

FORCED DRAFT WET SCRUBBER



EFFECTIVE DUST AND VAPOR REMOVAL

The forced draft wet scrubber is used for applications where lime is being slaked and where any dry chemical is being added to a liquid. This component captures the dust or vapor by introducing a water curtain across the extracted air stream from the chamber. A venturi eductor induces a vacuum that pulls the dust into the scrubber wetting zone and is wetted by a water spray nozzle. Any dust or vapor that escape the wetting zone is knocked out by the baffles located in the knockout zone and is returned to the chamber resulting in no wasted product. A slight negative pressure in the chamber created by the forced draft wet scrubber also helps prevent dust from escaping into the plant area for a cleaner, safer, and operator-friendly environment.

APPLICATIONS & USE

Typical Bulk Materials Processed

- Quicklime
- Hydrated lime
- Magnesium Oxide
- Soda Ash

Typical Applications

- Mining
- Municipal Water
- Wastewater
- Pulp and Paper
- Food
- Steel
- Power
- Oil and Gas

Applicability can vary by system make and model. For an evaluation, contact us: salesinquiries@carmeuse.com

FEATURES

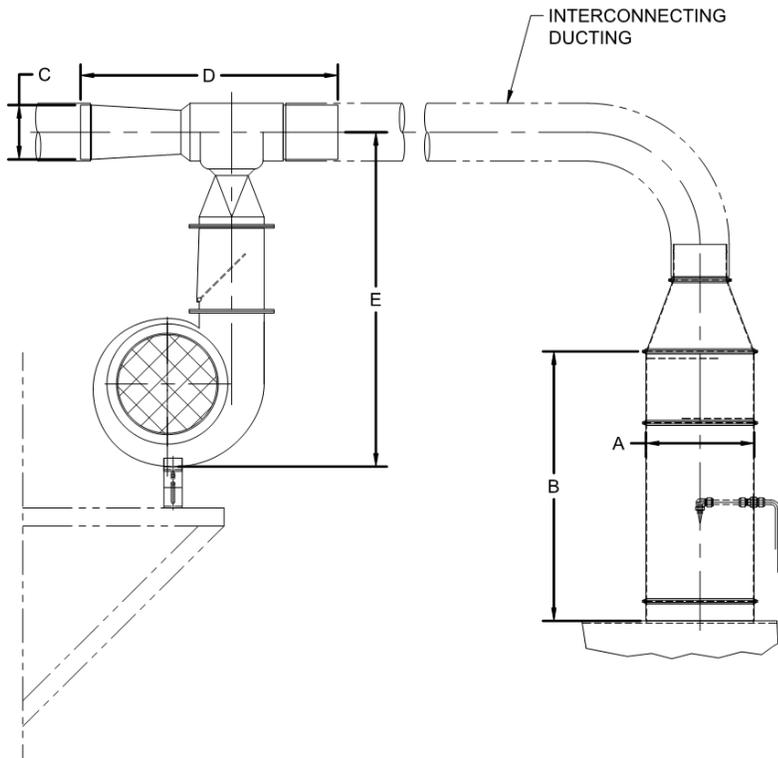
BENEFITS

Reduces undesired emissions and lowers exhaust temperature	Provides a cleaner and operator-friendly environment increasing safety
Stainless steel construction	Offers a corrosion resistant design permitting safe operations at elevated temperatures
Access door	Allows for quick inspection access with no tools saving money on maintenance time
Clamping system	Allows quick disconnect and reassembly making it easy to maintain and service
Self-draining baffles in the knock-out zone	Performs consistently and is easy to clean increasing productivity
Modularized arrangement and configuration (inlet/outlet design)	Can be installed in a new system or retrofitted into an existing system providing project flexibility
High efficiency and clog-resistant spray nozzle	Requires low operating pressure and little-to-no maintenance increasing efficiency
Blower outside of process stream	Protects from corrosive elements improving durability lowering maintenance costs
Stainless venturi eductor	Durable construction with no moving parts in the exhaust air stream minimizing maintenance time and labor

AVAILABILITY

MODEL	A (in. [mm])	B (in. [mm])	C (in. [mm])	D (in. [mm])	E (in. [mm])
WDS-200	8 [203]	37 [940]	4 [102]	27 1/2 [699]	24 1/2 [622]
WDS-250	10 [254]	37 [940]	4 [102]	27 1/2 [699]	24 1/2 [622]
WDS-300	12 [305]	37 [940]	6 [152]	28 [711]	37 [940]
WDS-350	14 [356]	37 [940]	6 [152]	28 [711]	37 [940]
WDS-400	16 [406]	37 [940]	8 [204]	21 [533]	40 1/2 [1029]

LIME SLAKER VERSION SHOWN BELOW.
ALSO AVAILABLE IN MIXING TANK VERSION.



NOTE:

Information / dimensions shown are for reference only and is subject to change based on final design and applications.

DRIVE (HP [kW])	AIR FLOW (MAX.) (CFM [m³/h])	SPRAY WATER (MAX.) (USgpm [m³/h])
1 [0.7]	222 [377]	2 [0.45]
1 [0.7]	222 [377]	2 [0.45]
2 [1.5]	573 [974]	3 [0.68]
2 [1.5]	573 [974]	3 [0.68]
3 [2.2]	1014 [1723]	5 [1.14]



SPECIFICATIONS

PROCESS REQUIREMENT

- **Air Flow Range:** 222 to 1014 CFM [377 to 1723 m³/h] @ 1.10 in w.g. [274 Pa]
- **Water Supply:** Max. flow of 5 USgpm [1.1 m³/h] @ min. pressure of 40 psig [276 kPag]

MATERIAL OF CONSTRUCTION

- **Standard:**
 - Scrubber Body: 304 Stainless Steel
 - Spray Nozzle Tubing: 304 Stainless Steel
 - Eductor: 304 Stainless Steel
 - Nonwetted Blower Wheel: A36 Carbon Steel
- **Options:**
 - Scrubber Body: Polypropylene
 - Spray Nozzle Tubing: Polyvinyl Chloride (PVC), 316/316L Stainless Tubing
 - Blower Wheel: Polypropylene (Available as In-Line Blower)



YOUR LIME HANDLING EXPERTS™

Carmeuse Systems is your trusted partner for designing, integrating, and upgrading lime handling systems. As part of the Carmeuse Group, our teams have unrivaled expertise in understanding the role of lime handling equipment within your operation. From selecting the appropriate raw material, to system engineering, enhancements, and maintenance, our teams provide End-2-End support and guidance. We make complex projects seem simple and help our customers every step of the way. Let's start a conversation, contact us at:

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