



# Profile:

Jagdish Exports is a well known organization engaged in the manufacture and export business of high quality and impressively priced complete Soap Machinery, We are the pioneer to develop and to reach such small technology to the people. The company has grown from strength to strength in last 3 decades and has attained unparallel leadership in manufacturing. The company has also gained reputation for the reliable performance of the products. We are a dynamic organization believing in customer support and satisfaction through quality product and services, on time resulting in long lasting business relationship.

Our company is driven by technology and the determination to excel in all activities. Its mission is directed towards providing the customer superior value and ensuring the success of employees, vendors and business partners. The organization also follows the axioms of total quality and continuous improvement in product features and processes. The company is also certified by **.SO. 2011 2000** certification





### **OILSEED EXTRACTION PLANT:**

Cooking oil making (Mechanical oilseed extraction) process:

Cooking (edible) oil making process can be divided in mainly five following process:

- Seed decorticating OR cracking OR cutting (Seed preparatory section)
- Seed cooking (Seed preconditioning section)
- Seed extraction (Seed crushing)
- Oil filtration

**EXTRACTION MACHINERY** 

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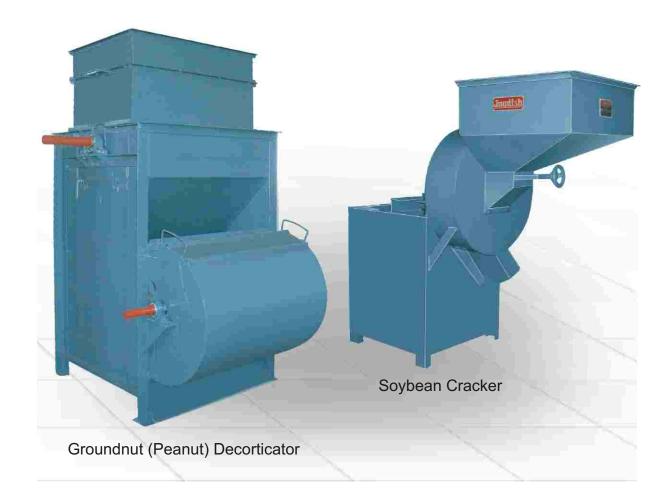
**PRESENTATION** 

Steam generation

Cooking (edible) oil can be produced by mechanical extraction (crushing) of different edible oilseeds. In this type of plant, after complete process filtered cooking oil is produced. The produced filtered oil is natural, clean, transparent and pure oil which has natural color and odor too. Filtration process is by special filter clothes and hence it is 100% natural. Due to natural oil, generally everywhere good demand of this type of oil and people like to use this oil in cooking. In the complete process, first process is seed decorticating OR cracking OR cutting which also says seed preparatory process. In the same process either seed is decorticating or cracking or cutting which make easier and suitable for crushing oilseed. Different oilseed require different process of preparatory section. So according to choice of seed crushing, decorticator or cracker or cutter has to install. The second process is seed cooking process. After decorticating or cracking or cutting, seed is transferred in to cooking kettle named machine and in which seed is equally and properly cooked. Cooking kettle is designed and manufactured by that a way so that seed cooked equally and properly as per requirement. Cooking is done because of getting more recovery and good quality of final oil and by-product cake. The third process is expelling (extraction) (crushing) of cooked oilseed. Cooked seed is dropped automatically in to expeller machine from cooking kettle. Expeller is a main machine where crude oil and by-product cake is produced. Our expeller machine is a latest designed and technology machine for extraction of oilseed that is warm type extraction chamber of expeller. Expeller chamber consist different forward and reverse warms with special degree of warm thread. Warms thread is also properly grinded for better extraction result. Expeller machine is made heavy-duty for better performance. Expeller machine produced raw (crude) oil and cake which says by-product. Oil is pumped by high pressure to the filter press from expeller oil tank. The fourth process is oil filtration. Crude oil is filtered in filter press with high pressure. Filter press is specially designed and used best quality of special filter cloths to get best quality of filter oil which will be natural, clean, transparent and pure as well as with natural color and odor too. Then filtered oil is either transferred to final oil storage tanks or fills in bottles or tins. The fifth process is steam generation. Steam boiler is produced steam from normal water. Normal water is pumped from water tank to steam boiler where it is boiled so that dry steam can be obtained. Water is boiled by heating through fire of wood or agricultural waste. Sometimes diesel or gas firing system is also supplied according to special demand from buyers. The dry steam is transferred from steam boiler to cooking kettle by pipelines. Elevators and conveyor are used for automatic and continuous feeding as well as cake collations from expellers to the cake bagging.



