J+A Hi-Flow™ Screen
For flow rates up to 3000 liters per second

Key features & benefits

- 2, 3, 5 and 6mm perforated screening
- Single machine capacities of up to 3000 l/s (70 MGD)
- Single pass screening with no carry over
- Stainless steel construction
- Vertical lift for small footprint
- Compatible with J+A Washpactor-Wave™ or J+A Washpactor Jet™ systems for screenings washing and compaction

How we create value

- High performance solids removal: 81.2% at 6mm (1/4”) perforation
- Double screening area allows for higher flow rates and capacity
- Reduced headloss satisfies existing channel requirements
J+A Hi-Flow™ Screen

Sizing and Selection

The J+A Hi-Flow™ screen is available in four screen sizes, with screen apertures of 2, 3, 5 or 6mm. A range of possible screen lengths are available so that each J+A Hi-Flow screen is tailored to meet individual requirements.

Primarily a screen will be selected for its peak duty points. Limitations are placed on the headloss at which the screen will operate, determined by the individual application’s hydraulic characteristics. It is important to select a screen relative to the range of flows, water levels, available channel space and the type of effluent to be screened.

Overflows
Flow rates and channel size, together with the chosen screen size, will allow the arrangement of inlet side seals to be determined. These can be designed to accommodate overflows in excess of design limits, or to operate in the case of emergency. The screen backplate can also be equipped with an opening to act as a bypass overflow to complement the side seal overflows. The inlet side sealing plates are shown in the picture below.

Screen Cleaning
Removing screened solids and cleaning the screening plates is achieved with a combination of wash water and a rotating nylon bristle brush. Either spray-jetting or gravity deluge may be used. The low pressure, non-aerosol forming deluge method is shown in the photo below.

Screened effluent may be used as wash water, meaning that the device can be cleaned independent of clean water supplies. The final cleaning and polishing of the screening plates is achieved using the brush, which is operated by a separate drive unit.

Screenings Washing
All J+A Hi-Flow screens can be equipped with the impeller screenings washing system developed for the J+A Washpactor-Wave system. Screenings are washed by liquefying and so eradicating faecal solids before they are extracted by the screen mechanism. The illustrations below show the on-board impeller and submersible drive motor.
Typical Installations

1. Two Size 1 J+A Hi-Flow™ Screens

2. Two Size 2 J+A Hi-Flow™ Screens

3. Two Size 1 J+A Hi-Flow™ Screens

4. Smaller sizes of the J+A Hi-Flow™ Screen

1. Two J+A Hi-Flow screens (Size 1) installed in steel tanks and built into a steel structure. Screenings discharge is to a J+A Washpactor unit positioned at ground level for washing and compaction of the screenings.

2. Two of four J+A Hi-Flow screens (Size 2) installed in a secondary screening building. Solids are flushed to a series of large capacity J+A Washpactor Jet system for dewatering and consolidation prior to loading containers.

3. Two J+A Hi-Flow screens (Size 1) remove screenings and deliver the solids via a laundered flume to one of two screw compactors.

4. Smaller sizes of the J+A Hi-Flow screen can be built with integral screw compactors. This provides a highly compact packaged unit suitable for the total screening requirements of a small facility.
Raw sewage enters the total capture J+A Hi-Flow™ fine screen

Effective screenings processing using the J+A Washpactor-Wave™ system eradicates faecal matter

Screenings are lifted and cleaned from the single pass screening media

Best possible waste product produced for easy waste disposal and handling

Screenings transfer by the safe, odor free self-generating launder system