

Case History 29 *Aeration* *Cal-Maine Foods installs* *O²ctopus® system at new* *egg processing plant*



Cal-Maine Foods is the nation's largest producer of eggs, with operations across the United States. The company has built a new egg-breaking facility in Waelder, TX, designed to produce a range of added-value products. The wastewater treatment plant includes an anaerobic cell for the removal of organics, and a sequenced batch reactor (SBR) to deal with ammonia and denitrification.

Space constraints were paramount in the new system, with a requirement for a rugged fine bubble diffusion system that could coexist with several downdraft mixers, and deliver 2,400 SCFM of air to support the nitrification process.....all packed into a relatively small treatment basin.

FBC Technologies, working with *Rowenvironmental* (consulting engineer), proposed a 13 unit O²ctopus® system, supplied with double-diffusers to handle the high air flow. Dubbed the "double-puss" system, the configuration allows the plant to introduce all the dissolved oxygen necessary to support process spec's in a very tight space. The system was successful installed in several days, and commissioned in April 2007.



Ballast weights installed at bottom of each diffuser leg, for operational stability on the "double-puss"