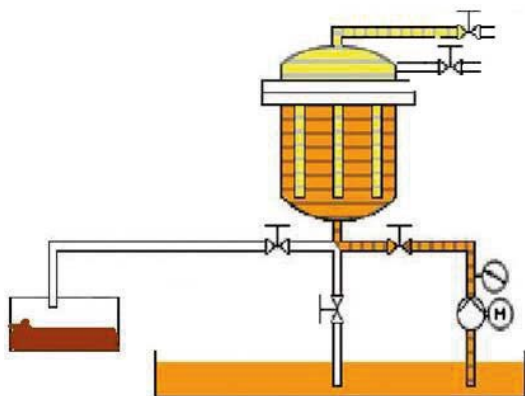
### Automatically back-flushing Micro-Filter ClearTube

- outstanding filtration efficiency: 1-3 µm (NAS 7/8)
- high flow rate at small filter area: 3,5-5 l/min per filter unit
- no need for filter aids
- works with water with and without coolant
- long filter life
- fully automatic and uninterrupted operation
- dry sludge when combined with Centrifugal Separator

	CTS 80	CTS 120	CTS 240	CTS 360	CTS 480
Filter area (m <sup>2</sup> )	2,50	4	8	12	16
Volume flow (l/min)	80	120	240	360	480



Grinding and spindle water recovery on CNC machining centre with microfilter ClearTube and auto-priming Centrifugal Separator S-15.



CTS Filter bodies contain seven or more filtering cartridges, depending on the flow rate class. The back flush cycle is done with compressed air, controlled by differential pressure measuring, even after thousands of cycles still rapidly and without performance loss. The back-flushed slurry is fed directly into a centrifugal separator, which is cleaning the conventional grinding water simultaneously and which is hence fulfilling a dual function.



# High Quality Machinery and Systems Engineering made in Germany



Centrifugal Liquid Recycling

Separatoren-Technik & Anlagenbau GmbH  
Obere Giesswiesen 32  
D-78247 Hilzingen (Germany)

Phone: +49 7731 9243 0  
Telefax: +49 7731 9243 11

info@sta-separator.de  
www.sta-separator.de

