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ENGLO WET-TOWER EXTRACTOR



INTRODUCTION

The purpose of the **Englo Wet-Tower Extractor** is to create a working environment that is **free** from dust. The Englo Dust Extractor has been a proven a reliable means of dust control in Underground Mining, Coal Preparation Plants, Mineral Processing Plants, and Power Plants around the world. Englo Wet Dust Extraction systems has a proven track record of mitigating fire and explosion risk associated with combustible dust. Englo has developed a unique capability for applications where combustible fibrous or hygroscopic dust is involved. Fibrous dust creates a problem for dry baghouses, cartridges, or cyclone collectors because the fibers can become entangled and clogged inside the equipment. The Englo Wet-Flow Dust Extraction Tower has been designed to prevent this entanglement. Hygroscopic dust tends to clog and blind off filters since it attracts moisture from the air. The Wet Tower eliminates these issues since no filters are needed. Dust and fibrous air from process operations is captured with exhaust hoods and ducted to an inlet located at the bottom section of the tower. The tower is designed to capture dust, fibers, and fluff from materials such as lint, paper, wood, film, and other difficult dusts and to continuously flush everything to a bottom effluent drain. The wet effluent can then be sent to an external process location or filtered and recirculated. Englo's Wet Tower Extractor the dust control devices are applied in the food industry, forest products industry, and metals recycling processes. From cradle to grave, Englo's Extraction units are proven methods of handling many types of dust. The Wet Tower Extractor can be implemented as a standalone dust control device using centrifugal or other fan types to move the dirty air into the wet tower. Opacity testing shows virtually no visible emissions exhausting from the tower. Therefore, it is suitable in many cases as a replacement for standard baghouses. Its design inherently eliminates fires or explosions normally associated with dry collection devices and according to the NFPA 652 exhaust air can be returned into the building.

The **Englo Dust Extraction Systems** have a rated efficiency of up to 99% total dust.

OPERATION

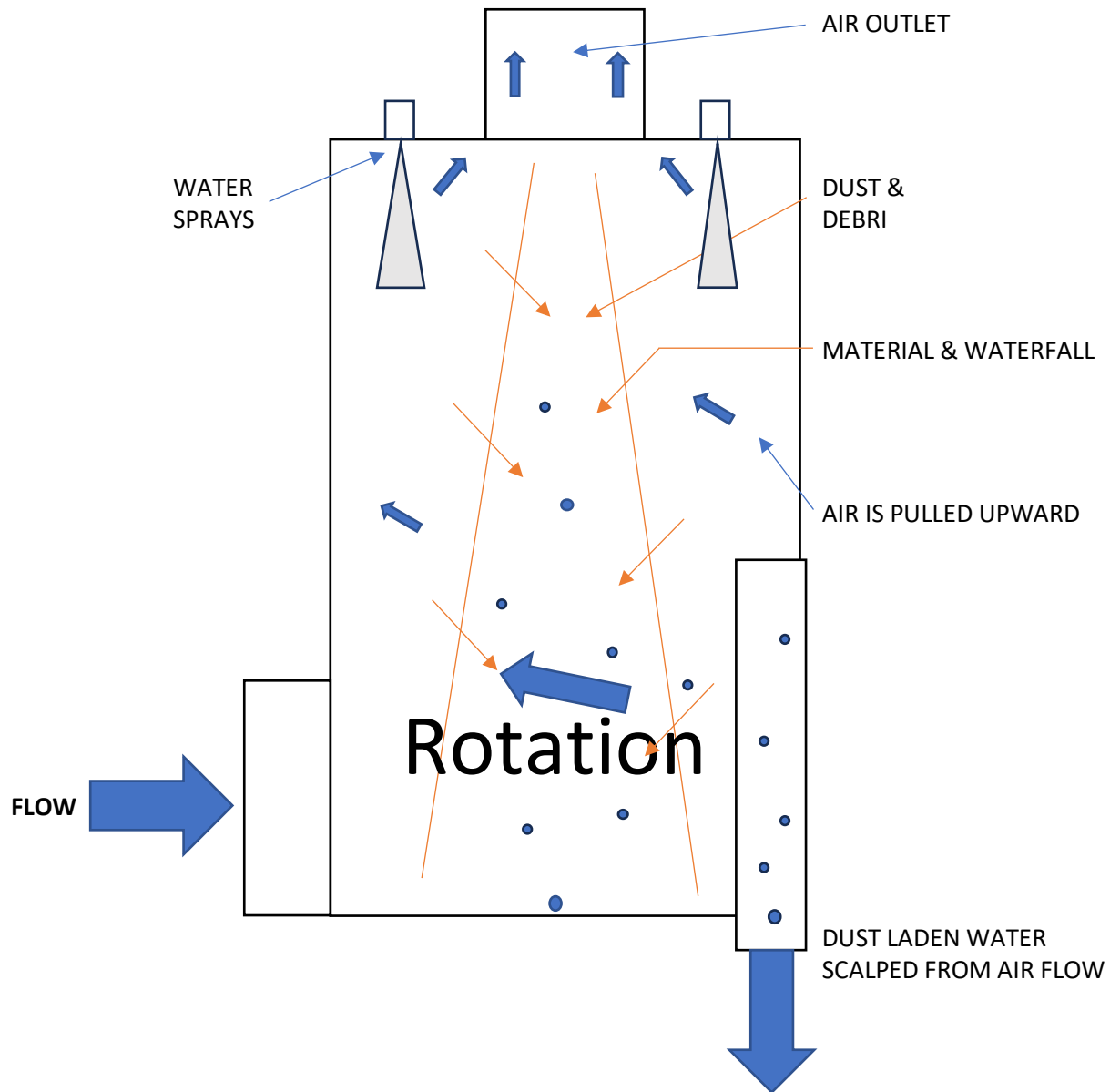
The Englo Wet-Tower Extractor can be utilized in conjunction with Englo Dust Extractors or other means to provide air flow through its interior, using water and high velocity generated by its unique design to extract particulate from the air being carried through duct systems in many different applications.

