

CASE STUDY

Helixpress®
Seneca Foods



Helixpress® dewatering press increases value of food by-product

Problem

During peak season, Seneca Foods, Blue Earth, MN, can easily process 45,000 tons of corn or 14,000 tons of peas. Food waste is valuable and hauled away as animal feed. To recover the valuable by-product, the waste was screened, sent to a belt conveyor and then to a hopper. However, during this process, water streamed everywhere. It filled hoppers, trucks, and overflowed conveyors.

The farmers who waited patiently to haul away the corn and peas for their animals had to deal with the water as well. Sometimes when truck doors were opened, water gushed out like a tidal wave. One farmer, in fact, was pulled over for creating a road hazard and had to sit for ten minutes until his load stopped dripping.

Solution

Seneca heard how the Helixpress® dewatering press had ended watery waste problems for other processors and arranged to pilot test a unit. The press typically reduces weight and volume of starchy crops such as peas and corn by 40-65%.

The press removes “free water” without breaking the vegetable fiber and releasing BOD. Seneca was so impressed by the dewatered feed, and how dewatering simplified disposal, that they purchased a Helixpress®, Model SPR320, for the next season.

The press was positioned to discharge directly into waiting trucks. It dewateres about 5,000 lbs of waste an hour. Filtrate from the press is directed back to the plant’s waste treatment facility. Not only did the new Helixpress® dewatering unit improve the by-product, but it improved the recovery process itself. The drippy mass became drier, easier to handle, and there were no messy spills to clean up.

The press does such a good job dewatering that trucks can now hold three times as much recovered waste. Also, with the excess water removed, trucks now can be filled to capacity. The number of truckloads was reduced from three to two very full, dry loads.

At \$20/day rental, the savings mounted quickly. Labor costs associated with cleanup and hauling fees were reduced in half, for an estimated savings of \$5,000-\$6,000 per process season. This year, too, the plant has no difficulty disposing of its food by-products because the waste is dry and quite valuable as animal feed. There’s less waste and the waste is higher quality, so farmers are scrambling for it.

Another Seneca plant that also used a Helixpress® was able to reduce its daily load of eight to ten truckloads to only two, very valuable, highly coveted loads. Farmers who were able to secure the corn mixed it with hay and used it as feed for regular cows while the beans were reserved to enhance milk production in dairy cattle. ■



Fort Lauderdale
Chicago
Montreal
Dubai
Mumbai

1.888.PARKSON
helixpress@parkson.com
www.parkson.com