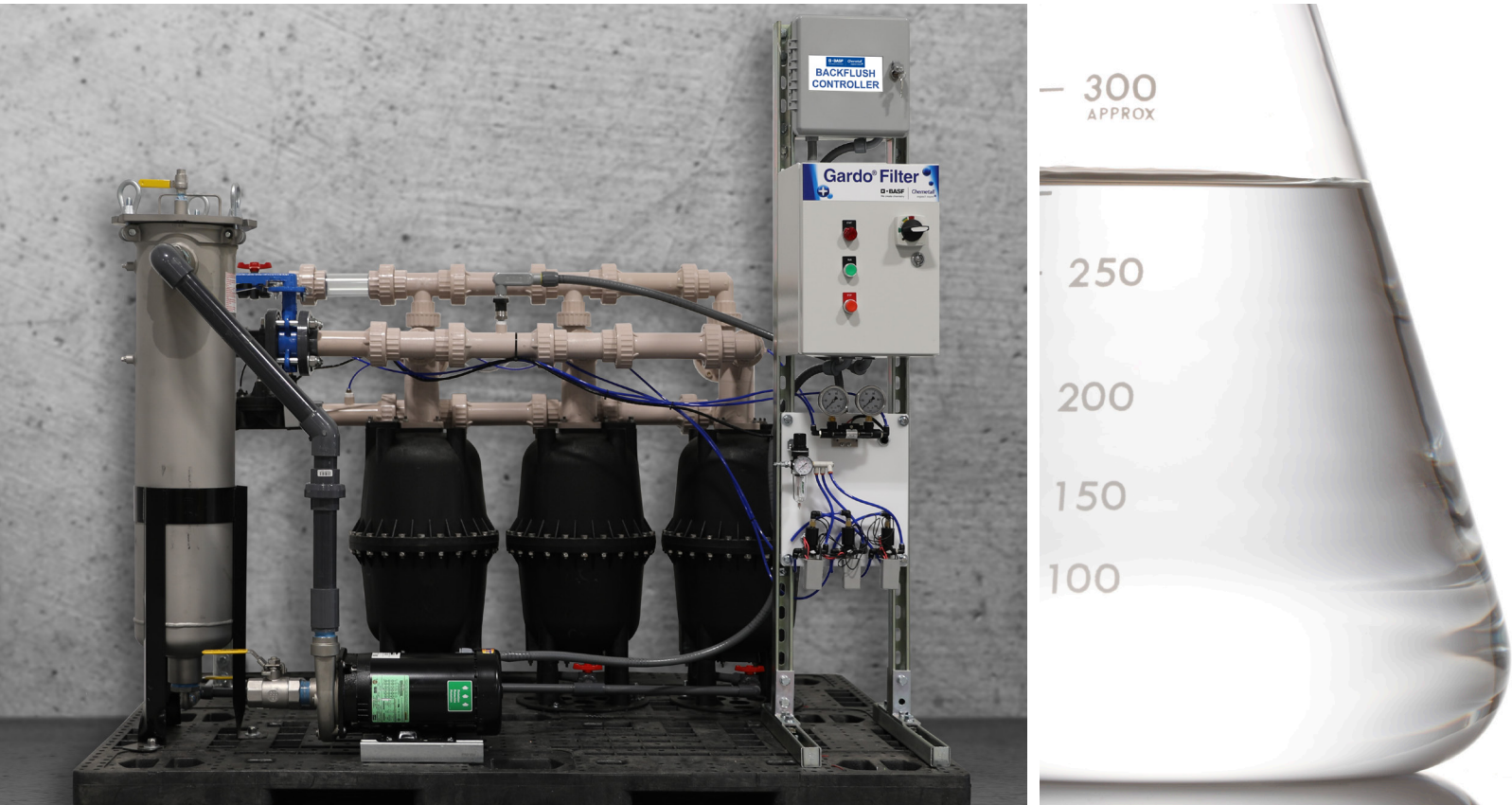


Gardo® Filter — Media Filtration System

Precision filtration system for excellent iron removal in advanced pretreatment and acid neutralizing baths



Introducing the Gardo Filter — Media Filtration System

The **Gardo Filter — Media Filtration System** is the ultimate solution for advanced filtration needs. Engineered for industrial-grade performance, the **Gardo Filter — Media Filtration System** is specifically designed to efficiently remove iron from Chemetall's advanced pretreatment and acid pickle neutralizer process baths.

Gardo Filter System benefits:

- ⊕ Skid mounted for easy placement
- ⊕ Built-in fluid purge system
- ⊕ Automatic backflush comes standard
- ⊕ Durably designed with Industrial components
- ⊕ Designed for easy maintenance & repair

BASF
We create chemistry

Chemetall
expect more[⊕]

Gardo® Filter — Media Filtration System

Far more capable than all predecessors, this innovative media filtration system is what your process needs to succeed!

