THE POULTRY PROCESSING SYSTEM CONSISTS OF FOUR BASIC COMPONENTS:

COURSE SCREENING - Feathers, dirt, grit and other large contaminants are removed by a course screening device that is chosen to meet the needs of each plant.

SURGE BUFFER - Following course screening we install or reuse a pre-existing tank as a surge buffer with only enough capacity to accommodate large surges such as those created by dumping a chiller or scalding unit. We do not use EQ tanks or holding tanks for chemical treatment.

PHYSICAL / CHEMICAL TREATMENT - 1. Coming from the surge buffer, the waste enters the multi-point injection plug flow reactor-type floculator where the chemical treatment takes place.
    2. Chemistry is introduced - Acids or bases are added to adjust pH. Then, cationic and anionic polymers are combined with micro air bubbles produced from dissolved air. As the chemicals and air are mixed with the waste stream large buoyant particles are formed that trap all contaminants.
        A. Waste stream with buoyant floc is introduced in DAF chamber.
        B. Solids rise to the top of the chamber where they form a floating layer of sludge.
        C. Skimmer paddles move sludge off into the sludge holding tank.
        D. Sludge is pumped out for dewatering or disposal.
        E. Clean effluent meets all discharge limits and is ready for reuse or discharge.

SLUDGE HANDLING - The system generates minimal amounts of sludge which can often be land applied or disposed of without further dewatering. If dewatering is required, we provide a filter press that produces dry solids that can easily be sent to landfill.

WATER REUSE - All systems provide for water reuse without further treatment or filtration. The quantity of water reused and its point of reuse is determined by the unique needs of each plant. In general, reuse of water is used as flume water, for wash water on trucks or to clean parking lots.