

Carter Environmental Model 170 EHA- A with Self Contained Centrifugal Extraction Fan



Stock No	EA1805S
Manufacturer	Carter Environmental
Model	170 EHA - A
Year of Manufacture	Ref. 2015
Serial	130020
Condition	From a working environment, Good Condition
Approx Duty CFM / M ³ /Hr	10000 // 17000M ³
Location	Rolls Royce stores, near Derby, UK
External Dimensions (WxDxH mm)	4200 x 1400 x 3920

Description

Carter Environmental Model 170 EHA Wet Type Dust Extractor

Carter EHS wet dust collector is particularly suitable for the collection of potentially explosive dusts such as aluminium and magnesium and other potentially hazardous applications

Former Rolls Royce Machinery

This plant is one of several machines acquired during Rolls Royce's reorganisation of their manufacturing facility at Inchinnan, UK.

The worldwide reputation for quality is reflected in the machinery and maintenance of their manufacturing plant. Many of the machines include features that are necessary for the manufacture of high quality engine components but can provide a benefit to any industry.

The machine primarily works by drawing the contaminated air through a linear spray generator baffle, which is designed to

- a) Generate an intense self-induced spray zone.
- b) Impose a series of about-turns on the airflow so that the dust particles are centrifuged at high velocity onto the walls of the baffle which are continuously irrigated by the water spray.
- c) Facilitate collisions between water droplets and dust particles in the spray zone.
- d) Create a final water curtain through which the air must pass before leaving the baffle system.

By these means, a very high percentage of the dust particles are trapped in the water which drains back into the bottom tank of the collector. The dust eventually settles out and accumulates at the base of the tank as a sludge prior to being manually raked up the inclined side of the bottom tank and removed from the collector when the plant ceases working.

After negotiating the baffle system, the air passes through the spray eliminators which remove entrained water droplets before the air is discharged from the unit via the fan.

Electronic water controls are provided to maintain the correct working level in the unit to ensure efficient collection. On explosion or fire risk applications these controls are augmented to provide additional safeguards against continuing plant operation with collector malfunction.

Included in the arrangement explosion relief panels and a fully integrated monitoring system

Numerous access doors provide full facilities for easy inspection and maintenance. A drain valve is fitted so that the collector may be emptied for more complete inspection and cleaning.

A Self-induced spray wet collector powered by a powerful integrated fan mounted on top of the machine providing high-efficiency levels up to 99%

Plant Information

1. ST1 Rated Explosion relief panel
2. 4.0 kW immersion heater
3. CEC3 Water Controller
4. Water supply connection 1" BSP
5. Left Hand Inlet
6. Roof mounted centrifugal Fan
7. White metal explosive dust precision water level control



Note:

The machine is current configured as a 'right-handed' unit but reconfiguration is made by simply relocating the explosion relief to convert it to a left-handed unit

Photographs taken prior refurbishment. Our refurbishment service is not available on all machines.