

#### THE END SUCTION CHOPPER PUMP

[Hidrostal is the sole distributor in Great Britain and Ireland for the Wemco Model CFTM Chop-FlowTM Pump].



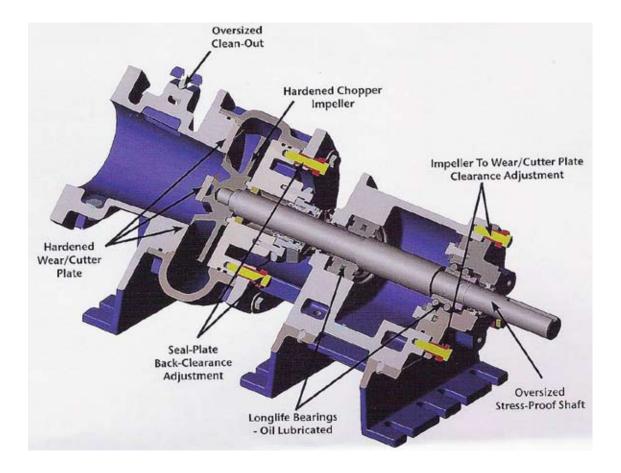
The WEMCO Chop-Flow chopper pump is designed and manufactured by Weir Specialty Pumps, Salt Lake City, USA, to complement their range of Hidrostal screw centrifugal pumps. Now patented, the WEMCO® Model CFTM chopper pump has been specifically developed to satisfy the requirements of the chopper pumps' market segment.

The WEMCO Chop-flow chops as it pumps keeping oversized solids and stringy material from clogging in the downstream process. Solids, fibrous and other hard to pump materials are pulled into the pump suction. Before these materials enter the pump impeller vanes, they are cut by the action of the rotating impeller against the stationary cutter plate so they easily pass through the pump after being chopped several hundred times per minute.

The Chop-flow pump's ability to handle large solids and stringy materials make it ideal for use in Waste Water Treatment applications and industrial applications such as pulp and paper, food & vegetable processing and meat & poultry production. With a common footprint to other chopper pumps, the Chop-FlowTM will bolt up to your existing piping and coupling.



## The WEMCO New Generation Chopper Pump



The new WEMCO® Chop-flow pump brings the chopper pumps' segment the same kind of user-friendly pumps you've trusted from Hidrostal for over 30 years – rugged, reliable, dependable and maintenance free.

- High hydraulic efficiency
- Wrap around nose vanes ensures effective chopping at the centre of the impeller, without the need for an impeller nut
- A one-piece, easily replaceable, ridged cutting bar that spans the entire suction opening
- Rear pump out vanes with cutting slots repel and chop any material that gets behind the impeller
- The wearing parts the cutting bar and rear cutting teeth are easily and inexpensively replaceable.
- All clearances are easily adjustable externally, without the need for two people and the hassle to unbolt and move the pump and/or the motor as required by other designs
- Top quality materials and castings throughout no flimsy fabricated parts to corrode
- Although the pump is completely new technology, it is dimensionally interchangeable with your present pump. Simply remove the old technology and the Chop-FlowTM will bolt up to your existing piping and coupling
- Available with packing and all conventional mechanical seals, flushed or flushless





WEMCO chop-flow Back Plate with replaceable cutter teeth



WEMCO Chop-flow Bearing Frame



Wemco Chop-Flow Cutting Plate

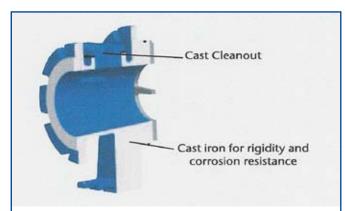


Wemco Chop-Flow Casing & Impeller



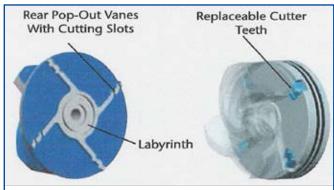
WEMCO Chop-Flow Suction Inlet





#### The Inlet:

- Heavythick casting for rigidity and corrosion resistance. No flimsy fabrications that can distort or corrode.
- Provides a smooth, slight tapered transition of the flow containing solids to the cutting bar/impeller – without the dead spots and recirculation caused by fabricated pieces of competitive units.



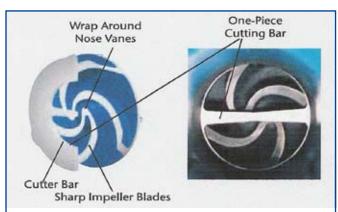
## Impeller Reverse Side and Back Plate

On the back side, the rear cutting action and the labyrinth protect and prevent any material from reaching the seal area, whether the pump is running or not:

When running, the large back pump-out vanes on the rear shroud of the impeller "pump out" any material which tries to enter the area between the rear of the impeller and the backplate. These back vanes also incorporate 2 cutting slots which intermesh with replaceable cutting teeth on the backplate:

- The pumping action/agitation of the vanes in combination with the chopping actions of the cutting slots ensures that any material in this area will be positively ejected and will not reach the seal area.
- The exclusive replaceable cutting teeth on the back plate are easily and inexpensively replaced when necessary, eliminating the need to buy the very expensive, complete backplate assembly of competitive designs.

A close- clearance labyrinth protects the seal area when the pump is not running.



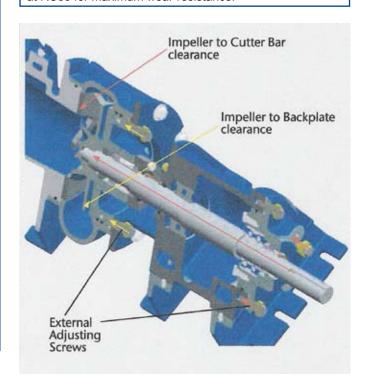
#### Front Side - Chop-Flow Impeller & Cutter Plate

Patent pending chopper/impeller

- Chops stringy material and solids as it runs against the stationary cutter plate, and then moves it through he pump casing with its highly efficient vane design.
- Has nose vanes that completely wrap around the centre of rotation, pulling material into the cutting area and assuring positive and complete chopping action.
- Made of tough and hard ASTM A148 steel, hardened to RC60
- Has ultra sharp blade face that maintains a cutting edge as it wears, coupled with a generous and easily adjustable wear allowance to maintain optimum chopping over the life of the impeller.

The stationary cutting bar

- Single piece easily removable and replaceable and economical too.
- Made of T-1 tool steel, as tough and hard as the impeller at RC60 for maximum wear-resistance.





# **WEMCO** Chop-Flow™ Performance Curves

