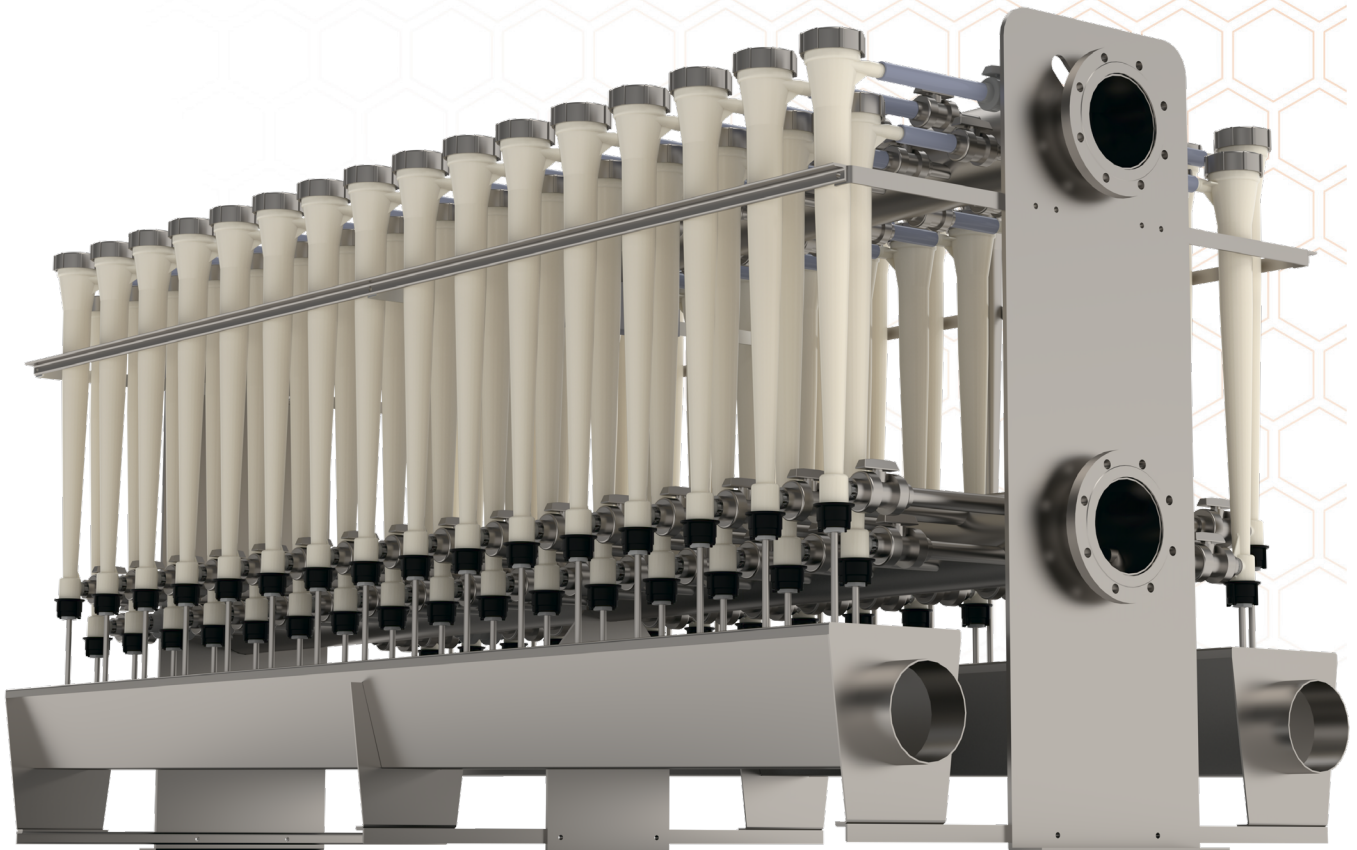


# **X-Clone™** Through-Flow Cleaner

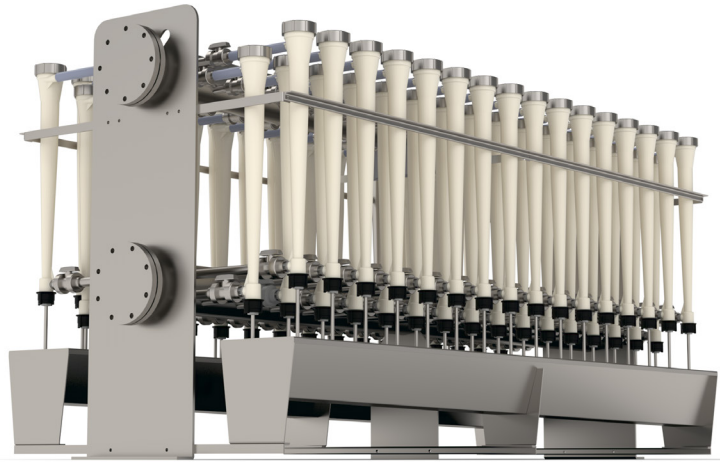
Removes waxes, polystyrene foam, polyethylene, hot melt adhesives, and other light, floatable material from a variety of furnishes.

*Compact, modular design  
provides easy access to  
individual cleaners.*



# X-Clone

## Through-Flow Cleaner



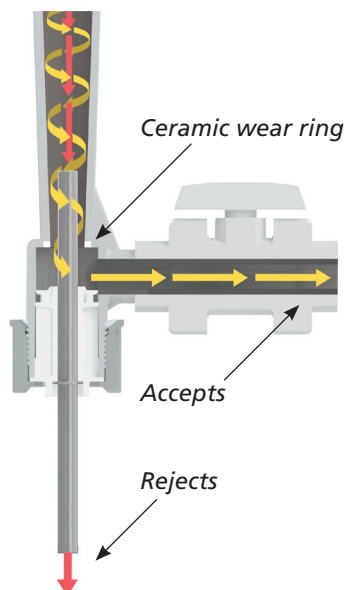
### Effective removal of light contaminants and entrained air

The Kadant Black Clawson X-Clone cleaner utilizes the through-flow principle to remove typical low specific gravity contaminants such as waxes, polystyrene foam, polyethylene, hot melt adhesives, and other light, floatable material from a variety of furnishes.

The through-flow operating principle means that light rejects and accepts discharge coaxially from the end opposite the feed. Since no macro flow reversal exists, pressure drops of 15-20 psi (100 -140 kPa) and nominal hydraulic reject rates of 10% provide very effective removal of most light debris at very low feed consistencies.