This robust filtration system features a durable stainless steel construction, including a direct-drive industrial pump capable of handling 1/8" solids without damaging the impeller. The stainless steel filter housing comes equipped with a strainer basket to capture larger contaminants, ensuring they don't interfere with the media filters' performance.

The **Gardo Filter — Media Filtration System** incorporates composite filter tanks with a two-part design, allowing for straightforward disassembly and maintenance if media solidification or component replacement is needed. The system's PVC plastic piping, with union connections, facilitates easy assembly and disassembly. Safety is a priority with a built-in pressure switch that automatically shuts off the pump if filter pressure approaches the maximum limit.

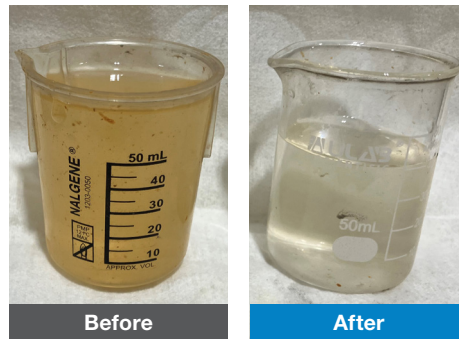
The intuitive backflush controller is user-friendly, allowing for quick adjustments. Operators can set the backflush to trigger based on a timer, inlet/outlet pressure differential, or manual activation. For reliable backflushing, the advanced backflush control system includes decoders and actuator valves, along with a master backflush backpressure valve, to optimize performance.

Unparalleled filtration performance

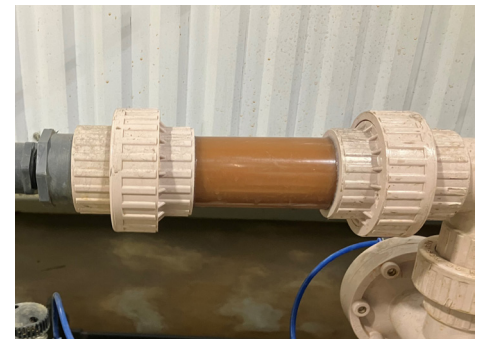
Before and After photos are from an actual installation on an advanced pretreatment process tank.



Typical advanced pretreatment bath **without Gardo® Filter**



Bath samples taken before and 1-hour after **Gardo® Filter** filtration begins



Concentrated iron contamination discharging during backflush

The system delivers superior backflushing performance

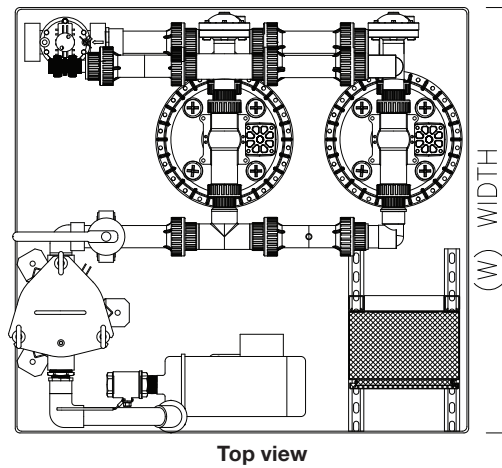
- ⊕ **Balanced Flow and Distribution:** Provides uniform flow across the media bed, promoting balanced and effective filtration.
- ⊕ **Full Vertical Backflush Flow:** Ensures that all backflush water is directed vertically, effectively lifting and flushing the entire media bed.

- ⊕ **Complete Media Cleaning:** The vertical flow pattern ensures thorough removal of iron from the media.
- ⊕ **Eliminates Channeling:** Avoids uneven water distribution, eliminating the problem of wasted backflush water and ensuring optimal filter performance.

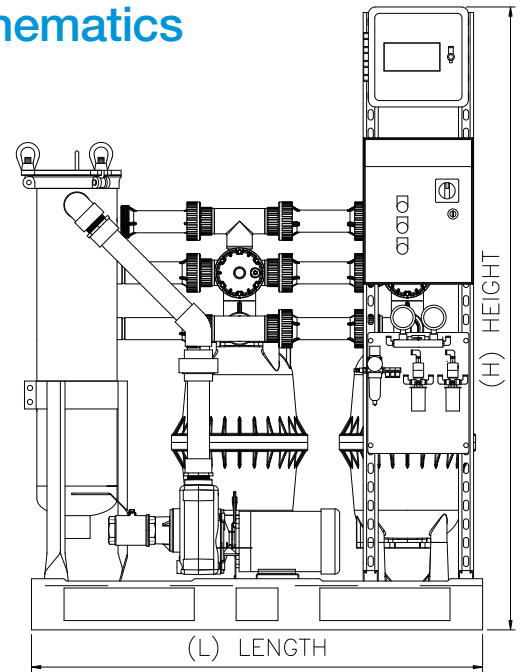
- ⊕ **Reduced Backflush Solution Consumption:** Efficiently uses less backflush water, reducing overall process solution consumption.

