FILTRATION MEDIA

ANTHRACITE

SWT Anthracites (P/N ON10001, P/N ON10015, P/N ON10002) come from a superior vein of coal in the USA and are preferred by filter manufacturers around the world. All sieve sizes are available for multimedia applications as either support layers or prefiltration layers. SWT anthracites meet all engineering specifications and/or can be custom specified. Certificates of analysis for all ASI, AWWA, or ASME standards and protocols can be provided by request. Standard packaging is either 2000 lb supersacks or 1 cubic foot bags. The cubic foot bags are banded, skidded, and shrink wrapped for reliable transport.

FEATURES

- Angular design specific for water treatment
- Durable
- Tight screen control for minimum attrition
- All sizes available
- International shipping
- Available in 1 cubic foot bags/palletized or 2,000 lb supersacks

Typical Properties

US Standard Mesh Size	
Anthracite #1	14 x 30 (0.6–0.8 mm)
Anthracite #1.5	10 x 20 (0.85–0.95 mm)
Anthracite #2	4 x 12 (1.7–4.0 mm)
Color	Black
Apparent Specific Gravity	1.65 ± 0.05
Hardness	3.0 to 3.8 (Mohs scale)
Attrition Losses	Minimal
Source of Material	Eastern Middle Field Mammoth Vein USA
Acid Solubility (Per AWWA B100-80)	1% maximum
Caustic Solubility (1% NaOH @ 190°F)	1% maximum
Uniformity Coefficient	1.7 maximum (unless otherwise specified)
Net Weight	50 lb per cu.ft.

Suggested Operating Conditions

Service Flow Rate	5 gpm per sq.ft. minimum
Bed Depth	24 to 36 inches
(Multibed Filter)	(10 to 18 inches)
Freeboard	50% of bed depth minimum
Backwash Rate @ 60°F	
Anthracite #1	12 to 18 gpm per sq.ft.
Anthracite #1.5	18 to 25 gpm per sq.ft.
Anthracite #2	Use air scour
Backwash Bed Expansion	20 to 40% of bed depth minimum

Average Ultimate Analysis (Moisture & Ash-Free Basis)

Hydrogen	2.1%
Carbon	94.7%
Nitrogen	0.8%
Oxygen	1.6%
Sulfur	0.8%
B.T.U.	14,828

Packaging

1 cu.ft. bag or 2,000 lb supersack

Warning

For safety and handling purposes, we recommend appropriate protective measures when entering a wet vessel containing granular activated carbon, because wet activated carbon depletes oxygen from air and therefore, dangerously low levels of oxygen may be encountered. In such a case, the oxygen level inside the vessel shall be determined before entering and appropriate protective equipment should be worn when entering, or leave the vessel open until the oxygen level in the vessel is normal.

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MEMBER Water Quality ASSOCIATION

FORM 1234
EFFECTIVE
AUGUST 2022

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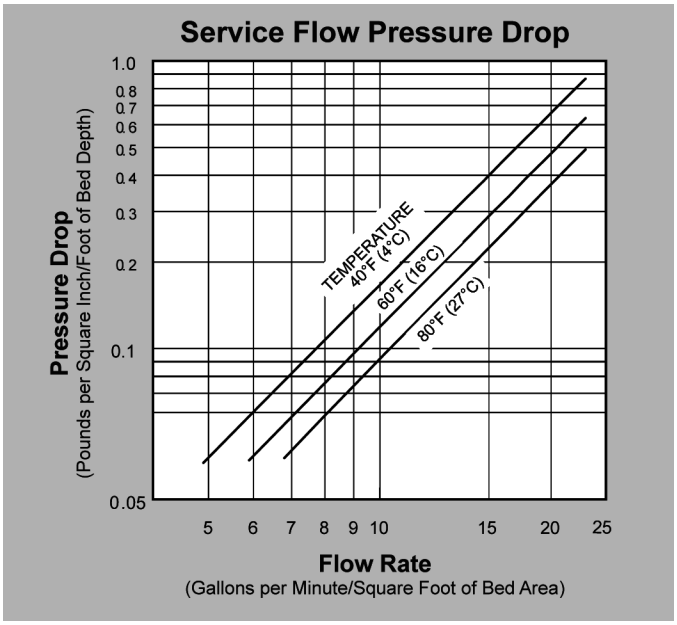

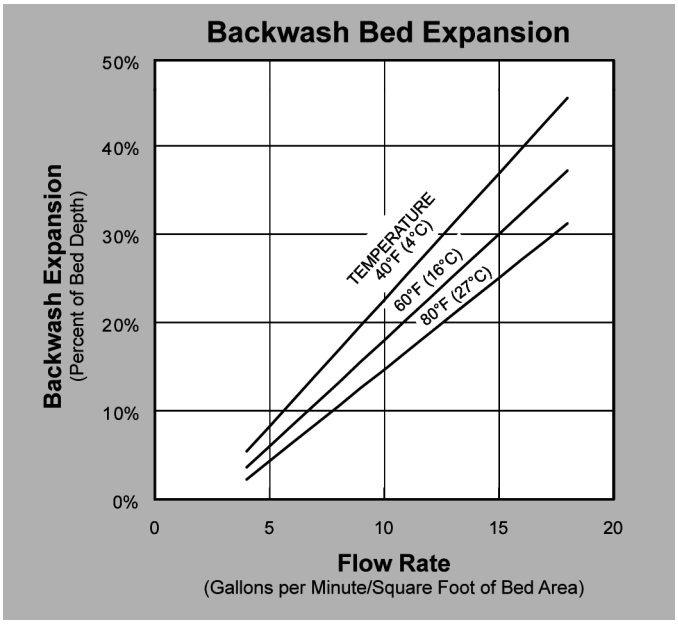

PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — After each cycle the media bed should be backwashed at a rate that expands the bed 20 to 40 percent.

UNIFORMITY COEFFICIENT (UC)

Low uniformity coefficient anthracite filter media has less oversized and undersized particles resulting in a highly uniformed bed which extends the life and efficiency of a water treatment filter. Lower uniformity coefficients lead to longer filter runs, better effluent quality, less head loss, and reduced backwash rates. This means more saleable water produced at a lower cost of operation.

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