

Cartridge Filter Equipment

I. Application Scope

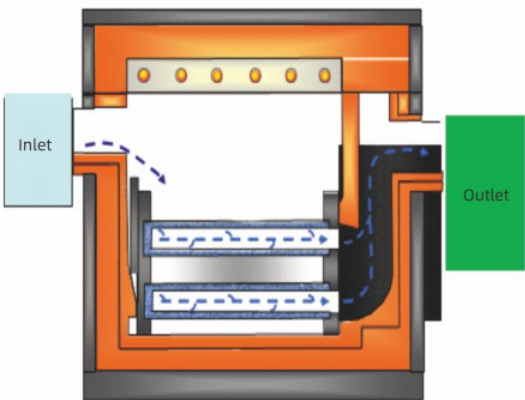
Used for fine filtration of particle impurities in molten aluminum alloy such as battery foil, 3C materials, Can materials, photosensitive drums, and aerospace materials.

It has the function of uniformly controlling temperature and stable filtration effect.



II. Cartridge Filtration Principle

The aluminum liquid enters from the inlet of the cartridge filter equipment, passes through the filter tube for filtration, filters out the impurities in the aluminum liquid, and the pure aluminum liquid flows out from the outlet of the cartridge filter equipment.



III. Equipment Model and Parameters

Model	Standard model	Operating flow (t/h)	Maximum aluminum liquid treatment capacity (t)	Heating power (kw)	Residual aluminum amount (kg)
EG-GS-7	7*1	≤7	665	79	997
EG-GS-25	28*1	≤25	2520	109	2120
EG-GS-45	22*2	≤45	3960	158	3960
EG-GS-55	28*2	≤55	5040	158	3960
EG-GS-65	22*3	≤65	5940	236	5940
EG-GS-75	28*3	≤75	7560	236	5940

IV. Performance Advantages

1. Long service life of the box lining: Adtech has developed a special material for the box, which has good non-stick aluminum performance, high erosion resistance, no delamination or chipping, and a relatively long service life. The market feedback service life is more than 3 years.
2. Good thermal insulation performance: The thermal insulation layer designed after simulating temperature field. The materials of insulation layer are combining with nano-fiber boards and other thermal insulation boards, which can make the shell temperature below 65 degrees.
3. High filtration precision: Compared with plate-type filtration and deep-bed filtration, the precision of cartridge filtration is higher.
4. Precise temperature control: The electric control adopts PID control, and the temperature control is more precise.

V. Filtration Precision

Applicable to all alloys. Depending on the purpose of the cartridge filter equipment, the specification model and filtration precision of the filter cartridge are different:

Filter tube grade	FA	FB	FC	FD
Double stage filtration CFF PPI	50	60	/	/
Average flow rate (kg/min/tube)	20	16	16	7~12
Filtration life/t/tube (per filter tube)	100~150	50~100	15~50	10~15
Filtration precision (μm) Filtration efficiency above 90%	40	20	10	5

VI. Application Cases

