

# Impinjet® Scrubbers



## Collect Particulates and Absorb Vapors and Gases

The Impinjet Scrubber uses Sly's unique perforated plate with impingement baffle strips to both collect fine particulate and absorb gases. Its design provides proven economies over many other techniques

Rugged and uncomplicated in design, Impinjet Scrubbers can realize efficiencies in excess of 99% on many types of dust or gases.

## Ready for Today... Ready for the Future

Unique flexibility is furnished by Impinjet Scrubbers. Made with the future in mind, additional stages can be added to existing installations to improve efficiency to handle tomorrow's requirements—without increasing liquid consumption. There is no need to buy complete new units.

## For Cooling & Condensing, Too

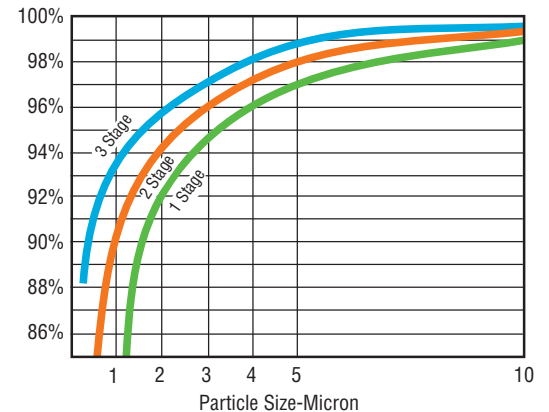
The outlet gas can be cooled to less than 5°F above the temperature of the incoming liquid. Chilled liquid is used as direct contact condensing liquid and removes the heat from the gas stream as it gains heat.

Scrubbers also recover waste heat. Heat from dryers and other processes that would normally be exhausted can be used to heat water being fed to the scrubber almost to the wet bulb temperature of the inlet gas. For cooling and condensing and for heat recovery, our designs can accommodate high hydraulic loadings.

## Highlights

- Handles combustible dusts safely, without modifications
- High condensing and cooling efficiency for gases
- Efficiencies exceeding 99% for particles 5 microns or larger
- Multiple stages can be added to improve efficiency
- Capacities from 500 to over 100,000 CFM
- Water requirements as low as 3 GPM per 1000 ACFM
- Emissions warranties available
- Low maintenance
- No moving parts, oversized access doors to service plates and sprays

## Standard Impinjet Efficiency@ Pressure Drop of 1-1/2" per Stage



## Pressure Drop @ 70°F

Number of Stages	Normal Capacity (Inches, W.G.)	Max. Capacity (Inches, W.G.)
One Stage	3.0	4.25
Two Stage	4.5	6.4
Three Stage	6.0	8.5

*Pressure drop is an important consideration in evaluating the efficiency expected of a scrubber in a given application and in fan, drive and motor selection.*

*When high efficiency is required, the use of additional stages provides a corresponding increase in pressure drop.*

*The above chart shows standard pressure drop in inches, w.g., across scrubber for 1 stage, 2 stages and 3 stages.*

# Impinjet® Scrubbers



## Standard Equipment

- Conditioning sprays
- Stainless steel impingement baffle plates
- Fixed blade mist eliminator
- Self-draining design
- Access doors (bolted)
- Carbon steel/stainless steel construction

## Optional Equipment and Features

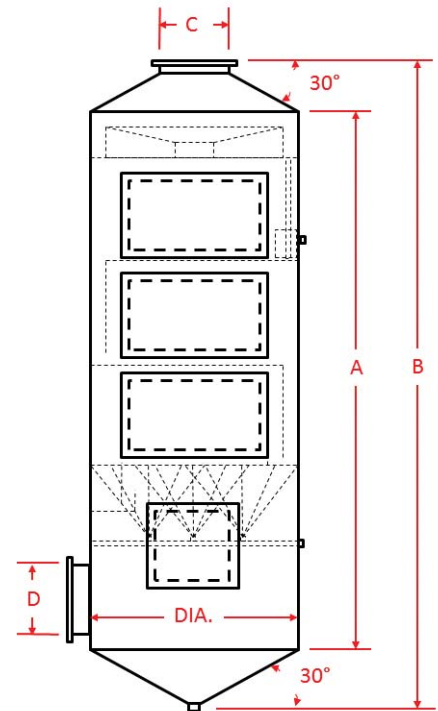
- Stainless steel, high alloy, FRP or plastic construction
- Mesh or chevron mist eliminators
- Quick opening access doors
- Integral sumps
- Recirculation tanks
- Pumps
- Exhaust fans
- Instruments

## Outlet Volume (CFM)

Normal Capy 420 FPM	Max. Capy 500 FPM	Dia
740	885	1'-6"
1350	1550	2'-0"
2100	2450	2'-6"
3000	3500	3'-0"
4050	4800	3'-6"
5300	6250	4'-0"
6700	7950	4'-6"
8250	9800	5'-0"
10000	11850	5'-6"
11900	14100	6'-0"
13950	16550	6'-6"
16200	19200	7'-0"
18600	22050	7'-6"
21150	25100	8'-0"
23850	28350	8'-6"
26750	31800	9'-0"
29800	35400	9'-6"
33000	39250	10'-0"
36400	43250	10'-6"
39950	47500	11'-0"
43650	51900	11'-6"
47550	56500	12'-0"
51550	61350	12'-6"
55750	66500	13'-0"
60150	71550	13'-6"
64700	76950	14'-0"