Additionally, since the air core is in communication only with the reject stream, excessive entrained air is also removed. A two-stage X-Clone cleaning system requires only 0.3 – 0.5 hp/d/t (6-10 kWh/mt) due to its low pressure drop and low hydraulic reject rate.

The apex (minimum diameter point) is the point of highest wear on all centrifugal cleaners, since this is where the maximum tangential velocity and the highest concentration of abrasives occur. By placing a ceramic wear ring at the apex of the X-Clone cleaner, the critical apex diameter is maintained at the original tolerance, thus assuring long wear life and a consistent reject rate for the full life of the plastic cleaner.



### Benefits



Ceramic wear ring at the cleaner apex assures long wear life and a **consistent reject rate** for the life of the cleaner



**Retractable vortex finder** allows oversized debris to be easily flushed out



**Compact, modular design** provides easy access to cleaners



**Shipped completely assembled**, ready to install and operate



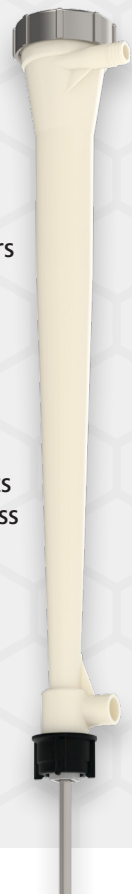
**Rugged construction** — All wetted and structural parts constructed from 316L stainless steel, plastic, or ceramic



