



Preparation & Dehulling

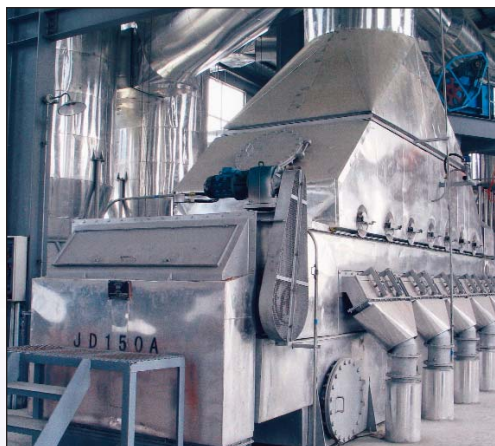
Crown Iron Works Company



Preparation & Dehulling



VSC Inlet



Jet Dryer

The Choice is Yours

As the world leader in soybean preparation and dehulling systems, Crown offers three types of dehulling systems. Hot Dehulling, Warm Dehulling, and Cold Dehulling

HOT DEHULLING:

The most popular dehulling system to meet today's high protein/low fiber meal market is **Crown's Hot Dehulling System**. This system will produce the meal quality you are looking for 12 months of the year, even with hard to dehull new crop beans while maintaining hull fats of less than 1%. When processing high moisture beans, up to 13½% moisture, directly from the field or within a couple of weeks of harvest, the Crown Hot Dehulling system will produce the high protein/low fiber meal your market requires.

With the Crown Hot Dehulling system there is no need to install expensive, high maintenance Grain Dryers, Tempering Silo's, or Rotary Conditioners. In a standard conventional dehulling system the beans are heated twice, but in the Crown Hot Dehulling system the beans are heated only once. A **Crown Vertical Seed Conditioner - 'VSC'** is used to slowly heat the beans to 140°F [60°C] and dry the beans more than 2%. This heating and drying process results in very consistent conditioned beans in only 30 minutes. The patented **Crown Jet Dryer** is then used for the final heating and drying. The beans are then fed through a gravity flow system through the **Hulloosinator®**, **Crown Cascade Dryer - 'CCD'**, **Cracker**, and **Crown Cascade Cooler - 'CCC'** where all the cracking and aspiration is performed.

SECONDARY DEHULLING SCREENINGS

Beans

Cracks w/Hulls

Cracks after CCC

Hulls

Mids

Fines





CCD



Hulloosinator



Secondary Aspirator

The Crown Hot Dehulling System is the most efficient method of dehulling in today's market. This system greatly reduces the amount of conveyors required in the preparation system with the gravity flow design. The system has the flexibility to dry, condition, and dehull beans of varying moistures with minimal adjustments while maintaining a very consistent flake to your extractor, improving extraction efficiency.

WARM DEHULLING:

The Crown **Warm Dehulling System** is designed for areas of the world that process imported beans. With imported beans, the beans have been harvested two to three months prior to processing and have been naturally conditioned during the shipping process. There are only two changes from Crown's Hot Dehulling system to Crown's Warm Dehulling System. One is a slightly larger Crown **VSC** installed to heat the beans to proper flaking temperatures, 155°F [70°C] along with drying more than 2%. The other change is the Crown Jet Dryer is no longer required, reducing installation costs. The remainder of the dehulling system is very similar to the Hot Dehulling system. The low fiber/high protein meal is still accomplished while maintaining hull fats close to 1%. The warm system is designed so the customer can upgrade to a complete Crown Hot Dehulling system in the future.

COLD DEHULLING:

Crown offers a **Cold Dehulling System** if plants have an existing preparation system that includes grain dryers and conditioners and want to add dehulling to produce a lower fiber meal. The cold system utilizes existing drying and conditioning equipment and installs the very efficient, patented **Crown Aspirators** to separate the free hulls and meats after the cracker and conditioner. Again, we design this system so it can easily be upgraded to a complete Crown Hot Dehulling system in the future.

With any of the systems you choose, Crown's experienced technical expertise will provide you with the best solution for your plant layout. We will work with you to minimize installation costs along with reducing operational costs.

