Stock Code: EW1561
Manufacturer: Plasticraft
Model: Vertical Packed Tower
New or Used: Used (Second Hand)
Approx Duty CFM / M³/Hr: 15000 // 25500
Other Info: Chemical fume abatement plant
External Dimensions (WxDxH): Ø1630 x 4000 + 1600 x 1320 x 3400

Plasticraft vertical cylindrical gas cleaning tower

Designed to remove waste particles, chemicals and liquids from a gas stream such as those generated from such processes as pickling, plating, curing, chemical processing plant and fume generating process equipment.

There is a large variety of wet scrubbers; however, all include three basic configurations:

1. Gas-humidification -

The gas-humidification process agglomerates fine particles, increasing the bulk, making collection easier.

2. Gas liquid contact -
Plasticraft Vertical Packed Tower Fume Scrubber With Fan

This is one of the most important factors affecting collection efficiency. The particle and droplet come into contact by four primary mechanisms:

a) Inertial impaction - When water droplets placed in the path of a dust laden gas stream, the stream separates and flows around them. Due to inertia, the larger dust particles will continue on in a straight path, hit the droplets, and become encapsulated.

b) Interception - Finer particles moving within a gas stream do not hit droplets directly but brush against and adhere to them.

c) Diffusion - When liquid droplets are scattered among dust particles, the particles are deposited on the droplet surfaces by Brownian movement, or diffusion. This is the principal mechanism in the collection of submicro dust particles.

d) Condensation nucleation - If a gas passing through a scrubber is cooled below the dewpoint, condensation of moisture occurs on the dust particles. This increases in particle size which makes collection easier.

3. Gas-liquid separation -

Regardless of the contact mechanism used, as much liquid and dust as possible must be removed. Once contact is made, dust particulates and water droplets combine to form agglomerates. As the agglomerates grow larger, they settle into the collector.

A single source solution for fume abatement offered by the highly durable and efficient Packed Bed Scrubber

This vertical column assembly is a counter flow design with contaminated gas flowing upwards and recirculating liquid spraying downward across the packing media and eliminator plates. Gaseous contaminants are then absorbed or neutralised by the liquid due to solubility levels and or by chemical reaction.

The vertical counterflow design typically provides the best scrubbing efficiency of vapors and is the most common design found in most industries. The Vertical Packed Bed Scrubber is normally not used when heavy solid particulate is in the air stream.

Common contaminants removed by a Packed Bed Fume Scrubber include:

H2SCiHCNNH3SOx - SO2, SO3, SO4Cl2, F2Formaldehyde And many more

Overall Dimensions

Tower Ø1630 ++ 900² inlet x 4000 highFan 1600 x 1320 x 3400 high Connecting duct work Ø750 Fan outlet 740 x 680 Inlet flange on tower Ø600
Plasticraft Vertical Packed Tower Fume Scrubber With Fan

View Plasticraft Vertical Packed Tower Fume Scrubber With Fan on our web site at https://www.rileysurfaceworld.co.uk/machines/28209.htm

PHOTOGRAPHS TAKEN PRIOR TO REFURBISHMENT.