Choose the **Gardo Filter — Media Filtration System** for unparalleled reliability and efficiency in your filtration processes.

Gardo® Filter — Media Filtration System schematics



Top view



Front view

System specifications

Product	Length (in. / cm)	Width (in. / cm)	Height (in. / cm)	Inlet connection	Outlet connection	Backflush discharge
1,280 Siphon system	45 / 114.3	48 / 121.9	67 / 170.2	2 in. FNPT	2 in. FNPT	1 in. FNPT/socket
1,920 Siphon system	72 / 182.9	48 / 121.9	67 / 170.2	2 in. FNPT	2 in. FNPT	1 in. FNPT/socket
1,280 Gravity system	45 / 114.3	48 / 121.9	67 / 170.2	2 in. FNPT	2 in. FNPT	1 in. FNPT/socket
1,920 Gravity system	72 / 182.9	48 / 121.9	67 / 170.2	2 in. FNPT	2 in. FNPT	1 in. FNPT/socket
2,560 Gravity system	72 / 182.9	48 / 121.9	67 / 170.2	2 in. FNPT	2 in. FNPT	1 in. FNPT/socket

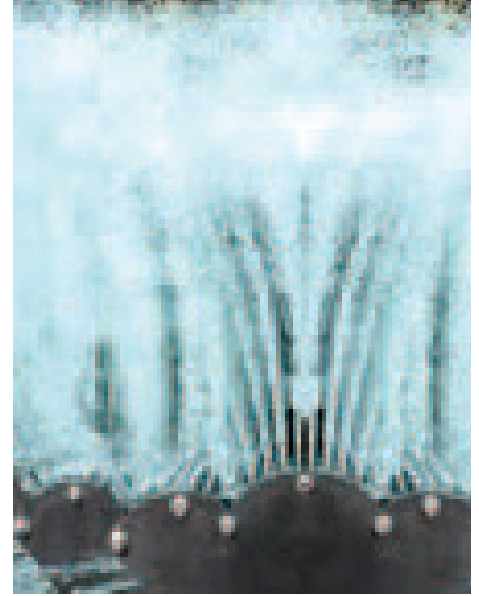
System models available

Maximum process tank capacity — 60 Hz* (Gallons / Liters)	Feed style	AC voltage (3 phase)		Gardo Filter part numbers	
		60 Hz	50 Hz	For advanced pretreatments (FKM)	For alkaline neutralizing baths (EPDM)
1,280 / 4,861	Siphon	460	380–415	45216043	45216059
1,280 / 4,864	Siphon	230	190	45216044	45216060
1,920 / 7,296	Siphon	460	380–415	45216047	45216063
1,920 / 7,296	Siphon	230	190	45216054	45216064
1,280 / 4,864	Gravity	460	380–415	45216045	45216061
1,280 / 4,864	Gravity	230	190	45216046	45216062
1,920 / 7,296	Gravity	460	380–415	45216055	45216065
1,920 / 7,296	Gravity	230	190	45216056	45216066
2,560 / 9,728	Gravity	460	380–415	45216057	45216067
2,560 / 9,728	Gravity	230	190	45216058	45216069

*When pumps are run on 50 Hz, flows are reduced by 17%.

Easy to maintain

- ⊕ **Flange and Union Joints:** Provides fast and easy maintenance and component replacement.
- ⊕ **System Fluid Purge Built-in:** Forces virtually all process fluid from the filtration system to allow for safe and effective maintenance to minimize employee contact with water and chemicals.
- ⊕ **Two-Part Filter Tank Construction:** Allows for disassembly of the media tanks to effectively remove solidified media and perform repairs on the underdrain assembly.
- ⊕ **Media Fill and Inspection Port:** Enables fast media inspection, removal, and replacement as needed.



We are dedicated to your success!

Build a partnership through support

- ⊕ On-site service regularly scheduled
- ⊕ Continuous improvement initiatives
- ⊕ Written service reports
- ⊕ Laboratory and Field Technical Group Support

We've got you covered

Our process success is achieved through our experts and the integrated technology they bring to the table

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- ⊕ Technical support
- ⊕ Corporate support



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