

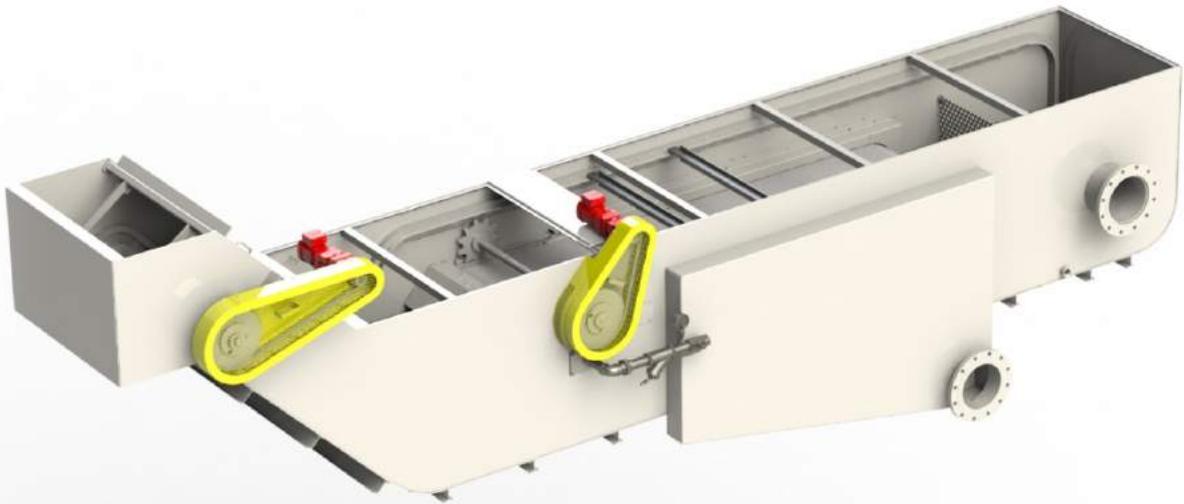
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HENRY FILTERS  
**Henry**®



