

FLUEPAC® STF

Powdered Activated Carbon

Applications



Flue Gas



Environmental Air

Description

Fluepac STF is a brominated powdered activated carbon specially formulated to enhance mercury capture in flue gas treatment applications with elevated levels of sulfur trioxide (SO₃). Its formulation allows for improved performance at reduced injection rates. Fluepac STF is injected directly into the flue gas stream and is easily removed by existing particulate control devices. The reduced ratio of carbon to fly ash and the product's inherent concrete friendliness preserves the fly ash suitability for sale or non-hazardous disposal.

In the presence of SO₃, mercury is much more difficult to remove with standard activated carbons. The performance improvement that can be expected by using Fluepac STF is illustrated in Figure 1. Figure 1 compares the Fluepac STF performance to a standard brominated PAC (MC+). With a utility burning a western coal, injection downstream of the air preheater (APH) and an electrostatic precipitator (ESP), Fluepac STF demonstrated a dramatic improvement over the standard product. The target of a 90% mercury reduction was easily attainable with Fluepac STF, while the standard grade product would have had difficulty. The high removal rates are achieved at both a lower carbon usage rate and lower total treatment cost than with standard carbon.

Features / Benefits

- Large number of high energy adsorption pores for mercury capture
- Good transport pore structure
- Concrete-friendly product
- Excellent flowability and minimal volatile content
- Sulfur tolerant formulation
- Product has demonstrated the ability to remove greater than 95% of mercury from flue gas
- Rapid adsorption kinetics lead to low required contact times

Specifications

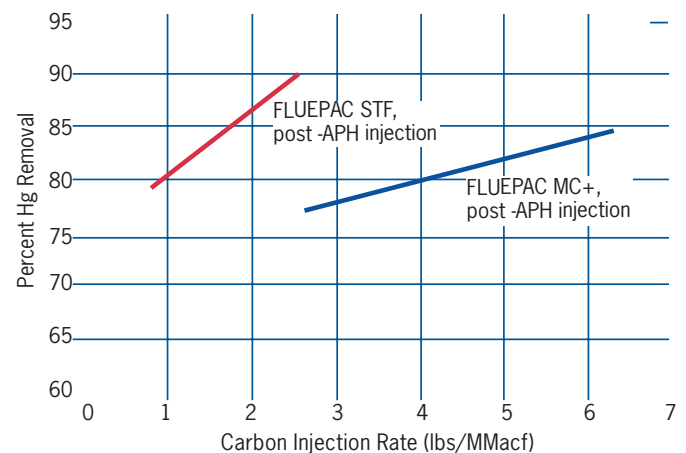
	Fluepac STF
Moisture, as packed by Weight	12% (max)
Sieve Size by volume (laser analysis)	
<100 US Mesh	100% (min)
<325 US Mesh	95% (min)

Typical Properties*

	Fluepac STF
Apparent Density (tamped)	0.4–0.8 g/cc
Ignition Temperature	>350°C

*For general information only, not to be used as purchase specifications.

Figure 1: Western Bituminous Coal with ESP Post-APH Injection



Safety Message

Wet activated carbon can deplete oxygen from air in enclosed spaces. If use in an enclosed space is required, procedures for work in an oxygen deficient environment should be followed.

1.800.4CARBON calgoncarbon.com

© Copyright 2015 Calgon Carbon Corporation, All Rights Reserved
DS-FLUESTF15-EIN-E1