

# STEAM FILTERS

## The Problem

Cleaning and sterilizing a sterile air system must be executed at least on a daily basis. Steam inherently contains dirt, rust, and scale particles which must be removed through filtration or the sterile bacteria particles which must become overloaded within a relatively short period of time.

## The Solution

Microdyne Steam Filters "STF" are the most economical solution to the removal of stated contaminants.

## Application

Exclusively as a Steam Filter, located at the steam input source. It is important to mount the unit, when possible, next to the connection from the steam to the compressed air network. When sections of the sterile air system in front of the sterilizing filter are in non-stainless steel, we recommend the appropriate rated Steam Filter. The Steam Filter operates during routine service and filters out particles and dust. During steaming, it carries out the same function.

**NOTE:** Where a Steam Filter must also serve as an air filter, type selection corresponds to our Sterile Filter table.

### Example:

Flow Volume: 23.5 scfm Operating Pressure: 30 psi (2 Bar) approx. Conversion Factor: 0.36 Filter Size: 23.5/0.36 = 65.3 scfm Filter Choice: "STF" 10 with a capacity of 65 scfm @ 30 psi (2 Bar)

We strongly suggest the use of our rugged 1.4301 stainless steel housings when we are filtering any aggressive media.

## Performance Data

**Materials:** All Microdyne Steam Filters "STF" are manufactured in sintered stainless steel and stainless steel end caps. the housings are also standard 1.4301 stainless steel. The Microair modular housing construction system permits the use of sintered steam elements in either aluminum or carbon steel housings.

Efficiency: 100% relative to a particle size of 30 microns.

Pore Size: .2, .5, 1, 2, 5, 12, 25, 50, 100 microns.

Flow Volumes: 88 to 52,800 lb/hr.

Max. Operating Pressure: to 250 psi (10 Bar).

Differential Pressure: .3 to .4 psi (.02 to .03 Bar).

**Operating Temperature:** up to 392° F (200° C).

Pipe Connections: 3/8" NPT to 12" Flange.

Steam Capacity: 50 to 32,000 lbs/hrs.

Microdyne Products Corp.

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## Technical Data — Non-Flanged Housings

Non-flanged, single-element housings are fabricated in stainless steel and are rated at 250 psi. Connection types include stub-end, NPT and sanitary.

Size	Nominal flow (lb/hr)	NPT Size Connections	Elements Per Filter
3	50	1/2″	1
5	65	1/2″	1
7	120	1/2″	1
9	230	3/4"	1
10	285	1″	1
11	340	1″	1
12	550	1 1/2″	1
13	800	1 1/2″	1
14	1000	2"	1
17	1600	2"	1

## Technical Data — Flanged Housings

Filters with flange-type connections, both single- and multiple-element housings, are fabricated in stainless steel and are rated at 250 psi.

Size	Nominal flow (lb/hr)	NPT Size Connections	Elements Per Filter
14	1000	2″	1
17	1600	2″	1
20	3200	3″	2
30	4800	4″	3
40	6400	6″	4
60	9600	6″	6
80	12800	8″	8
100	16000	8″	10
120	19200	10″	12
160	25600	10″	16
200	32000	12"	20

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