



# CPM Crown's Preparation and Dehulling



## THE WORLD LEADER IN SOYBEAN PREPARATION AND DEHULLING



The Choice is Yours. CPM 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 13.5% 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 Silos 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 Hullosenator®, Crown Cascade Dryer (CCD), Cracker, and Crown Cascade Cooler (CCC), where all the cracking and aspiration is performed. 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 that 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.

BEANS

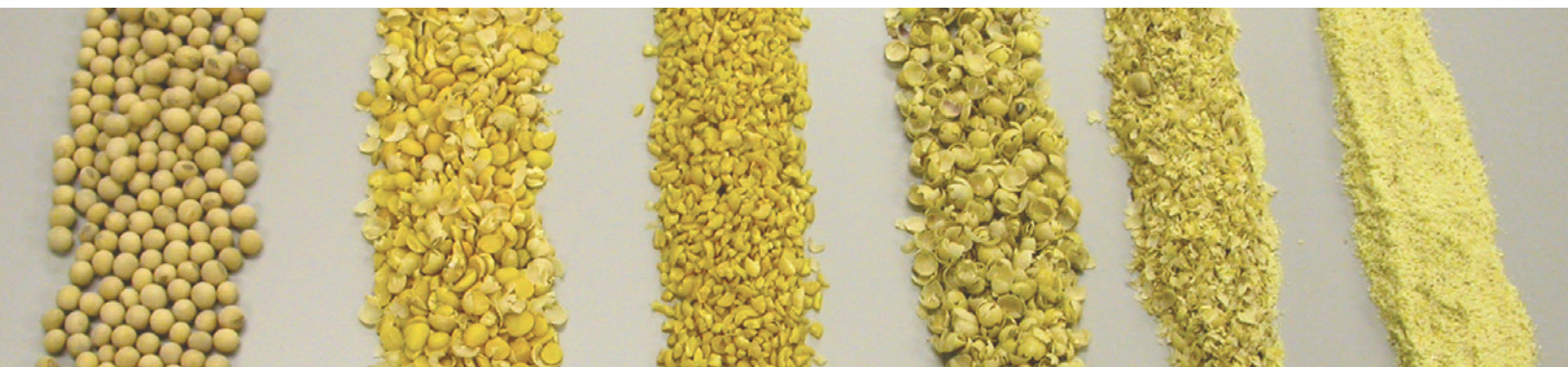
CRACKS WITH HULLS

CRACKS AFTER CCC

HULLS

MIDS

FINES





VSC INLET



JET DRYER



CCD



HULLOSENATOR



SECONDARY  
ASPIRATOR

## For ongoing innovation, Crown's technology and team are second to none.

CPM Crown's Global Innovation Center is a facility unlike any other. A fully functional 15,000 sq. ft. pilot plant, analytical lab and training facility, the GIC offers piloting capabilities from benchtop lab scale to multiple tons per day of continuous production, simulating real life and enabling customers to develop and test new product concepts in a confidential, controlled environment. The GIC has capabilities in preparation, extraction, desolventizing, drying, deodorizing, refining, fat splitting, renewable diesel and specialty extraction (including Hemp CBD Oil). Crown's technical expertise, R&D and full lifecycle process provide guidance and support at every step from feasibility, trials and custom processing to commercial-sized operations and aftermarket.



Feeding, Fueling and Building **a Better World.**



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