

Peach Processing and Packing

A major fresh pack operation of peaches and nectarines needed a screening system to remove the labels and peach fuzz from their wash water before it was pumped from the pond for irrigation use. Flow to the pond is a steady flow of 50 gpm, rising to 600 gpm during periodic draining of the peach coolers and washing systems. The water is a combination of wash water, labels and fuzz from the fruit, which clogged the irrigation pump intake, left dried fuzz in the fields which is a skin irritant to the field staff.



Integrated Engineers proposed a design to change the drains to the pond and rerouting them into an equalization catch basin, from which a Vaughan submersible chopper pump would pump it to a parabolic screening system. A polymer mixing and dispensing system would thicken the peach fuzz, which would then be filtered out by a parabolic screen. Filtered water would drain by gravity back to the pond for irrigation use, while solids would be conveyed to a dewatering bin for disposal.

The system is meeting the design goals by screening out 90+% of the labels and 70+% of the fuzz, at a total capital cost of about \$110,000. Ongoing chemical costs are minimized by employment of an inexpensive polymer solution. Integrated Engineers custom made the screen, polymer system, control panel with VFD's for operator fine adjustment and tuning.

