

TORNADO

Product Data Sheet

The Most Advanced, Automatic,
Non-Disposable Liquid Filtration System



The Tornado is a patented centrifugal separator that puts a new spin on an established technology!

The Tornado separator is the future of centrifugal separation technology. The innovative separator utilizes an internal blade design. The blades create a unique and beneficial flow path through the separator that increases the “G – Force”, resulting in more effective and efficient particle removal.

If you are looking for economical particle removal, the Tornado separator is your new choice for centrifugal separators. The Tornado is simple but extremely innovative, has no moving parts, and no media. Tornado effectively removes particles without any regular maintenance.

Centrifugal separators are used in Power Generating plants, Automotive plants, Steel Mills, and in Oil & Gas. They are utilized to filter machining coolant, wash solutions, cooling and process water, quench fluid, flowback water and brine, and many other process fluids. With standard sizes ranging from 2” to 10”, the Tornado can handle flows from 50 gpm to 2,500 gpm.



Tornado Description and Operation:

Dirty fluid enters tangentially near the top of the separator. As the fluid enters, the blades create and maintain a high-velocity centrifugal force that causes the fluid to “spin” down the entire length of the separator’s body. The centrifugal force created by the blades forces the particles toward the outer wall of the separator and away from the clean water discharge slots. Once the separated particles pass the discharge slots they slow down and settle towards the bottom of the separator body. Particles collect in the bottom until the purge valve is opened, flushing the particles from the separator. The separator discharge tube carries clean water from the discharge slots to your process.

Inlet / Outlet Size	Minimum flow	Maximum flow
2”	50 gpm	140 gpm
3”	140 gpm	225 gpm
4”	225 gpm	400 gpm
5”	400 gpm	600 gpm
6”	600 gpm	900 gpm
8”	900 gpm	1,500 gpm
10”	1,500 gpm	2,500 gpm

The Tornado effectively removes solids, providing the following benefits:

- Minimizes fouling of cooling water system piping and equipment. Reduces labor costs associated with manual cleaning of cooling tower basins, chillers, condensers and heat exchangers
- Improves performance and efficiency of heat transfer equipment, and reduces energy costs
- Reduces loading on downstream filters, extends the life of expensive, low micron cartridge filters
- Extends fluid life and reduces sump maintenance in quench systems, grinders, parts washers, etc.