**"No Tools Required"** maintenance saves operators time and money



**Rejects can be pressurized** if required



## Yield-increasing efficiency and cost-saving flexibility

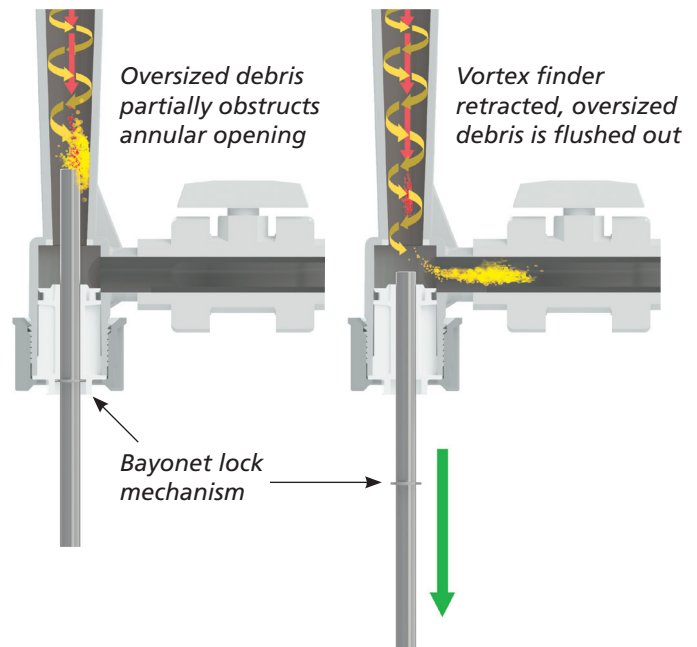
# Effectively and consistently removes light debris

## Eliminates plugging - Retractable vortex finder allows oversized debris to be quickly and easily flushed out

The gap between the apex diameter and the vortex finder of small diameter through-flow design cleaners is typically 0.25" (6.5mm). Since occasional strings or gross contaminants could cause an obstruction, the X-Clone is equipped with a vortex finder that is retractable. This allows oversized debris to be flushed out easily. During normal operation, the vortex finder is held firmly in place with a bayonet lock mechanism.

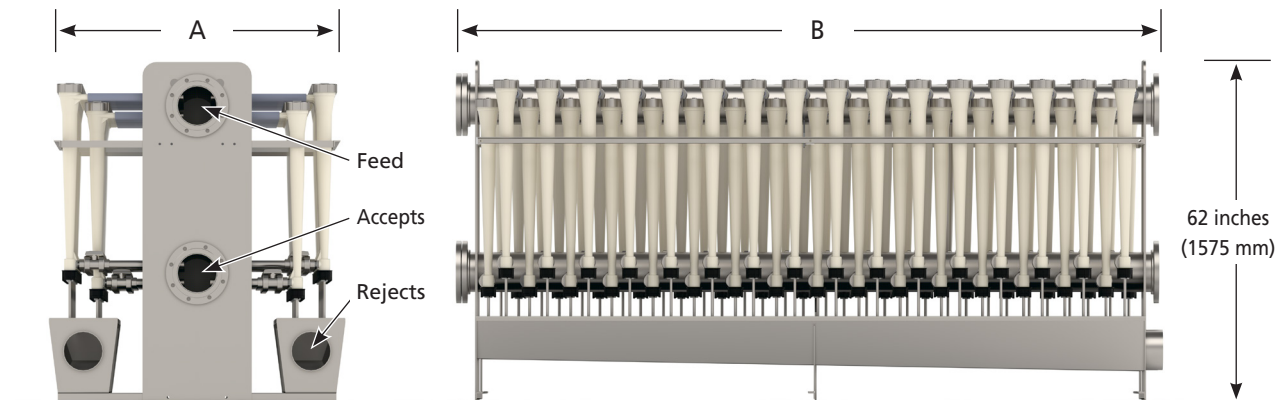
Rejects are normally atmospherically discharged but can be pressurized to allow installation on the same floor as the next stage pump. Pressurized rejects can also be used to control reject volume in cases where relatively high cleaner accept pressure is required.

