



## DS PRODUCT BROCHURE DRUM SCRUBBER UNIT

**THE BION® DRUM SCRUBBER UNIT** is perfect for the removal of odorous gases in industrial environments. The five Drum Scrubber models are designed for airflows up to 1,000 CFM [1.700 m³/h] and are recommended for both low to high load/ and low to high concentration applications.

### MAIN APPLICATIONS

- Wastewater Treatment Plants
- Refineries
- Pulp and Paper Plants
- Lift Stations
- Pumping Stations
- Sludge Deposits
- Applications dealing with fertilizer, printers, cleaners, urine and fish processing.

### TARGETED GASES

- Hydrogen Sulfide
- Mercaptans
- Ammonia
- Ammonia Amines
- Volatile Organic Compounds (VOC's)

### CONSTRUCTION

The Drum Scrubber line is constructed of high-density polyethylene, measuring from 24 to 52in [610 to 1.321mm] in diameter, 63 to 81in [1.600 to 2.054mm] in overall height including the blower, and 0.75in [19mm] in thickness.

### MEDIA

At the center of BION's DS units is BION engineered, dry-chemical air filtration media, bulk filled within the units. BION offers multiple media options for the removal of odorous and sewage gases. The specific media selected is based on each individual project, with an expected Media Life (Autonomy) of six to twelve months, depending on the inlet contaminant levels.

### KEY CHARACTERISTICS

- Corrosion resistant and weather-proofed housing makes the DS range ideal for harsh environments and outdoor installations.
- Quiet operation – the centrifugal blower operates at low decibels; perfect for residential neighborhoods as well as commercial and industrial settings.
- Low maintenance – standard servicing to the centrifugal blower and media are the only tasks required to maintain this system.
- Optimal drainage via a port located at the bottom side of the vessel.
- Excellent performance in high acid gas, fluctuating temperature and relative humidity environments.

### BION SUPPORT

BION offers numerous services including unit sizing and media selection, technical support, media life analysis testing as well as environmental corrosion classification testing.

BRR\_ENV\_DS\_ENG\_V2

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STANDARD DS MODELS	DS-100	DS-300	DS-500	DS-750	DS-1000
<b>AIRFLOW</b>	100 CFM 170 m³/h	300 CFM 510 m³/h	500 CFM 850 m³/h	750 CFM 1.275m³/h	1,000 CFM 1.700 m³/h
<b>VESSEL DIAMETER</b>	24" 610 mm	30" 760 mm	36" 915 mm	45" 1.150 mm	52" 1.320 mm
<b>VESSEL HEIGHT</b>	48" 1.220 mm	60" 1.525 mm	60" 1.525 mm	48" 1.220 mm	60" 1.525 mm
<b>INLET COUPLING DIAMETER</b>	4" [USA] DN 140 mm [EU]	8" [USA] DN 160 mm [EU]	8" [USA] DN 200 mm [EU]	10" [USA] DN 200 mm [EU]	10" [USA] DN 200 mm [EU]
<b>MEDIA BED VOLUME</b>	5 ft³ 0,14 m³	10 ft³ 0,28 m³	17 ft³ 0,48 m³	27 ft³ 0,76 m³	39 ft³ 1,10 m³
<b>VOLTAGE/PHASE/FREQ</b>	110-220/1/60 [USA] 380/3/50 [EU]	110-220/1/60 [USA] 380/3/50 [EU]	110-220/1/60 [USA] 380/3/50 [EU]	230-460/3/60 [USA] 380/3/50 [EU]	230-460/3/60 [USA] 380/3/50 [EU]
<b>MOTOR RATING</b>	0.5 HP [USA] 0,37 kW [EU]	1 HP [USA] 1,5 kW [EU]	1.5 HP [USA] 1,5 kW [EU]	1.5 HP [USA] 1,5 kW [EU]	3 HP [USA] 1,5 kW [EU]

\*\*\* [USA] denotes drum scrubber specifications manufactured in North America.  
\*\*\* [EU] denotes drum scrubber specifications manufactured in Europe.

### STANDARD FEATURES

- HDPE vessel
- Removable HDPE lid
- One drain with ball valve at base of drum
- Lid mounted centrifugal blower
- TEFC [USA] or IP55 [EU] weatherproofed motor
- Outlet slide gate damper [USA] or butterfly valve [EU] with birdscreen for airflow adjustment
- Inlet flexible coupling connection
- A media bed with BION chemical filtration media, available in both bulk filled and mesh sack designs
- Suitable for outdoor installation

### OPTIONAL FEATURES

- Explosion proof [USA] or ATEX [EU] motor
- Outlet silencer
- Inlet mist eliminator
- Passive configuration