CULINARY GRADE STEAM FILTERS

SPECIFICATION GUIDELINES

Process Filtration

As a market leader in steam filtration products, R.P.ADAMS has created performance and material specifications to assist in the selection of steam filters for culinary grade steam production. These product-related requirements do not represent the full range of requirements that systems may need, and may not identify all potential considerations.

QUALITY ASSURANCE

- Filter elements must be completely staged, assembled, tested, and packaged in a facility whose quality management system is approved by an accredited registering body to the appropriate ISO 9000 quality systems standard.
- All component materials used must be FDA listed for food contact use in accordance with CFR Title 21, as well as EC/1935/2004. All plastic or elastomeric component materials shall meet the criteria for USP Class VI testing.
- Filter elements must be non-shedding, and fabricated without the use of binders, surface-active agents, adhesives or additives.

PERFORMANCE SPECIFICATIONS

CULINARY STEAM FILTER PERFORMANCE AND OPERATING SPECIFICATIONS

Filter Specification	Value	Measurement
Retention Efficiency (Steam)	≥ 95%	2.0 µm
Media Air Permeability	2.08	$ft^3/(min^* ft^2)$@0.5 in.$H_2O\Delta P$
Regeneration Cycles Allowed	6	30 min. Ultrasonic Bath, Aqueous Solvent
Integrity Test	≥ 12	Inches H_2O Bubble Point
Operating Temperature Range	-4 to 392	Degrees Fahrenheit
Max Pressure Differential	75	Lb./In.^{2} (Either Direction)

INSTALLATION AND USE SPECIFICATIONS

- Steam filters shall be installed at all points-of-use where steam either directly or indirectly comes in contact with food or food contact surfaces.
- Steam filter assemblies should each have an appropriate means of discharging condensate, such as a float trap/drain. The drain design should be consistent in construction and material to the filter housing.
- An entrainment or moisture separator must be installed near to and upstream of the culinary steam filter assembly to protect the filter from slugs of water, particularly during system startup.
- The filter assembly and associated pipe work must be insulated in a way that keeps the steam relatively dry while still providing access to service the assembly or change the filter element.

MATERIALS SPECIFICATIONS

CULINARY STEAM FILTER MATERIALS OF CONSTRUCTION

Part	Material		CFR Title 21
	GP-GS	GP-GSL N	
Filtering Media	SAE Grade 316	SAE Grade 304	211.65
End Caps	SAE Grade 304	SAE Grade 304	211.65
O-Rings	EPDM (Alt. Fluoraz)	EPDM (Alt. Fluoraz)	177.2600

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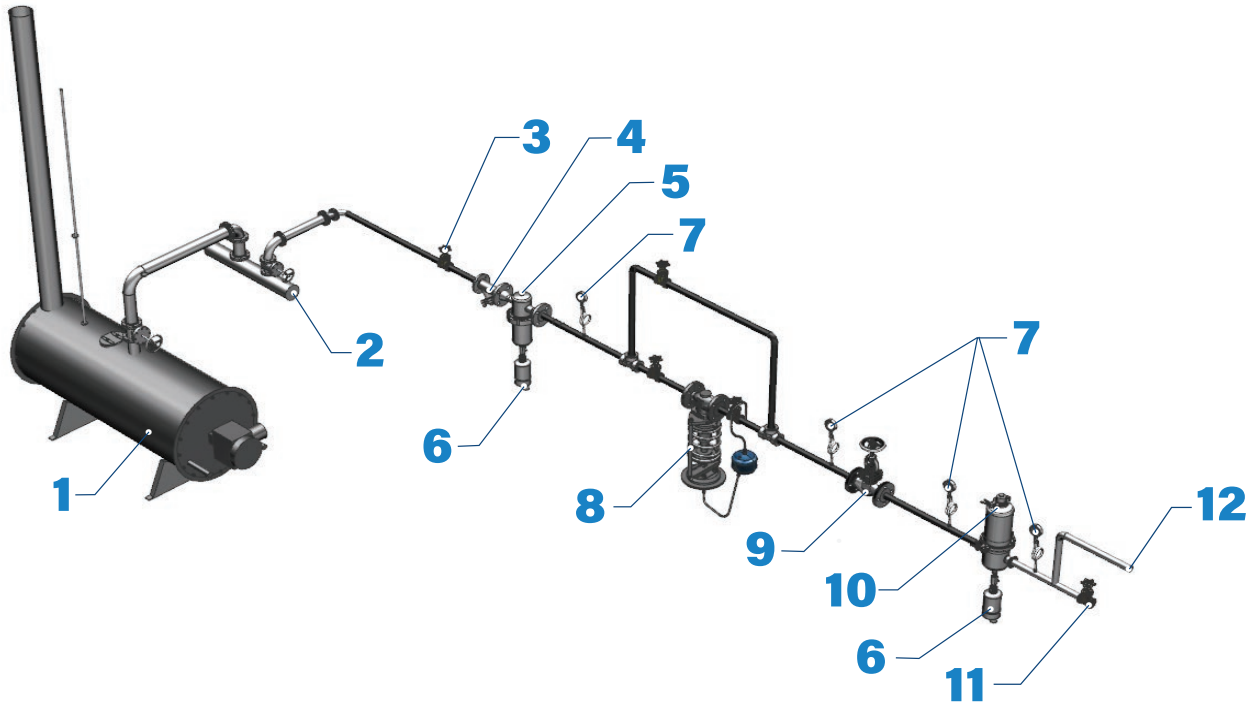
RECOMMENDED CULINARY STEAM SYSTEM



1 Boiler
2 Steam Header
3 Stop Valve
4 Strainer
5 Entrainment Separator
(GP-EG housing with 25µm GP-GSLN Element)
6 Condensate Trap
7 Pressure Gauge
8 Pressure Reducing Valve
9 Steam Throttling Valve
10 Culinary Steam Filter
(GP-EG housing with 5µm GP-GS Element)
11 Sampling Valve
12 Sanitary Check Valve & Tubing to Process

R.P. ADAMS

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