

KTM

High Grade Manganese Dioxide **KT**[®]

KTM is a granular manganese dioxide filter media used for reducing iron, manganese and sulfide from drinking water by a process of catalytic oxidation. Hydrogen sulfide is oxidized to sulfur. The precipitates are filtered out in the granular bed and removed by backwashing.

Natural manganese ores specially selected for their high catalytic activity, free from contamination and with no additives, are used in the production of this manganese dioxide, is an example of contact oxidation where the media itself provides the oxidizing potential. This allows for a much broader



range of operation than many other iron removal medias. A pH level as low as 6.2 can be treated. Dissolved oxygen is not essential. The manganese content varies between 55 and 85% as MnO₂, but the catalytic activity is not dependent upon the manganese content.

PHYSICAL PROPERTIES:

○	Color	Black
○	Bulk Density	45-50 lbs./cu. ft.
○	Specific Gravity	2.0 gm/cc
○	Effective Size	0.43 mm
○	Uniformity Coefficient	2.0
○	Mesh Size	2 x 50

CONDITIONS FOR OPERATION:

▶	Water pH range	6.2-8.5
▶	Maximum water temp	100°F/38°C
▶	Bed depth	24-36 in.
▶	Freeboard	50% of bed depth (min.)
▶	Service flow rate	Continuous 2-5 gpm/sq. ft. intermittent flows up to 10 gpm/ft.2
▶	Backwash flow rate	At 60°F 8-10 gpm/sq. ft. for tanks ² 12" diameter, 10-12 gpm/sq. ft. for tanks ³ 13"
▶	Backwash expansion rate	20-40% of bed depth (min.)

MAXIMUM PRACTICAL LIMIT

- Iron 15 ppm
- Manganese 5 ppm
- Hydrogen Sulfide 2 ppm

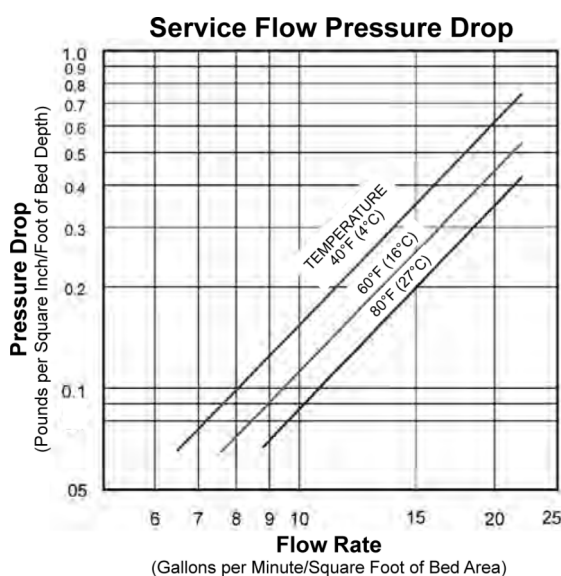
APPLICATIONS

- Broad operating range for iron reduction
- Lower pressure loss through the bed with high flock holding capacity
- Effective hydrogen sulfide, iron and manganese reduction.
- Light weight requires lower backwash rates and reduces pumping requirements
- Chlorine can be beneficial in extending filter run times
- Low attrition loss for long bed life
- Lower shipping cost

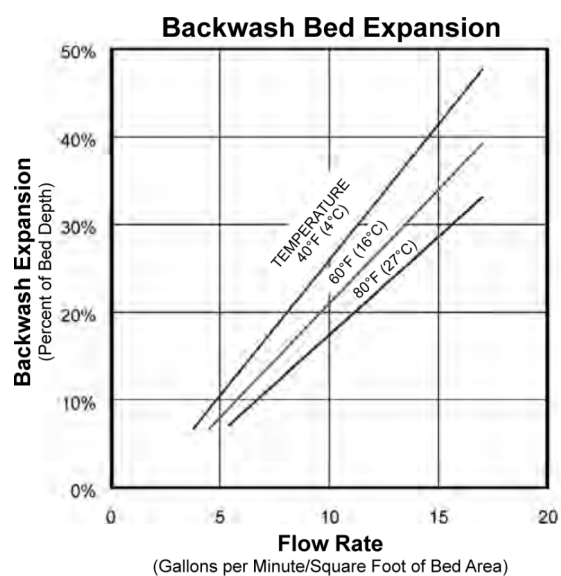
GRANULAR SIZE WITH MnO₂ Content

Product Name	Size (MM)	Mno2 Content
KTM 80	0.5-1, 1-3, 3-5, 5-10, 10-20, 20-50	80-85 %

KTM Pressure Drop Graph



KTM Backwash Expansion Graph



KYNREM TECHNOLOGY PVT LTD

O : 4/1, Dum Dum Road, Nager Bazar, Kolkata 700 074.

F : 108, Nilganj Road, Mirhati, Amdanga, Kolkata 700125



+91 9836 892982



sales@kynremtech.com



www.kynremtech.com