

SULZER

Flow Equipment

MC discharge scraper



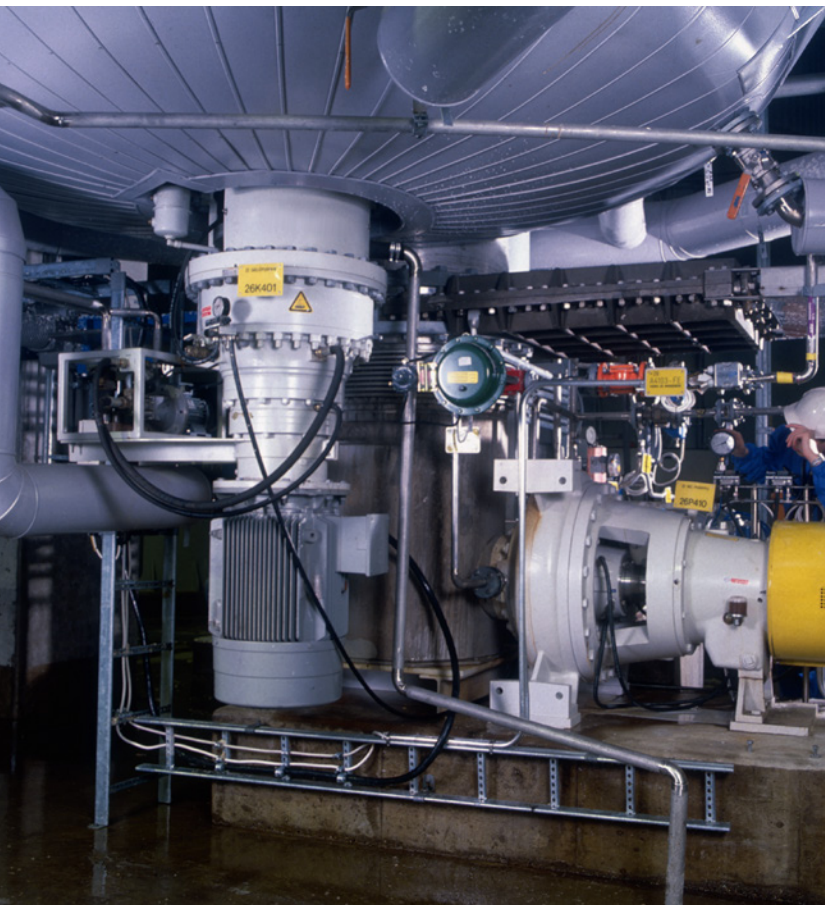
MC discharge scraper for efficient discharging of high-consistency towers

Since 1987, MC discharge scrapers have successfully facilitated the discharging of high-consistency storage and bleaching towers for both mechanical and chemical pulps. The discharge of large high-consistency towers often involves difficulties, especially when a well-controlled discharge is required.

When selecting a scraper, factors such as stock consistency and tower diameter play a crucial role. The use of a scraper is recommended in specific cases to improve the efficiency of discharging high-consistency fibrous slurry towers in demanding pulp processing applications.

Features and benefits

The Sulzer discharge scraper, designed for large high-consistency towers, scrapes the stock over the complete bottom area of the tower and leads it into the feed chute of the MC pump, thus enabling an even discharge and simultaneously preventing channeling of the stock in the tower. The MC discharge scraper also stabilizes the pumping procedures.



Compatibility and adaptability

- MC discharge scrapers are designed to be easily installed in existing towers with minor changes
- Available in three sizes and with or without a dilution possibility, which allows customers to choose the size and features that best suit their needs
- Dilution scraper, if chosen, simultaneously dilutes the pulp uniformly and discharges the tower without interference. This is particularly beneficial when dealing with high-consistency stocks (20-35%) and the pumping consistency required is in the MC range

Long-standing reliability for discharging high-consistency towers

Specifications

Non-diluting scraper

- diameter of tower > 3'000 mm
- inlet and outlet consistency 8-13%

Diluting scraper

- diameter of tower > 3'000 mm
- inlet consistency 13-30%
- outlet consistency max. 13%

Construction

The scraper is fastened to the bottom flange of the stock tower. A flanged electric motor serves as the drive. The bushing of the scraper shaft to the tower is equipped with a water-flushed packing box.

Scraper 3'000 with a planetary gear is suspended from the tower bottom. The packings can be replaced without discharging the tower. Scrapers 4'300 and 6'500 are provided with a spur gear with an upright shaft which is fastened on the slowly rotating secondary shaft of the gear with a fixed coupling. The two-armed scraper equipped with doctor plate is fastened to the scraper shaft.

In the diluting scraper, dilution water is led through the dilution connection along the shaft to the scraper. Dilution water is discharged into the fiber suspension through the holes in the scraper, thus diluting the stock.

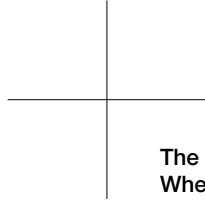
Materials

The standard material is EN 1.4404 stainless steel. Other materials are available on request.

Operational values

Diameter of scraper, mm	3'000	4'300	6'500
Consistency range, %			
MC-xxxx	8-13	8-13	8-13
MC-xxxx-D	13-30	13-30	13-30
Scraper rotating speed, rpm			
MC-xxxx	10	12	8
MC-xxxx-D	10	15	8
Power demand max., kW*			
MC-xxxx	36	88	105
MC-xxxx-D	36	105	105
Motor			
MC-xxxx	45/1'500	110/1'500	132/1'500
MC-xxxx-D	45/1'500	110/1'500	132/1'500
Amount of sealing water, l/min			
MC-xxxx	3-4	3-4	3-4
MC-xxxx-D	6-8	6-8	6-8
Pressure of sealing water higher than pressure in tower bottom, bar>			
MC-xxxx	0.5	0.5	0.5
MC-xxxx-D	0.5	0.5	0.5
Weight without motor, kg			
MC-xxxx	1'330	6'970	9'230
MC-xxxx-D	1'370	6'970	9'230

* Depends on stock consistency and capacity



The Sulzer Flow Equipment division keeps your processes flowing. Wherever fluids are treated, pumped, or mixed, we deliver highly innovative and reliable solutions for the most demanding applications.

The Flow Equipment division specializes in pumping solutions specifically engineered for the processes of our customers. We provide pumps, agitators, compressors, grinders, screens and filters developed through intensive research and development in fluid dynamics and advanced materials. We are a market leader in pumping solutions for water, oil and gas, power, chemicals and most industrial segments.

E00512 en 12.2023, Copyright © Sulzer Ltd 2023

This brochure is a general presentation. It does not provide any warranty or guarantee of any kind. Please, contact us for a description of the warranties and guarantees offered with our products. Directions for use and safety will be given separately. All information herein is subject to change without notice.