### **Decorticator / Cutter / Cracker:**



## **Decorticator / Cutter / Cracker:**

Groundnut (peanut) decorticator is used for decorticating of groundnut. Decorticating is done for separation of kernel and husk. It means after decorticating process, clean kernel will be produced and husk will be separated as by-product. During the process, husks are thrown away by built in air blower and kernels are screened to separate split kernels from whole kernels. Cutter of groundnut decorticator is designed specially so that it can be adjust according to different quality and verity of groundnut for better result of machine. There is also facility for adjustment of air flow to throw husk away. In case of castor seed castor seed decorticator is used. In case of sunflower, sunflower cracker is used this breaks the sunflower seeds and gives the mixture of kernels & husks for better crushing. In case of soybean, soybean cracker is used this breaks the soybean seeds into small pieces for better crushing. In case of coconut (copra), copra cutter is used this cut the copra cups into small pieces suitable for crushing into expeller. In case of mustard, sesame, rapeseed (canola), cotton seed, palm kernel, jetropha etc. can be crushed directly in expeller without any cracking or cutting process.





## Steam cooking kettle:

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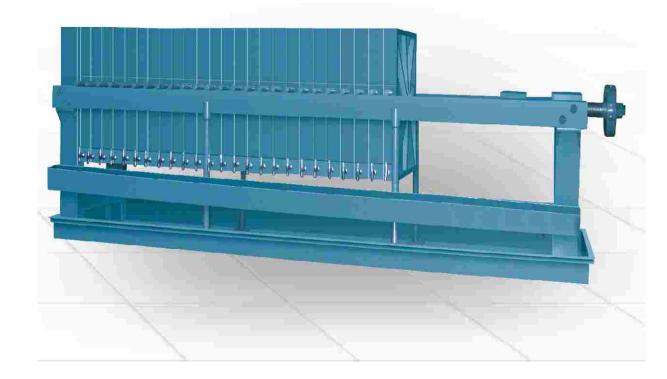
Cooking of oilseed (conditioning) is done in steam cooking kettle by using of steam of steam boiler. In this process, seed is roasted and cooked (motorized) up to necessary level. Kettle is mounted on the expeller and mostly is driven from expeller. After decorticating or cracking or cutting process, seed is fed in the feeding hopper of long cooking kettle. Cooking of seeds is necessary for highest recovery and long life of oils. Long cooking kettle is specially designed and shaped for proper cooking and roasting of seed for better result of extraction. One fan like agitator is fitted in the feeding hopper and which is operated by gears with cooking kettle. Steam inlet and outlet connections are provided. Steam is traveled from steam boiler to steam kettle by pipeline.

## **Heavy-duty Expeller:**

Expeller pressing is a chemical free method whereby oil is mechanically squeezed from raw materials under high pressure. Raw-materials are supplied to the press feeding hopper in a continuous feed from steam cooking kettle where it will be extracted (crushed) and produce the oil and by product (cake). The expeller and it's chamber is specially designed as well as heavy-duty machine for the best result of oilseed crushing. Crushing method of our expeller is latest one that is warms type crushing technology. Different warms are fitted on warm shaft. After extraction of oil under high pressure and squeezing, drop down between specially maintained gape between two cage bars. At the end of expeller, special type of mechanical system is fitted which maintain thickness of cake which is byproduct of process.



#### **Filter Press:**



#### Filter press:

Extracted oil from expeller is filtered in filter press with high pressure. Filter pump is pumped unfiltered oil from expeller tank to filter press at high pressure by pipeline. Filter press is specially designed and used best quality of special filter cloths to get best quality of filtered oil which will be natural, clean, transparent and pure as well as with natural color and odor too. The necessary pressure is obtained by using specially designed reciprocating type pump. Filter press is membranes plate type which is latest for cooking oil filtration.





## Steam boiler:

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Steam boiler is produced steam from normal water. Normal water is pumped from water tank to steam boiler by required pressure where it is boiled so that dry steam can be obtained. Water feed pump is pumped normal water from water tank to steam boiler or economizer of steam boiler at high pressure by pipeline. Special type of non-return valve is fitted between the way to avoid back stem pressure of steam boiler. The necessary pressure is obtained by using specially designed reciprocating type water feed pump for feeding water. Water is boiled by heating through fire of wood or agricultural waste. Sometimes diesel or gas firing system is also supplied according to special demand from buyers. The dry steam is transferred from steam boiler to cooking kettle by pipelines. Special type of water level gauge is provided with glass tube to see the water level of steam boiler. Boiler safety valve is also fitted in boiler so that at high pressure it will open and which provide the safety of steam boiler.







## **Bucket Elevator:**

Bucket elevator is used for lifting of materials. Here it is used for lifting of raw material (seed) and byproduct cake. It means bucket elevator is used for automatic feeding of seed in expellers. In medium and bigger scale oilseed extraction plant, elevator feeding is required. Bucket elevator is worked by special type of many buckets and belt or chain.

## **Screw Conveyor:**

Screw Conveyor is used for conveying of materials. Here it is used for conveying of raw material (seed) and by-product cake. In medium and bigger scale oilseed extraction plant, Conveyor is required for conveying of materials. Screw Conveyor is worked by many a special type of screw.



## SMALL SCALE OILSEED EXTRACTION MACHINERY