Once installed the tower extractor requires very little attention to perform.

Upon startup check the water pressure is set to the recommended pressure of 25-30 psig. The water pressure can be increased if dust loading is heavy. It is recommended that the water pressure be raised in increments of 2 psig while monitoring until a more desirable result is achieved.

Monitor discharge to ensure drains are clear and loading is acceptable.

PRINCIPLE OF OPERATION



As the heavily particulate laden air is pulled upward through the Englo Tower Extractor, the particulate is forced to contact the water droplets from the tower's spray nozzles, causing it to be weighted and fall to the bottom of the cylinder. From there the particulate and water, entrained in the air flow inside of the tower, is scalped off and exits the tower. The Wet-Tower is custom designed to allow flexibility in sizing for the required air volume of the system.

ISOLATION/LOCK OUT-TAG OUT

All relevant Manager's Rules, Management Plans, Isolation Procedures and Safe Work Procedures of the individual site must be strictly adhered to.

The purpose of isolating machinery or equipment is to allow work to be undertaken safely by ensuring that there is no danger to life, injury to persons or the possibility of damage.

Isolation requirements for individual items of machinery or equipment will vary and specific requirements of each installation site must be followed. Check the isolation requirements at the installed location and ensure compliance before starting the job.

Maintenance of this equipment may require confined space entry. Isolation Procedures and Safe Work Procedures and Practices of the individual site, and other governing agencies as applicable must be strictly adhered to.

Always adhere to the most current Isolation guidelines for the use of remote-controlled equipment when used in conjunction with this equipment.

Before work commences, all personnel that are to be employed on the job shall ensure that they understand the relevant isolation procedures, as laid down here and under the plant or mining operations rules and all applicable regulations.

All relevant isolation procedures shall be followed meticulously.

No person shall commence work until all the relevant isolation procedure(s) are in place.

PERSONNEL AND EQUIPMENT

- Before commencement of work, ensure all personnel are in a safe working position.
- Ensure that all tools are readily available.
- Appropriate Personal Protective Equipment (P.P.E.) shall be worn.

MAINTENANCE

MAINTENANCE CHECKS SHOULD BE COMPLETED WEEKLY FOR THE FIRST MONTH OF OPERATION TO DETERMINE A PREVENTIVE MAINTENANCE SCHEDULE. IT IS RECOMMENDED OPERATION CHECKS ARE COMPLETED NOT LESS THAN ON A MONTHLY BASIS THEREAFTER TO DETERMINE THE NEED FOR ADDITIONAL MAINTENANCE.

- Check water pressure during operation and adjust as needed. The recommended operational water pressure setting is 25 to 30 psi



Isolate the water source and all electrical equipment connected to the Tower Extractor prior to performing maintenance.

SAFETY REFERENCES



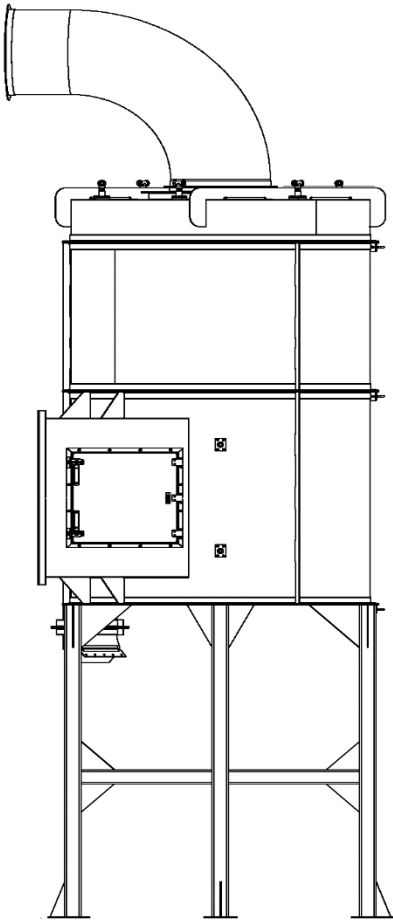
ISOLATION



EYE PROTECTION

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- Inspect and clean as needed all spray nozzles to ensure good flow and proper operation of the Tower Extractor. The Englo Tower Extractor is equipped with 6 spray nozzles located in the top of the tower. These should be accessed from outside of the tower for maintenance. Four additional spray ports are available in the lower section of the tower if it is determined that additional water sprays are required for the application.
 - Inspect nozzle holders and hoses during cleaning to ensure they are open. Clean as needed. Replace any parts that cannot be cleaned.
 - Inspect the tower from the inspection hatch located near the inlet of the tower. Rinse buildup and debris out through the scalper slot with high pressure water when needed.

Englo Tower Extractor Parts



Parts List	
Part Number	Description
Contact Englo	W72 Tower Extractor-Complete
200-0251	Glycerin Filled Pressure Gauge
200-0250	3/4" Watts Pressure Regulator
200-0681	D/E Spray Nozzle (all units)
Nozzle Holder	Tower Nozzle Holder
200-1004	12"x 12" Inspection Door
200-1004	12"x 12" Door Frame Gasket
Contact Englo	24"x 24" Inspection Door
Contact Englo	24"x 24" Door Frame Gasket
Supply Hoses	Call Englo with Length for price

Please contact Englo for prices at time of order