Double row banks of 6 to 30 cleaners are available with feed flows from 300-1500 gpm (1135 – 5675 lpm). Double row, staggered banks of 32 to 72 cleaners are also available with feed flows from 1600 – 3600 gpm (6050 – 13,600 lpm).



**X-Clone Through-Flow Cleaner - Double Rows of Staggered Banks**

Model	Number of Cleaners	A		B		Feed and Accepts		Rejects	
32-3-CBT	32	56 in	1422 mm	98 in	2489 mm	10 in	254 mm	8 in	203 mm
40-3-CBT	40	56 in	1422 mm	118 in	2997 mm	10 in	254 mm	8 in	203 mm
48-3-CBT	48	58 in	1473 mm	138 in	3505 mm	12 in	305 mm	8 in	203 mm
56-3-CBT	56	58 in	1473 mm	158 in	4013 mm	12 in	305 mm	8 in	203 mm
64-3-CBT	64	58 in	1473 mm	178 in	4521 mm	12 in	305 mm	8 in	203 mm
72-3-CBT	72	58 in	1473 mm	178 in	4521 mm	12 in	305 mm	8 in	203 mm



General Dimensions - Not certified for construction or installation. Guards omitted for clarity but perimeter guards are recommended.

## A Trusted Partner

Stock preparation is in our DNA. We know this industry like few others – your equipment, your processes, and your challenges. We have the know-how and tools to elevate the efficiency of your production. Our team can help monitor, maintain, and upgrade your line, providing process improvements, replacement parts, rebuilds, and comprehensive maintenance plans.

We understand what it takes to remain competitive, protect your investment, and extend the life of your stock preparation assets. To that goal, we offer:

- Field services, inspections, and audits
- Rebuilds and retrofits
- Upgrades and modernizations
- Maintenance and service contracts
- Process control solutions
- Replacement upgrades and spare parts

**Certified Parts and Service 24 Hour Hotline for North America: 1-800-448-5422**

## Expertise to Empower You

Our team is there for you at every step. We help you select the right options to best meet your specific needs.

