

LOW-FAT SOYBEAN PRODUCTION



We have developed a system for the production of high protein and low-fat soybean, which can be used both as a poultry feed and as a milk production enhancer.

- It is provided that the nutrient value of the feed is increased and the protein in it is digestible.
- Prevention of inhibitors (trypsin inhibitor, urease, lipoxidase, etc.), which reduces nutrient value and prevents growth, is provided by EXTRUDER in the system.
- At the same time, it is possible to reduce the fat content of the final product component up to 7% by pressing the seed with the high quality EXPELLER PRESS of the HUM brand in the system.
- It is possible to obtain full fat soybean only with Extruder by passing Expeller Press according to the requirement..
- With the HUM Dehulling process it is possible to maximize the proportion of protein in the final feed: 43-44% relative to the protein in the end.
- In addition to soybean, cotton seed is one of the best sources of protein. With the low-fat soybean meal production system it is possible to process cotton seed and use it as a feed to increase cow milk yield.
- In the production system of low-fat soybean or cotton seeds, you will also obtain vegetable oil near the refined oil grade as a very valuable product.

IMPORTANT STAGES OF THE PROCESS

The main feature of the low-fat soybean production system is that Extruder and Expeller Pres work together.

With the help of CLEANING EQUIPMENT, soybeans separated from foreign materials are transferred to later stages of the process.

It is ensured that the temperature of the cleaned soybean is adjusted in the CONDITIONER and it is brought to a temperature of 60-70 °C for a good crushing - dehulling process. With HUM's powerful CRUSHING, the soybean is broken into 6-8 pieces and is prepared for effective dehulling.

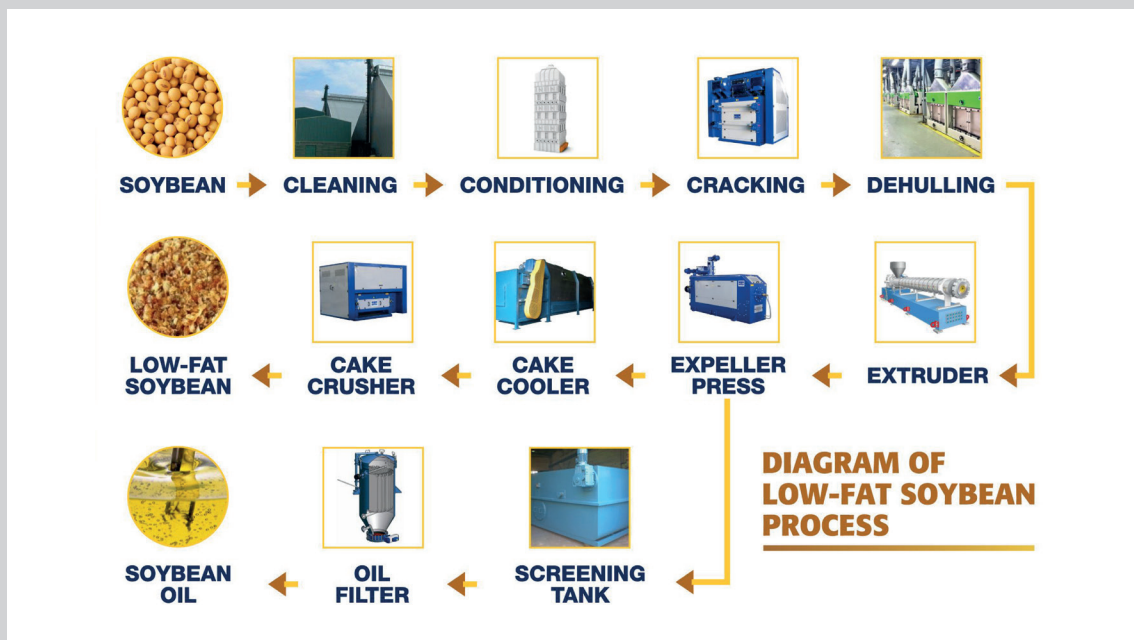
DEHULLING is an optional choice and must be applied if maximum protein is desired in the final meal.

Inside the EXTRUDER, soybean is heated to 140-150 °C and the protein is cooked, as a result the inhibitors that are restricting nutritiousness are eliminated and fat cells are destroyed.

Full-fat cooked soybean that comes out of EXTRUDER is pressed in HUM EXPELLER PRESS (continuous screw press) and excess oil is separated thus low-fat soybean meal is obtained. The meal is cooled in HUM CAKE COOLER with ambient air aspiration and brought down to storage temperature. Then it is resized homogeneously in CAKE CRUSHER and sent for usage.

Oil that is obtained from EXPELLER PRESS is cleared from impurities completely in SCREENING TANK & FILTER, and pumped to the oil storage.

We are in the service of the industry with our technology in the production of high protein low-fat soybean.



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