

Creative Chemistry. Smart Solutions.

IMPROVING FILTRATE QUALITY

Colloids and silt fouling are major causes of performance decline in reverse osmosis (RO) membrane systems. As a result, many system designs include upstream Multimedia Filtration (MMF) to enhance particulate removal and improve the feedwater quality to downstream membrane systems.

Particles and colloids in naturally occurring feedwaters typically exhibit negative charges that constantly repel each other. This keeps the particles small and makes them more difficult to capture within MMF. A continuous injection of a coagulant to the MMF feedwater neutralizes the negative charges and allows the particles to combine, forming a particulate size that is more readily captured within the MMF media bed.

The more effective MMF provides a higher quality feedwater for downstream membrane systems and result in reduced cleaning frequencies and increased system run times.

Studies prove that MMF without coagulant addition will remove approximately 35%-50% of incoming particulates.

ROQUEST® COAGULANTS

RoQuest® membrane compatible coagulants improve the efficiency of MMF equipment by increasing particulate removal and providing a higher quality feedwater to downstream membrane systems. Adding a RoQuest liquid coagulant to MMF feedwater causes particles to be readily retained by MMF equipment, improving the filtrate quality fed to downstream membrane systems.

The addition of RoQuest coagulant can increase the removal of particulates by up to 97%.

- **RoQuest 3000** is a multicomponent blend of organic polymers.
- **RoQuest 4000 and 6000** are multicomponent blends of organic coagulants and ferric sulfate.

RoQuest Direct Filtration Feedwater Limits

Color < 10 Units
Turbidity < 10 NTU

Our Avista Advisor software calculates consumption rates for all on-site water treatment chemicals. The software uses water analysis and system data to determine the most appropriate coagulant for site-specific applications. We also conduct pilot and lab cleaning studies to confirm site-specific recommendations.

RoQuest products are NSF approved and compatible with membranes from all major manufacturers.

CORPORATE OFFICES

Please consult your sales representative for further technical or logistical details and always review the SDS before use to ensure suitable safety precautions are followed.

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