



SERIES 5000 COUNTER-CURRENT PACKED TOWERS

CFM	A	B	C	D	E	F*	G*
400	6"	—	6"	1'-0"	1'-9"	10'-0"	7'-9"
1,500	10"	—	10"	2'-0"	2'-6"	11'-0"	8'-8"
2,400	1'-0"	—	1'-0"	2'-6"	3'-1"	12'-0"	9'-7"
3,400	1'-4"	—	1'-4"	3'-0"	3'-2"	12'-6"	9'-11"
4,600	1'-6"	—	1'-6"	3'-6"	3'-3"	13'-2"	10'-4"
6,000	1'-8"	—	1'-8"	4'-0"	3'-4"	13'-7"	10'-8"
7,600	2'-0"	—	2'-0"	4'-6"	3'-6"	14'-6"	11'-5"
9,400	2'-6"	—	2'-6"	5'-0"	3'-7"	13'-8"	10'-6"
11,400	2'-9"	1'-10"	2'-6"	5'-6"	3'-8"	14'-3"	10'-11"
13,600	3'-0"	2'-0"	3'-0"	6'-0"	3'-9"	14'-7"	11'-2"
15,900	3'-3"	2'-2"	3'-0"	6'-6"	3'-10"	15'-1"	11'-6"
18,500	3'-6"	2'-4"	3'-0"	7'-0"	3'-11"	15'-2"	11'-6"
21,100	3'-9"	2'-6"	3'-6"	7'-6"	4'-0"	15'-7"	11'-9"
24,100	4'-0"	2'-8"	3'-6"	8'-0"	4'-1"	16'-1"	12'-1"
27,200	4'-3"	2'-10"	3'-6"	8'-6"	4'-2"	16'-6"	12'-4"
30,500	4'-6"	3'-0"	4'-0"	9'-0"	4'-4"	16'-11"	12'-8"
34,000	4'-9"	3'-2"	4'-0"	9'-6"	4'-5"	17'-5"	13'-0"
37,700	5'-0"	3'-4"	4'-0"	10'-0"	4'-6"	17'-5"	12'-10"
41,500	5'-3"	3'-6"	4'-6"	10'-6"	4'-7"	17'-9"	13'-1"
45,600	5'-6"	3'-8"	4'-6"	11'-0"	4'-8"	18'-1"	13'-4"
50,000	5'-9"	3'-10"	4'-9"	11'-6"	4'-10"	18'-6"	13'-7"

Intermediate and larger sizes are available. Consult factory on specific requirements.

F* and G* dimensions based on a 4 foot packing depth and may vary depending on application.

Bionomic counter-current packed towers are the ideal solution to air pollution problems associated with the removal of corrosive vapors, unwanted mists, noxious and odoriferous gases.

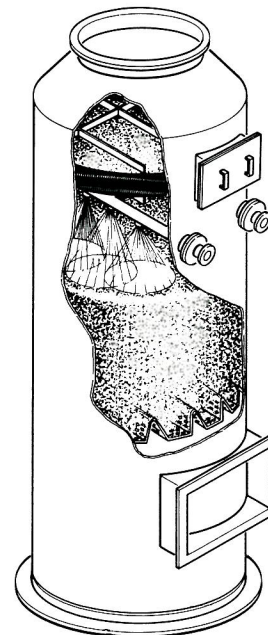
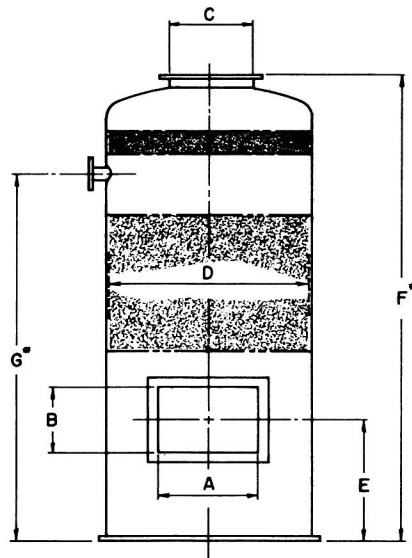
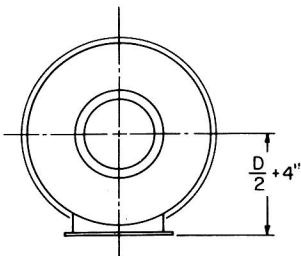
By creating a counter-current flow between contaminated gases and scrubbing liquid throughout a high surface area packed bed, rapid and uniform absorption of pollutants is achieved with maximum efficiency.

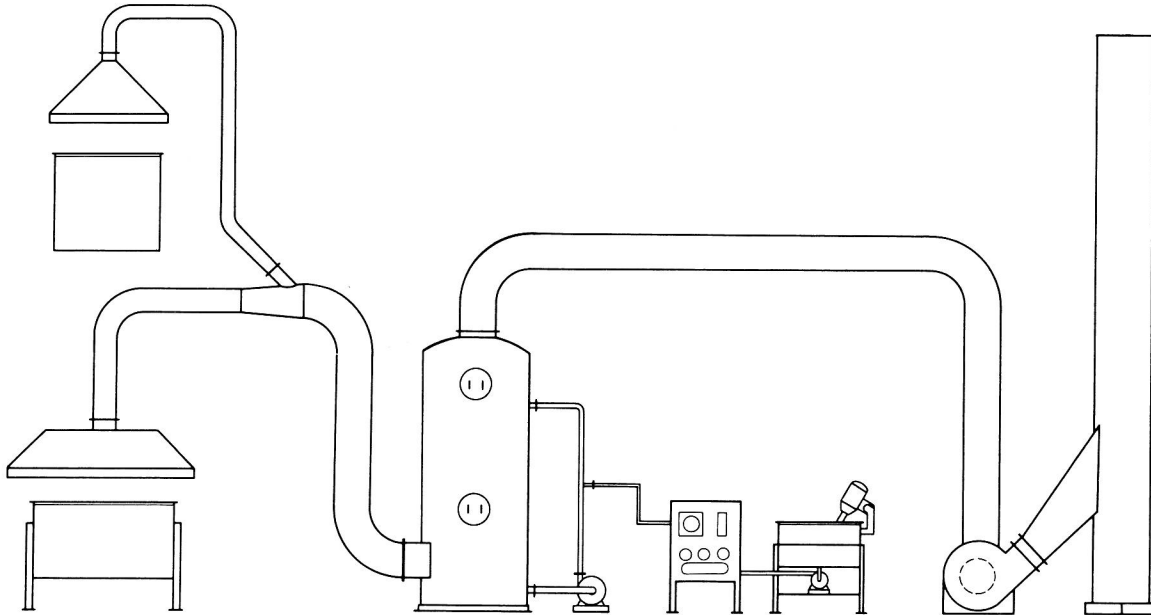
Series 5000 towers are designed to accept a wide variety of packings, mist eliminators and gas-scrubber liquor distribution systems. This enables the scrubbers to meet a full range of applications and gas absorption requirements.

For specially troublesome low solubility gases, scrubbers can be custom engineered to include extra depth or multiple packed beds with intermediate step chemical treatment.

Standard tower designs cover gas flow rates from 400 to 50,000 ACFM. Construction materials include thermoplastics, fiberglass reinforced plastic, mild steel, stainless steel, high nickel alloys, hastalloy and corrosion resistant coatings and linings.

In situations where building codes limit the height of rooftop structures, or where lower absorption efficiencies are acceptable, compact horizontal cross-flow packed scrubbers are available.





SPECIAL FEATURES:

Reinforced Gas Inlet and Outlet — Flanged inlet sized for uniform gas distribution with minimum entrance flow losses. Rugged flanged outlet capable of supporting the weight of an axial flow fan, stack or unsupported ducting.

Easy Access Liquid Distributors — Liquid distributors are bolted to the tower for easy removal and inspection. Low pressure, non-clogging spray nozzle arrangements achieve uniform liquid distribution for low to medium capacity towers. High capacity units are fitted with special trough-type high efficiency distributors.

Multiple Mist Eliminator Designs — Under normal conditions, our standard knitted wire mesh pad mist eliminator superbly separates the incoming liquid from the vapor. When high mist concentrations, fine mists or scrubbing liquids that contain depositing solids are present, we recommend our special interlaced filament mist eliminators or packed bed sections.

Choice of Packed Bed Section — The absorption efficiency of the packed bed section depends upon the choice of types and sizes of packings, and the bed depth. These are selected by our engineers to meet the pollution treatment requirements. Multiple beds with redistributors are available for difficult applications.

Optimum Selection of Bed Support Plates — Three different styles of bed support plates are offered so that the gas distribution and packing support requirements can be precisely matched. Large open passages in the plates permits complete washdown of depositing solids and minimal gas friction losses.

Large Capacity Integral Recycle Section — A standard feature on all Bionomic counter-current packed towers, this eliminates the need for separate recycle or chemical neutralization tanks in most installations. Recycle sections are available with optional sloped, dished and cone bottoms in lieu of flat for better drainage on scrubbing liquids that tend to sludge or solidify.

COMPLETE SYSTEM CAPABILITIES

As specialists in the handling of corrosive fumes, Bionomic Industries also fabricates and installs complete corrosion resistant exhaust systems in PVC, polypropylene and fiberglass reinforced plastic. Fabrication capabilities include laboratory hoods, ducts, fittings, blast gates, dampers, fume hoods, stacks, fans and tanks. These items are designed to complement the series 5000 counter-current tower together with recirculation pump, chemical feed package and instrumentation.