



# CORN FRACTIONATION

## CROWN FRACTIONATION SYSTEM

### ABOUT THE CROWN FRACTIONATION SYSTEM

The Crown Fractionation System separates corn into three components: starch, germ and bran. Separating the non-fermentable products such as germ and bran from the starch increases an ethanol plant's efficiency and throughput per bushel and is the first step to creating value added co-products.



This process begins with the corn being tempered, which enables the corn to absorb moisture required for fractionation. The tempered corn is conveyed to the degerminator where it is fractured, separating the starch while maintaining the integrity of the germ. The fractionated corn is screened and aspirated, separating the starch, germ and bran. The starch is sent to the ethanol plant and the bran to storage for sale. The germ is then milled and screened producing a high quality product for either sale or further on-site processing.



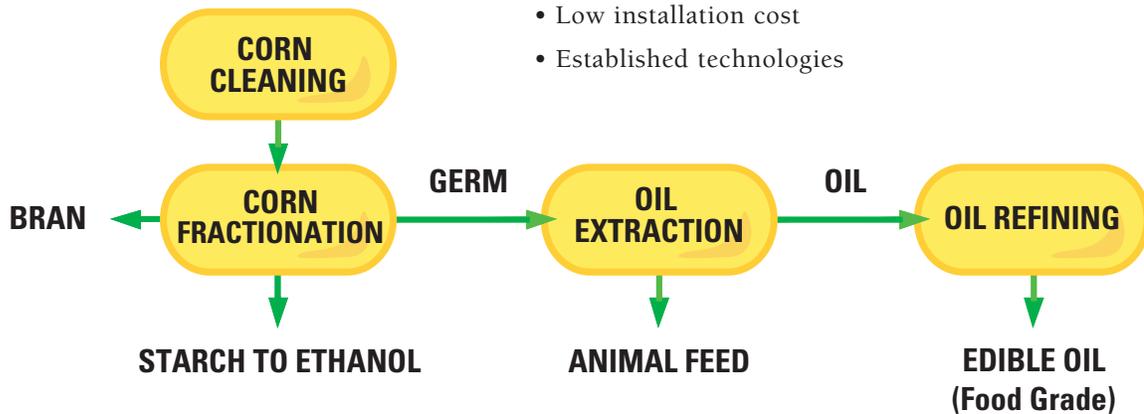
### MORE VALUE ADDED PROCESSES

Crown Iron Works understands the need for process flexibility. An important feature of Crown's fractionation system is the rapid adjustment of starch and germ stream ratios to meet varying ethanol and oil production needs.

Adding Crown's Solvent Extraction and Oil Refining technologies converts the germ into two additional premium products, animal feed and edible oil. A typical kernel contains 4% oil that can be sold as food grade oil, which has more value than crude oil.

### PROCESS ADVANTAGES

- Low operating cost
- Low installation cost
- Established technologies



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