



Manz Eng. Ltd.

## Manz Engineering Filter Systems may be used to treat:

- Surface water (direct filtration and substitute for traditional slow sand filtration.)
- Ground water (substitute for multi-media and greensand filters).
- Ground water under direct influence of surface water (direct filtration and substitute for traditional slow sand filtration).
- Pretreatment for membrane, electrodialysis reversal and other processes requiring feed water with low silt density index.
- Municipal wastewater that has been treated to tertiary (perhaps secondary) standards.
- Rainwater.
- Storm water.

## 曼兹工程过滤系统可用于处理：

- 地表水（直接过滤和替代传统的慢速砂过滤）。
- 地下水（替代多媒体和绿砂过滤器）。
- 地表水直接处理后生成的地下水（直接过滤和替代传统的慢速砂过滤）。
- 预处理过滤膜，电渗析反转和其他需要低泥沙密度指数给水过程的预处理。
- 已经处理为三级（可能是二级）标准的城市污水。
- 雨水。
- 雨雪融化水。

## Variations of the Manz Engineering Filter Systems:

- **Manz Engineering Polishing Filter** when treating water for removal of suspended solids.
- **Manz Engineering Biological Filter** when treating water for removal of pathogens as well as suspended solids.
- **Manz Engineering Carbon Filter** for removal of dissolved organics.
- **Manz Engineering Roughing Filter** for removal of larger suspended solids.

## 多种不同类型的曼兹工程过滤系统：

- **曼兹工程 - 抛光过滤器**  
用于清除水中的悬浮物体。
- **曼兹工程 - 生物过滤器**  
用于清除水中病原体和悬浮物体。
- **曼兹工程 - 碳过滤器**  
用于去除溶解的有机物。
- **曼兹工程 - 粗加工过滤器**  
用于去除较大的悬浮颗粒体。



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## Applications of the Manz Filter System include:

- Pathogen removal.
- Sand and silt removal.
- Colloidal particle .
- Algae removal.
- Oxidized iron and manganese removal.
- Iron and sulphur reducing bacteria removal.
- Co-precipitation of arsenic.
- Turbidity reduction associated with removal of particulates.
- Colour reduction associated with removal of particulates.
- Total organic carbon reduction associated with removal of particulates.

**Note that bench scale and pilot scale evaluations are considered essential to guarantee performance and are always recommended.**

## 曼兹工程过滤系统的应用功能包括：

- 去除病原体。
- 去除泥沙和淤泥。
- 胶体颗粒。
- 藻类清除。
- 氧化铁和锰去除。
- 铁硫还原菌的去除。
- 砷的共沉淀。
- 减少微颗粒进而减轻浊度。
- 减少微颗粒进而减轻颜色。
- 减少微颗粒进而减轻总有机碳含量。

**请注意，总是建议首先进行实验室模型和野外试点评价，这对于保证性能及项目质量至关重要。**

## Advantages of the Manz Filter System include:

- Effectiveness (guaranteed performance when piloted).
- Low capital cost.
- Simplicity of operation.
- Flexibility of design.
- Compact compared to standard designs of traditional slow sand filters.
- Low operating pressure at raw water inlet.
- Operated on demand basis.
- Elimination of air-binding.
- Elimination of media compaction problems.
- Easily used in multi-barrier treatment systems.
- Minimum operating costs.
- Minimum operation training.
- Minimum operator attention.
- Minimum maintenance.
- Minimum use of chemicals.
- Minimum energy requirements.
- Minimum production of wastewater.
- Fixed or mobile installations.

## 曼兹工程过滤系统的优势包括：

- 有效性（操作时保证性能）。
- 低成本投入。
- 操作简单。
- 设计灵活性。
- 与传统慢砂过滤器的标准设计相比，紧凑。
- 水入口处的操作水压需求低。
- 按需运营。
- 避免了空气阻滞。
- 避免了媒体被压缩问题。
- 易于多屏障处理系统。
- 最低运营成本。
- 最简易的操作培训。
- 最少的操作员注意力。
- 最小维护。
- 最少使用化学品。
- 最低能源要求。
- 最少的废水产生。
- 固定或移动安装。