amiad WATER SYSTEMS

TECHNOLOGY PER APPLICATION MATRIX

Our technology offering:









Key Strengths

Polymeric Construction | Seawater and Aggressive Water Applications | Chemical Resistant | High Organic Loads | Down to 10 micron Small Foot Print | High Temperature | High Pressure | Coated Welded Alloys | Polymeric (Sigma & TAF) | Inorganic Loads | Down to 10 micron

Polish Applications | Coated Welded Alloy | Down to 2 micron High Dirt hold capacity | Coated Welded Alloys | GRP | Fine Filtration

Special Considerations

- Operational pressure (max design pressure per product line)
- Minimum backwash pressure of 2 to 5 bar/ 30 to 75 PSI (subject to micron grade & Internal/ External source)
- Temperature band vs. pressure (Polymeric structure)
- Chemical cleaning regime recommendation in fine filtration applications.
- Backwash source (internal/external).
- AAF option for low flow systems.

- Cleaning mechanism advantage with SLN when <80 microns
- · Low backwash flow rate
- Drive type (electric / hydraulic)
- MCFM for high fiber and TSS loads
- Low operational pressure for cleaning with SLN
- Chemical cleaning regime recommendation in fine filtration applications

- · Pressurized external backwash source
- Downstream stop during flushing cycle
- Backwash regime (frequency and volume)
- Automatic filtration alternative for disposable filters
- CIP recommendations
- Upstream flocculants and polymers should be reviewed
- Turbidity reduction capability

- Backwash source (external/internal)
- Downstream stop during flushing cycle
- Backwash regime (frequency and volume)
- To achieve fine filtration low velocity and additional upstream coagulation may be required
- Different Media types and depth available to fit different applications and filtration degrees
- Turbidity reduction capability

Filtration spectrum (micron)

O 1 10 50 500 10,000

SPIN KLIN™ DISC FILTRATION

(10-400 micron)

MEDIA FILTRATION
(1-130 micron)

SCREEN FILTRATION
(10-10,000 micron)

Recommended Technology per Application

APPLICATION	TYPICAL MICRON RANGE*	DISC	SCREEN	MICROFIBER	MEDIA
Nozzles protection	100 < 500	•	•	\bigcirc	\Diamond
Intake water	50 < 500	•	•	\Diamond	•
Point of entry (POE)	2 < 50	•	•	•	•
Side stream	10 < 100	•	•	\Diamond	•
Full stream	50 < 130	•	•	\Diamond	•
Heat exchanger protection	50 < 200	•	•	\Diamond	•
Pumps seal protection	20 < 100	•	•	\Diamond	\Diamond
Process/service water	20 < 130	•	•	\Diamond	\Diamond
Recycling water	50 < 300	•	•	•	•
Pre UF / MF	10 < 300	•	•	\circ	\Diamond
Pre RO	2 < 20	•	•	•	•
Pre UV	10 < 100	•	•	•	•
Drinking WTP	2 < 100	•	•	•	•
Wastewater	2 < 130	•	•	•	•
Injection water	20 < 80	•	•	•	\Diamond
Produced water (including SWD)	2 < 30	•	•	\circ	•
Ballast water	20 < 50	•	•	\Diamond	\Diamond
Rain water harvesting	10 < 100	•	•	0	\Diamond
Stormwater	2 < 100	•	•	•	•

• Optional technology for the application

○ Technology is not preferred or cannot be offered for this application

* Typical micron range

- The most common filtration rate used in the industrial market for the application
- Data is based on Amiad automatic backwash filters
- Offering is based on Amiad standard Industry offerings (not special design/projects)
- DW standards (i.e. NSF, ACS, DWI, etc.) should be analyzed per technology offer and product
- There will always be exceptional needs for specific application, that can be considered as special

Additional guidelines

- For filtration >130 microns Screen technology is preferred (cost effective)
- For seawater applications (chloride>3000 ppm) Disc technology is preferred
- For low operational pressure applications 2 to 3 bar (30 to 45 PSI) Screen technology is preferred (cost effective)
- For high TSS load (>500 mg/L) pretreatment technologies will be required (e.g. Lamella, Clarifier)
- Refer to "sizing guidelines tools" for recommended filtration velocity per technology
- Filtration degree of 10 micron for Screen and Disc should be considered as polish applications
- For the high spec industries (e.g. Metal ,Mining, Petrochemicals, O&G, etc.) Screen offer will be preferred

Commercial Considerations

- RFQ/spec/restrictions
- Competitors
- Budget available
- Customer preference
- Complexity to support