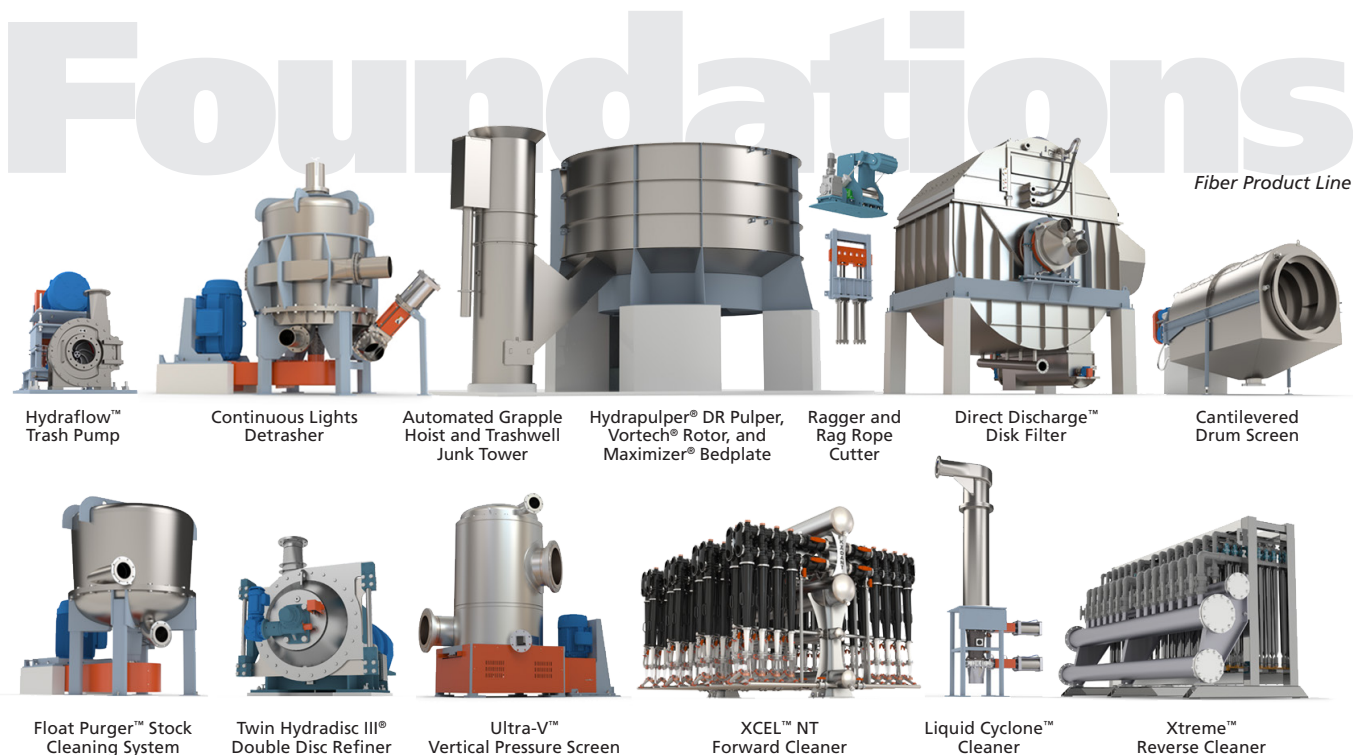
We have generations of experience, a history of innovation, and a proven record of success across the globe. Our skilled engineers, process professionals, application experts, manufacturing, and field service teams have thousands of successful installations to their credit.

## Get You Running, Keep You Running

Our technical service and support teams are ready. We provide superior guidance in the planning, design, engineering, installation, and start-up of your systems. Our products and expertise cover the full range of stock preparation and pulping, including:

- Pulping
- Screening
- Cleaning
- Thickening
- Deinking
- Detrashing
- Refining and dispersing
- Reject handling
- Recovery systems
- Heat transfer
- Pulp washing
- Recausticizing

The Kadant Black Clawson **Foundations** product line offers a full range of fiber processing equipment and services.



For patent information about this and other Kadant products visit <https://kadant.com/en/patents>

# KADANT

**fiberprocessing.kadant.com** Kadant is a global supplier of high-value, critical components and engineered systems used in process industries worldwide.

North America, Central America, and Japan:

Kadant Black Clawson LLC  
1425 Kingsview Drive  
Lebanon, OH 45036 USA  
Tel: +1-513-229-8100  
Email: [info@kadant.com](mailto:info@kadant.com)

China, Taiwan, and South Korea:

Kadant Fiberline (China) Co. Ltd.  
STE 1960, Beijing Sunflower Tower  
37 Maizidian Street, Chaoyang  
District, Beijing 100125 China  
Phone: +86-10-65813011/12/13  
Email: [Marketing.KFC@kadant.com](mailto:Marketing.KFC@kadant.com)

EMEA, APAC, and South America:

Kadant Lamort SAS  
39, rue de la Fontaine Ludot,  
B. P. 30046  
Vitry-le-Francois cedex 51302  
Phone: +33-26-74-80-80  
Email: [kadant.lamort@kadant.com](mailto:kadant.lamort@kadant.com)

Kadant Noss AB  
Malmgatan 25  
602 23 Norrkoping, Sweden  
Phone: +46-(0)-11-23-15-00  
Email: [info.kadantnoss@kadant.com](mailto:info.kadantnoss@kadant.com)

X-Clone Through-Flow Cleaner  
©2024 Kadant Inc  
01/2024