**EBPR**  
**Endless Belt Primary**

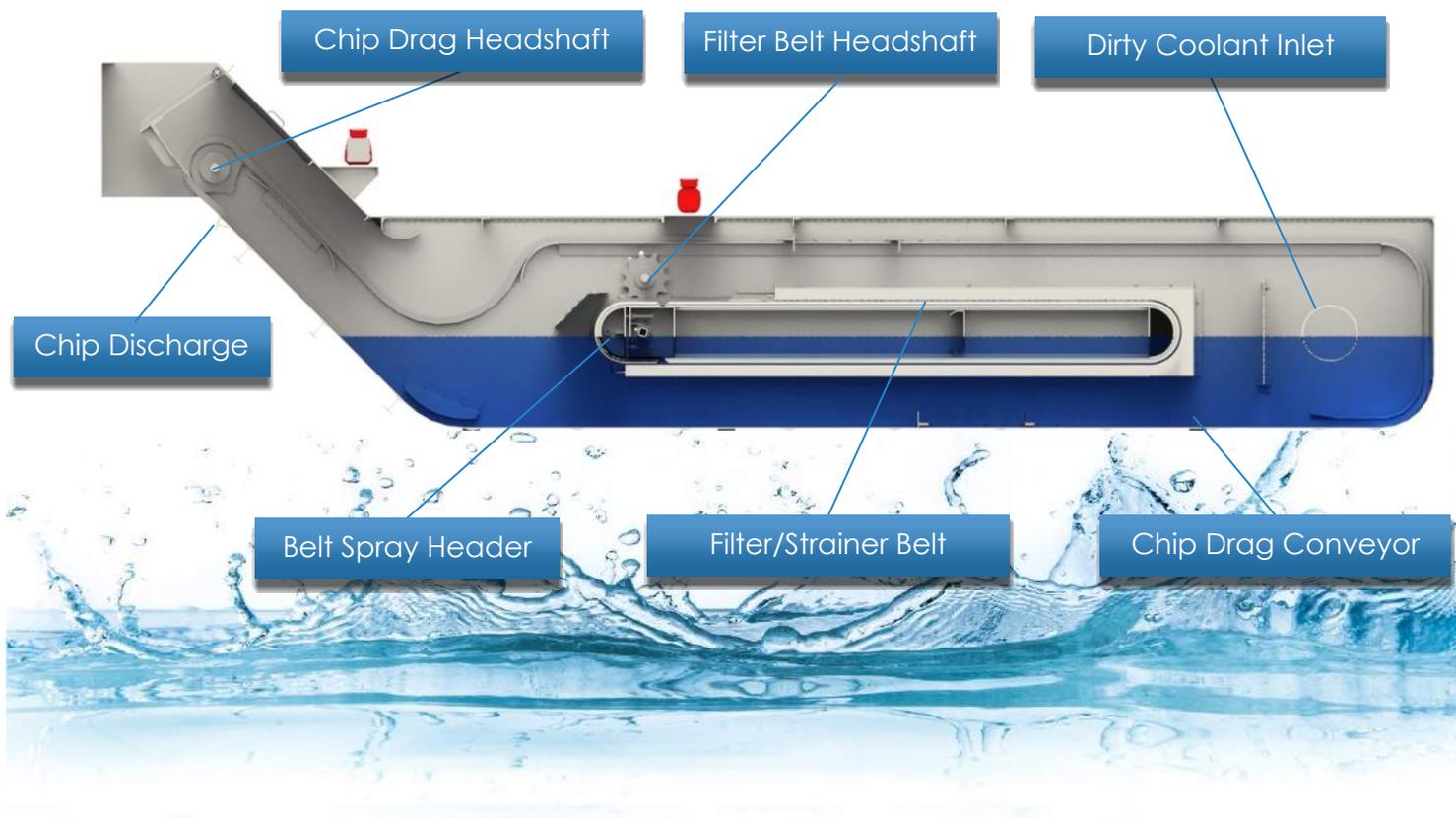
# Gravity Separation/ Filtration

## Technology

The Henry EBPR, or otherwise known as the Endless Belt Primary, with SealTrack™ positive mechanical seal, is a unit used as a pre-separation conveyor or as a gravity filter. The EBPR is designed using proven "up-flow" of the liquid passing through a continuously moving fabric belt. The belt is connected to a set of hook chains on each side for positive movement of the fabric belting. Traditional "flow-through" primary pre-separators employ fixed screen panels (wedge wire or perf plate) that are designed to separate chips from coolant using flight bars dragging across the screens. The EBPR's unique design eliminates the need to have flight bars contacting the moving belt that can cause

## Process

Contaminated liquids enter the rear of the EBPR conveyor, this is where the heavy chips are allowed to drop to the conveyor below. The unique design of the EBPR allows the bottom of the conveyor to be a solid steel base, where the chain and flight bar conveyor can remove chips that have settled or been strained from the liquid. Based on chip volume, this conveyor assembly can be ran continuously or intermittently. Intermittent operation causes the least amount of wear and allows for the optimum drying of chips. Depending on the type of fabric belt used, various coolant clarities can be achieved.





# EBPR

## Operation

As the liquid is introduced into the EBPR, heavy chips fall from the liquid flow to the conveyor. The fluid then flows up through the bottom surface of the continuously moving fabric belt separating the fine chips from the fluid. After passing through the belt, the liquid can be channeled to a filter system below or to a pumping tank. As the belt rotates around, it is washed at the front, to remove any fines that may have collected on the surface of the fabric belt, all within the conveyor housing. The fines are washed off in front radius area of the conveyor where they settle and are conveyed out of the unit

## Media Options

With the design and ability to use a wide variety of fabric belts on the EBPR assembly, a range of clarities can be achieved. For typical chip separation applications a nominal 500 micron belt is used, but for situations where a cleaner outlet clarity is required tighter filter belts can be applied. Applications with the tighter filter belts use the EBPR as the only means of filtration.

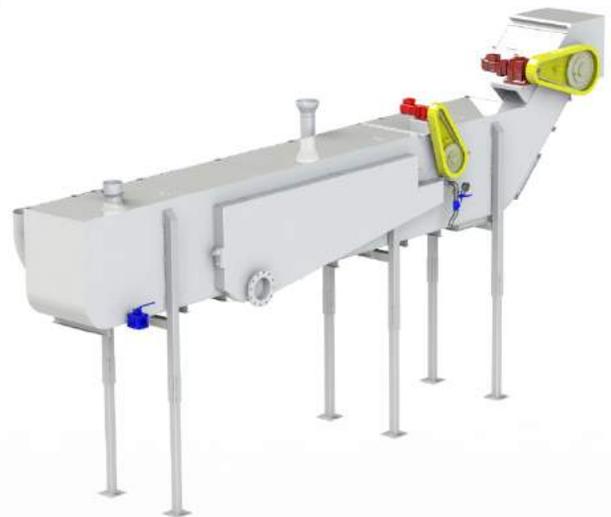
Capacity	
Flowrate	200-10,000 GPM
Filtration Area	4-200 SF per Unit
Application	
Aluminum and Cast Iron Machining	
Steel Machining (Broken Chips)	
Quenching Operations	
Parts Washing	
Waste Water Systems	



# EBPR

## System Benefits

- Proven "up-flow" fluid path for chip separation
- Patented SealTrack™ positive mechanical seal on belt virtually eliminates particle by-pass
- Full-width independent (intermittent or continuous drag) conveyor handles heavy chip loads.
- Reduced risk of media cutting, tearing or wearing because conveyor does not ride on the belt.
- No manual fastening of belt for ease of installation/ removal
- Shorter belt length saves cost on replacement time.
- In-tank belt return minimizes belt length and drying which can shorten belt life.
- In-tank belt wash header eliminates floor leaks/ drips.
- Quiescent belt wash area is ideal for removal of settled fines.
- No special tools required for basic belt installation.



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