

THE BASICS & COMMON MYTHS OF BACKWASHING GRANULAR MEDIA FILTRATION

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Backwashing granular media filtration (BGMF) has been used through the millennia for basic filtration of particulate matter from water and other fluids. Today their use is wide spread and commonly incorporated within pretreatment trains in advance of more exotic and refined technologies. These technologies are typically more interesting and studied, such as those related to adsorption and/or other particulate/ionic separation. Likewise, while BGMF is included within many advanced water treatment installations, it has become both the least understood and optimized. Whereas, downstream expendable filters typically mask their poor performance and the need for optimization continues to be unnoticed. Then, in the event the operating costs associated with expendable filters is noted by management, one of two courses of thought are followed: A.) Well, I guess that is how much it costs. B.) Wow, maybe the BGMF system either is not working, or is in need of optimization. The simple answer is we have been doing this for years and that is just what it takes to run our water treatment plant.

Then in the event that over time, management becomes tired of paying for so many expendables and hires a consultant to help justify this expense, nine times out of ten that consultant will find a BGMF system that is either: A.) In need of repair, B.) Is being operated beyond its theoretical capacity, C.) Not designed in accordance to accepted engineering standards. Unfortunately, the latter is typically the case. This educational session is provided to ensure yourself this is not the case within a water treatment plant, which you are responsible to operate, purchase, or design.