HEATEC® THERMO-GUARD® DB

Astec[™]Liquid Storage Tanks



Better mix, less maintenance.

Astec's Heatec Thermo-Guard DB tanks feature a dish bottom (DB) design instead of a flat bottom or cone shaped bottom. There are significant advantages to this design when storing liquids that require agitation such as polymer modified asphalt cement.

Improved flow patterns and heat distribution in our dish bottom tanks virtually eliminate the need for cleaning out solidified build-up or coking that can occur in other designs, saving you time and money.

The Heatec Thermo-Guard DB is available in standard sizes ranging from 10,000 to 35,000 gallons capacity. Additional sizes up to 50,000 gallons are available as special order.



HEATEC THERMO-GUARD DB

Astec™ Liquid Storage Tanks

Improved Flow Pattern: All parts of the dish bottom tank receive an equal amount of fluid movement, resulting in a more effective mix. A dish bottom promotes a more uniform flow pattern and prevents the formation of dead spots, eddies, and vortexes where the contents of the tank might not be mixed well in other designs.

Increased Surface Area: The dish shape of the bottom provides an increased surface area for liquid to flow over, which enhances the mixing process.

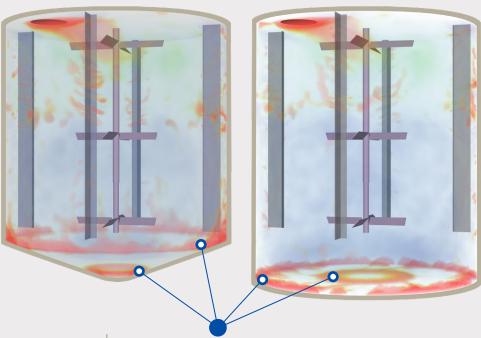
Heat Distribution: The dish bottom uses hot oil channels on the underside of the bottom in addition to the hot oil finned tube bundle inside the tank to help maintain uniform temperature and reduce build-up.

MIXING SIMULATION

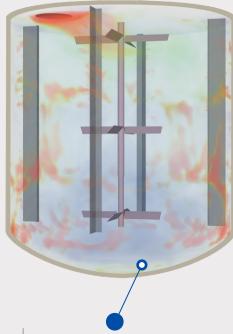
CONE TANK BOTTOM

FLAT TANK BOTTOM

DISH TANK BOTTOM



Dead spots, eddies, and vortexes form in cone and flat bottom tanks resulting in uneven mix and build-up.



With dish bottom tanks, acheive a more uniform blend without dead spots or build-up.

^{*}Images indicate trajectories of 5mm pellets insterted from top





^{*}Mixer simulated at 42 RPM (Astec standard)