

Automatic Internal Scraper (Brush) Filter

NO.8802

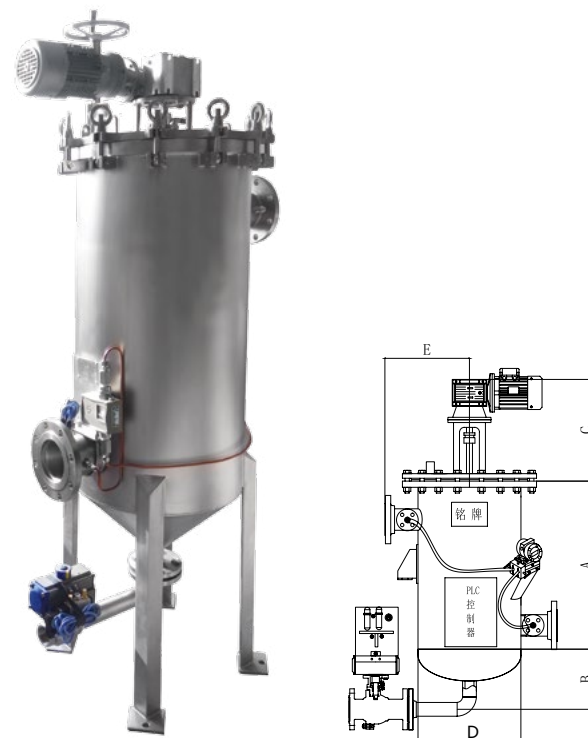
Description

Scraper filter is a new generation of mechanical self-cleaning filter developed by Shanghai Ruicui Filtering Equipment Co., Ltd. and has reached the world's leading technology level. Different from the recoil self-cleaning water filter, the scraper filter is not only used for water filtration, but also is widely used for self-cleaning filtration of viscous materials such as solvents, acids, alkalis, polymers, coatings, etc. The efficiency is higher and the accuracy range is 30- 1500 microns, can handle the viscosity of up to 800,000 centipoise liquid, used in water treatment, petrochemical, metallurgy, power, fine chemicals, coatings, inks, paper, food and beverage, pharmaceutical, metal processing and other industries.

The external scraper filter, fully automatic operation, high filtration accuracy, stable and reliable performance, is an alternative to the traditional manual filter or the use of disposable filter media. It can replace the traditional core filter in many fields. Filters, basket filters, shaker filters, etc.

Working Principle

The liquid flows in from the inlet of the filter and flows from the top down and flows through the surface of the filter to the outlet. When a certain amount of impurities are collected on the surface of the filter, the motor drives the scraper equipped with a corrector to rotate against the surface of the filter to scrape impurities and impurities. As the descending liquid accumulates at the bottom of the container, when a certain amount of impurities accumulates, the automatic blowdown valve opens the collection chamber to discharge the liquid containing a high concentration of impurities, and the residual liquid can be recovered or discharged.



Technical Parameters

Filter No.	Dimensions					Effective filter area m ²
	A	B	C	D	E	
RCGD-WL80	650	180	260	219	210	0.125
RCGD-WL159	680	180	260	250	225	0.22
RCGD-WL200	680	190	260	300	250	0.471
RCGD-WL250	700	220	260	350	275	0.392
RCGD-WL325	720	240	280	426	315	0.51
RCGD-WL400	780	300	280	500	350	0.628
RCGD-WL500	850	390	300	600	400	0.785

Applicable Industry and Fluid

- Suitable for industrial water treatment, papermaking, petrochemical, biopharmaceuticals, coatings, inks, food and beverages, etc.
- Suitable liquid break types: Water, fermentation broth, syrup, protein, corn syrup, large pot bean powder, culture medium, oil blend oil, methylstyrene, concentrated sulfuric acid, methanol, polymers, resins, inks, pigments, Fillers, coatings, citric acid,

- soaps, rubber, sorbitol, wet end additives, adhesives, ethanol, chocolate, high temperature oils, juices, coolants, diesel, kerosene, etc.
- Main filtration function: Remove large particles, sieving at fixed value, purify fluid, protect key equipment
- Filtration type: scrape filter, automatic continuous online filtration

Technical Features and Advantages

- Fully automatic operation, through the PLC timing cleaning or differential pressure protection cleaning, so that the filter element is always clean
- Does not produce disposable filter consumables, saves on consumables costs and environmental treatment costs
- Adopt PTFE wear-resistant material scraper, excellent scraping effect, significantly improve the ability of impurity removal, and effectively improve the service life of the filter element
- Using high-intensity filter elements, precise gaps, extremely smooth surfaces, easy scraping, high strength, long life
- Filter pressure loss is very small, flow rate is stable, saving pipeline energy consumption, conducive to continuous process stability

- Closed filter to prevent leakage of hazardous materials, which is conducive to safe production
- Emissions are highly contaminated and recyclable to avoid loss of high-value materials
- Multiple module combinations and automation modes are available to meet various filtration application requirements
- Configuration of internationally renowned branded gearmotors or pneumatic components for extremely high reliability and long life
- Configuration cover auxiliary lifting device, easy to operate

Technical Parameters

Performance parameters	I22	I42	I72	I109	I136	I158	055	0105	A22	A39	A78
Filter area (cm ²)	2200	4200	7200	10900	13600	15800	5500	10500	2200	3900	7800
Can use accuracy first(μm)	30-5000										
Reference flow(m ³ /h)	3.9-24	6.5-45	10.8-85	16-140	20-192	32-300	8.7-59	20-118	3.9-24	5.8-45	10-92
Maximum operating temperature(°C)	200										
Working pressure(MPa)	0.1-1.0(Higher customizable)										
Capacity(L)	42	64	180	320	400	580	175	378	35	52	160
Import and export connection	Flange or thread										
Import and export size(DN)	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Sewage outlet size(DN)	40	40	40	40	50	80	40	50	40	40	40
Motor reducer / cylinder	180/250/370/550W , 750W , Three-phase, 380V motor or explosion-proof motor/cylinder drive										
Pneumatic sewage ball valve	Double acting cylinder, 220VAC or 24VDC solenoid valve/explosion proof solenoid valve, gas source requirement 5SCFM (m3/h), pressure 0.4~0.8MPa										
Differential pressure switch	Use differential pressure switch or differential pressure transmitter for protection and control										
Control box	220V stainless steel control box or explosion-proof control box										
Scraper material	PTFE Scraper / Stainless Steel Scraper										
Sealing material	VITON Fluoroelastomer/PTFE										
Note: The flow rate is for reference (100 micron), and is influenced by the liquid viscosity, temperature, filtration accuracy, cleanliness, etc. Please contact us for details.											