

## Proven Technology – Reliable Operation

### *AVX Pumps with Vortex Impellers*

HOMA Pump Technology has extended our product range of submersible wastewater pumps with Vortex Hydraulics.

Stronger performance, improved hydraulic efficiency and ultimate reliability – these were the central design targets for the newest pump range. The results are the AVX line of improved submersible waste water pumps with Vortex impellers.

**Higher performance** was achieved with an extended range of unique 4" and 6" vortex optimized volutes. Heads up to 180 feet now available. Flow rates in excess of 1200 gpm are available with our new 6" volutes, with motor sizes up to 100HP.

**Improved hydraulic efficiency** was achieved with optimized volute design coupled with innovative contouring of the impeller vanes.

**Smooth, vibration free operation** resulting from the enhanced multiple vane configuration providing long trouble-free service life.

**Clog resistant design** utilizing the optimized vortex flow path with 4" solids passage, permits abnormally large rags and long, stringy material to pass through the pump unobstructed.

**Innovative impeller design** is provided in cast iron as standard. Hardened iron or rubber coated options also available.



With the optimized Vortex flow path, clogging is prevented and wear is minimized.

#### The Vortex Effect

The hydraulic of the AVX pumps reliably prevents clogging. The impeller is recessed, and fills only a small part of the pump volute. By the Vortex effect, the liquid streams through the pump with minimal contact with the impeller.

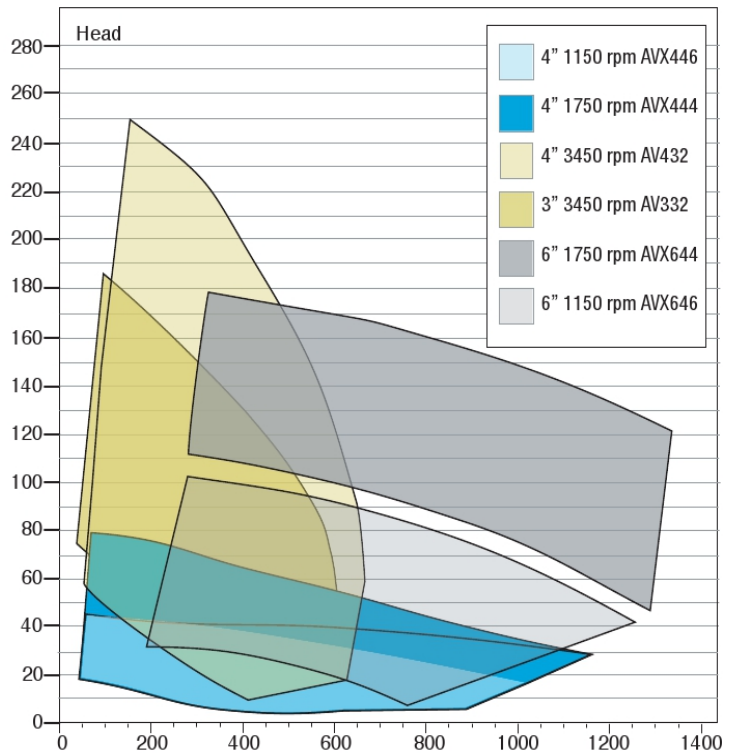
The spherical clearance is a full 4", with both our 4" and 6" pump discharge versions.

## The improved AVX pumps share the high quality standards in design and materials with all HOMA waster water pumps

- » Pressure tight submersible motors with Class H Insulation, suitable for operation with VFD. Also available to FM explosion proof specification or IE3 Efficiency Standards.
- » Liquid jacket motor cooling with open or closed circuit non-submerged installation
- » Shaft sealing by tandem silicon-carbide mechanical seals with oil chamber
- » Monitoring options for temperature of motor winding and shaft bearings, moisture or leakage in oil chamber, stator housing and cable junction chamber



HOMA AVX technology is an excellent solution for the growing challenge of today's waste water streams.



HOMA AVX range of non clog Vortex pumps

## Strong Solutions for New Challenges

Municipal and industrial waste water today is affected with larger volume of solids and fibrous matter, mainly because of reduced water consumption and the changing characteristics of the solids encountered in sewer systems.

The new HOMA AVX series submersible wastewater pumps with Vortex impellers provide the strong solution for these new challenges. Expanding the performance of existing HOMA ranges AVX their strength is pumping liquids with:

- » large diameter solids
- » long fiber reinforced materials
- » entrained gas
- » sludge
- » abrasive solids
- » accumulated fibrous material