## Nozzle Sizes

Plate Water Inlet I.P.S. Inches	Spray Water Inlet I.P.S. Inches	Bottom Drain I.P.S. Inches	Inlet Flange Dia. D	Outlet Flange Dia. C
1/2	1/2	1	6"	7"
3/4	1/2	1	8"	8"
1	3/4	1 1/4	10"	11"
1	3/4	1 1/4	1'-0"	1'-1"
1 1/4	1	1 1/2	1'-2"	1'-3"
1 1/4	1	1 1/2	1'-4"	1'-5"
1 1/4	1	1 1/2	1'-6"	1'-7"
1 1/2	1 1/4	2	1'-7"	1'-9"
1 1/2	1 1/4	2	1'-9"	1'-11"
1 1/2	1 1/4	2	2'-0"	2'-2"
2	1 1/4	2 1/2	2'-2"	2'-4"
2	1 1/2	2 1/2	2'-4"	2'-6"
2	1 1/2	2 1/2	2'-6"	2'-8"
2	1 1/2	2 1/2	2'-8"	2'-10"
2 1/2	2	3	2'-10"	3'-0"
2 1/2	2	3	3'-0"	3'-2"
2 1/2	2	3	3'-2"	3'-4"
2 1/2	2	3	3'-0" x 3' -2"	3'-7"
2 1/2	2	3	3'-0" x 3' -6"	3'-9"
3	2	4	3'-0" x 3' -10"	3'-11"
3	2	4	3'-0" x 4' -2"	4'-1"
3	2 1/2	4	3'-0" x 4' -6"	4'-4"
3	2 1/2	4	3'-0" x 5' -0"	4'-6"
3	2 1/2	4	3'-0" x 5' -4"	4'-8"
3	2 1/2	4	3'-0" x 5' -10"	4'-10"
4	2 1/2	4	3'-0" x 6' -4"	5'-0"



Three Stage Unit

## Single Stage Dimensions

Impinjet Number	Straight Side A	Overall Height B
115	5'-4"	6'-4"
120	5'-6"	6'-9"
125	5'-9"	7'-2"
130	6'-0"	7'-8"
135	6'-3"	8'-2"
140	6'-6"	8'-7"
145	6'-9"	9'-1"
150	7'-3"	9'-10"
155	7'-6"	10'-3"
160	7'-9"	10'-9"
165	8'-0"	11'-3"
170	8'-3"	11'-10"
175	8'-6"	12'-3"
180	9'-3"	13'-3"
185	9'-9"	13'-11"
190	10'-0"	14'-5"
195	10'-6"	15'-2"
1100	10'-9"	15'-8"
1105	11'-0"	16'-1"
1110	11'-6"	16'-10"
1115	13'-0"	18'-7"
1120	13'-3"	19'-1"
1125	13'-6"	19'-7"
1130	13'-9"	20'-1"
1135	14'-0"	20'-6"
1140	14'-3"	21'-0"

## Two Stage Dimensions

Impinjet Number	Straight Side A	Overall Height B
215	7'-4"	8'-4"
220	7'-6"	8'-9"
225	7'-9"	9'-2"
230	8'-0"	9'-8"
235	8'-3"	10'-2"
240	8'-6"	10'-7"
245	8'-9"	11'-1"
250	9'-3"	11'-10"
255	9'-6"	12'-3"
260	9'-9"	12'-9"
265	10'-0"	13'-3"
270	10'-3"	13'-10"
275	10'-6"	14'-3"
280	11'-3"	15'-3"
285	11'-9"	15'-11"
290	12'-0"	16'-5"
295	12'-6"	17'-2"
2100	12'-9"	17'-8"
2105	13'-0"	18'-1"
2110	13'-6"	18'-10"
2115	15'-0"	20'-7"
2120	15'-3"	21'-1"
2125	15'-6"	21'-7"
2130	15'-9"	22'-1"
2135	16'-0"	22'-6"
2140	16'-3"	23'-0"

## Three Stage Dimensions

Impinjet Number	Straight Side A	Overall Height B
315	9'-4"	10'-4"
320	9'-6"	10'-9"
325	9'-9"	11'-2"
330	10'-0"	11'-8"
335	10'-3"	12'-2"
340	10'-6"	12'-7"
345	10'-9"	13'-1"
350	11'-3"	13'-10"
355	11'-6"	14'-3"
360	11'-9"	14'-9"
365	12'-0"	15'-3"
370	12'-3"	15'-10"
375	12'-6"	16'-3"
380	13'-3"	17'-3"
385	13'-9"	17'-11"
390	14'-0"	18'-5"
395	14'-6"	19'-2"
3100	14'-9"	19'-8"
3105	15'-0"	20'-1"
3110	15'-6"	20'-10"
3115	17'-0"	22'-7"
3120	17'-3"	23'-1"
3125	17'-6"	23'-7"
3130	17'-9"	24'-1"
3135	18'-0"	24'-6"
3140	18'-3"	25'-0"

Model Number Example: **155** Single Stage, 5' 6" Diameter



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