



# Polishing the Water

## Condensate water polishing carbon

### Superior quality condensate cleaning

An enormous quantity of demineralized water is being used around the world for boilers in generating steam for power plants and oil and gas industry. As water is becoming an increasingly scarce resource, the boiler feed water is recycled when used for this application in both power plants and oil and gas industry.

Fresh water from municipal supply or any other source may contain chlorine and other organic contaminations which can foul or damage the Ion Exchange Resins used to de-mineralize this water for use in boilers. Additionally, while in process re-circulated condensate water is contaminated with various oils, hydrocar-

bons and other organic compounds from wear and tear of machinery and equipment, turbines and other sensitive equipment.

Haycarb activated carbon successfully removes these various contaminants in both fresh water and recycled water, protecting the ion exchange resins, boiler and other sensitive equipment from damage and deterioration.

### Lower silica leaching with absolutely no backwashing needed

Purity of the activated carbon is another important factor to consider when selecting activated carbon for use in this application. Silica, being the most common contaminant, can also foul ion exchange resins and damage boiler

tubes and turbine blades, increasing operational costs and reducing operating efficiency.

Coal and lignite based activated carbon products, as well as standard coconut shell carbons in the market contain a high amount of silicate that cannot be removed even with extensive prewashing and backwashing regimes of the carbon bed.

Therefore the advantage of using Haycarb carbon range is that it is a direct application ready product, as it has the lowest amount of leachable silica in the market and maximum capacity to adsorb all contaminants in fresh and recycled water. This results in time and operational costs saving for end users.

#### Product Feature

Lowest level of silica leaching

No pre-washing of filter beds needed

Superior hardness and high resistance to attrition

Low ash content

#### Benefit

Results in significant improvement of machinery lifetime and reduction of maintenance costs in petroleum plants.

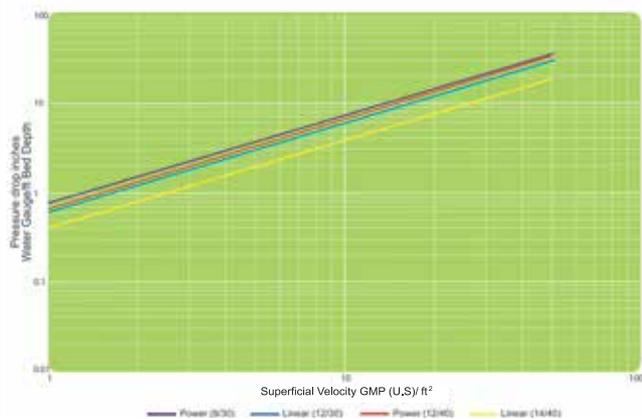
There is no requirement for pre-bed washing, resulting in time and manufacture cost benefits

Results in the carbon staying intact to deliver a consistent performance, while increasing the lifetime of the filter bed

Lower levels of inorganics in the carbons results in superior performance



Resistance to Water Flow



### Technical Information

Parameter	Typical Values
Particle Size (ASTM - D2862)	8 x 30, 12 x 30, 12 x 40
Si Leaching	0.1% max
Ball-pan Hardness (ASTM - D3802)	>98 %
Ash Content (ASTM - D2866)	0.3%
pH (ASTM - D3838)	6-8
Iodine Adsorption (ASTM - D4607)	≥1050 mg/g

We provide custom designed products for specific customer applications within the general range.

### Packaging

Standard packaging is designed primarily to prevent deterioration of accurately graded granules and preclude the adsorption of moisture or atmospheric contaminants. Other packaging criteria can be accommodated on request.

**Bulk Bag**  
Net. 500 Kg

**Sacks**  
Net. 25 Kg

### Product Testing Services

Haycarb's Research & Development laboratories in Sri Lanka and its overseas subsidiaries are equipped to perform all the standard testing required for Activated Carbons together with any other specialized product or application related testing requirements.

### Warranty Disclaimer

Please confirm the specification of any particular grade with your representative prior to purchase. The user is responsible for ensuring that the product is correctly specified prior to purchase and Haycarb makes no express warranty as to suitability for specific application.



Haycarb Activated Carbon grades that are Tested and Certified by NSF International against NSF/ANSI Standard 42 for material requirements only, are listed on: [www.nsf.org/certified/CWTL/](http://www.nsf.org/certified/CWTL/)

Component



**HAYCARB**  
Activated carbon solutions

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