



*Flocculation* is the agglomeration of small particles and colloids to form larger settleable or filterable particles (floc), for removal in subsequent treatment processes. Flocculation begins immediately following particle destabilisation in the preceding coagulation stage. Often, flocculation aid polymers are used to assist in forming denser floc particles.

The process requires application of gentle (low-shear) mixing equipment to enhance contact of destabilised particles and to build floc particles of optimum size, density and strength. Optimum floc is usually formed under conditions of gradually reducing energy (tapered flocculation), as achieved in two to three stages, each with variable speed flocculation mixers installed.

Both *Hydrofoil* mixer and *Vertical Paddle* mixer designs are commonly used for this application. These mixer types are supplied by Aquatec Maxcon to suit the specific water treatment requirements:

