

# NEW - GOYUM 1500



View of the expeller from both sides.



## DESCRIPTION

Goyum Screw Press all steel construction means that Mild Steel material is used.

Triple Reduction Gear Box – The gearbox is fitted with three sets of Gears and Pinion. All gears and pinions are helical and of special steel.

Self contained conveyor – One conveyor is fitted in the bed or Base of the machine to take out all the oil along with small size foots.

Water cooled Main worm shaft – The main shaft is fitted with rotary joint and 10 feet long pipe is inserted in the drilled hole (in the shaft).

Supported in a sleeve for easy removal – The main worm shaft is inserted in the sleeve of the gearbox. This shaft can be taken out from the sleeve, while changing the shaft or worm assembly, without disturbing the gearbox.

**Worm Assembly – Complete worm assembly is hardened, using hard and wear resistant welding rods of latest research. These worms and collars are then profile grinded.**

**5 Stage Cooker – Five jackets are welded in the drum to make cooker. Each jacket is of 72" diameter for efficient cooking of seed.**

**Gearbox, for driving main shaft, is designed especially for cooker which can bear heavy and shock loads. Maintenance is easy.**

Chamber Size: There are three chambers fitted on the machine each of length 36". The first chamber from the feed end has inside diameter of 12", the next one has 11" and the last one has inside diameter of 10".

Cap. 50tpd – The crushing capacity of the machine is 50 tonnes per day (24 hours). It can crush around 50 tonnes of seed or nut while doing single pressing. The crushing capacity also depends upon the type and density of the material.

Power – The machine is supplied with electric motor of 180 HP for expeller, 30 HP for kettle, 3 HP motor for crammer fitted on the feed hopper, 0.5HP motor for blower fitted on the kettle for aspiration system, one motor fitted on the gearbox for lubrication system. All electric motors have rotating speed of 1440 rpm.

Switch, starter – The switch, starters and other electric controls are fitted in the control panel and supplied with the expeller.

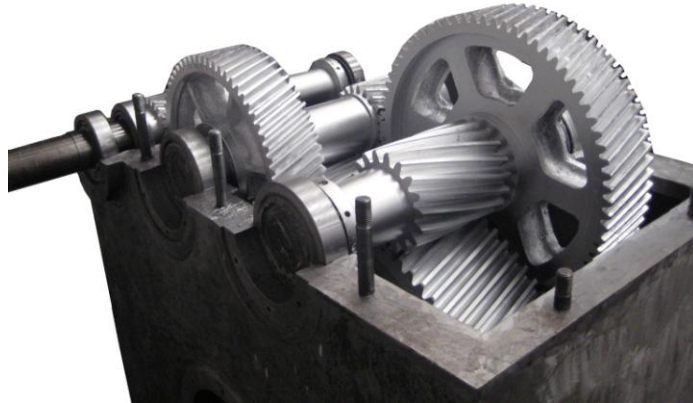
V – Belts for V – pulleys are of E Section for higher strength and durability.

**Temperature Thermometer – A thermometer is fitted on the inlet hopper to measure temperature of the incoming seed.**

A Sight glass is provided on the pipe joint fitted on the inlet hopper to check the flow of seed going into the expeller.

Manually operated, mechanical arrangement for lifting chambers is installed on the expeller.

## DIFFERENT VIEWS



Gears and Pinion being seen when the top cover is removed. Both the gears and pinion shafts have been made from special steel after extensive research to extend the life to more than 10 years.

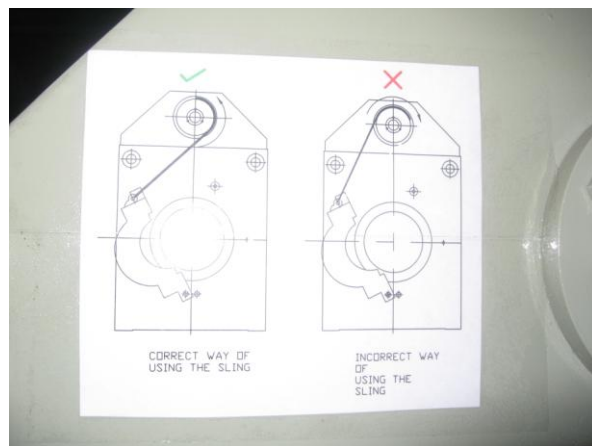


In the above picture, the fitting method of 170 HP motor, V-Pulleys and V-Belts can be seen.

In the bottom right corner, a chain can be seen which drives the conveyor inside the bed. The drive is taken from the gearbox. An oil level gauge is fitted at the bottom left corner and below a drain plug is fitted to drain the oil.



The person in the picture is fitting cage bars in the chamber. Between cage bars spacers are put so that the oil comes out from the spacing.



The chamber lifting arrangement is shown from the top. When an open chamber is to be closed, a sling is attached to the hook on the chamber and the pulley is rotated with the handle in the direction as shown on the sticker to lift the heavy chamber. Only one person is needed.



The above picture shows from the inside, the mechanical choking system to make the desired thickness of the cake or meal coming out of the machine.





The above picture is of control panel. All the switches and starters are fitted inside. Incoming wires and outgoing wires all fitted inside so that there is no open connection.



In the picture conveyor is shown which is fitted in the base of the machine to take the oil out from the base. There is one screen put on the base which allows foots of small size only to go through it with the oil.



In this picture, feed hopper can be seen with the temperature thermometer.

The hopper is installed on the Hopper body. The temperature of seed going inside the expeller can be judged from the thermometer.

One pipe extension is fitted with sight glass to see the material going inside. The other opening is provided for the crammer assembly.



This is the crammer assembly fitted on the feed hopper.



All the worms except the first three from the feed end is fitted with O – Rings to stop the oil going towards the shaft. The oil which goes towards the shaft does not get out and gets hardened due to heat. All the worms and collars are then stuck on the shaft which causes much difficulty when the worm assembly is to be changed.



Lubrication system is fitted on the gearbox. Below oil filter is attached and above a rotary pump. The oil distributor or junction box is fitted inside the gearbox. This system keeps all the bearings and gear sets lubricated. Inside, the pipeline material is of copper.



The rotary joint is fitted at the end of the main worm shaft for cooling purpose. The water goes through the rotary joint from the top and comes out from below of the rotary joint.



A small chamber is fitted inside the hopper body.



A view with the chamber removed.

All the worms and collars are hard face welded and then profile grinded. Welding rods used have high wear resisting properties, and life of more than 10,000 hours (ten thousand hours) when used under standard conditions.





The expellers are wrapped with the plastic sheet before packing in the wooden or plywood Box.

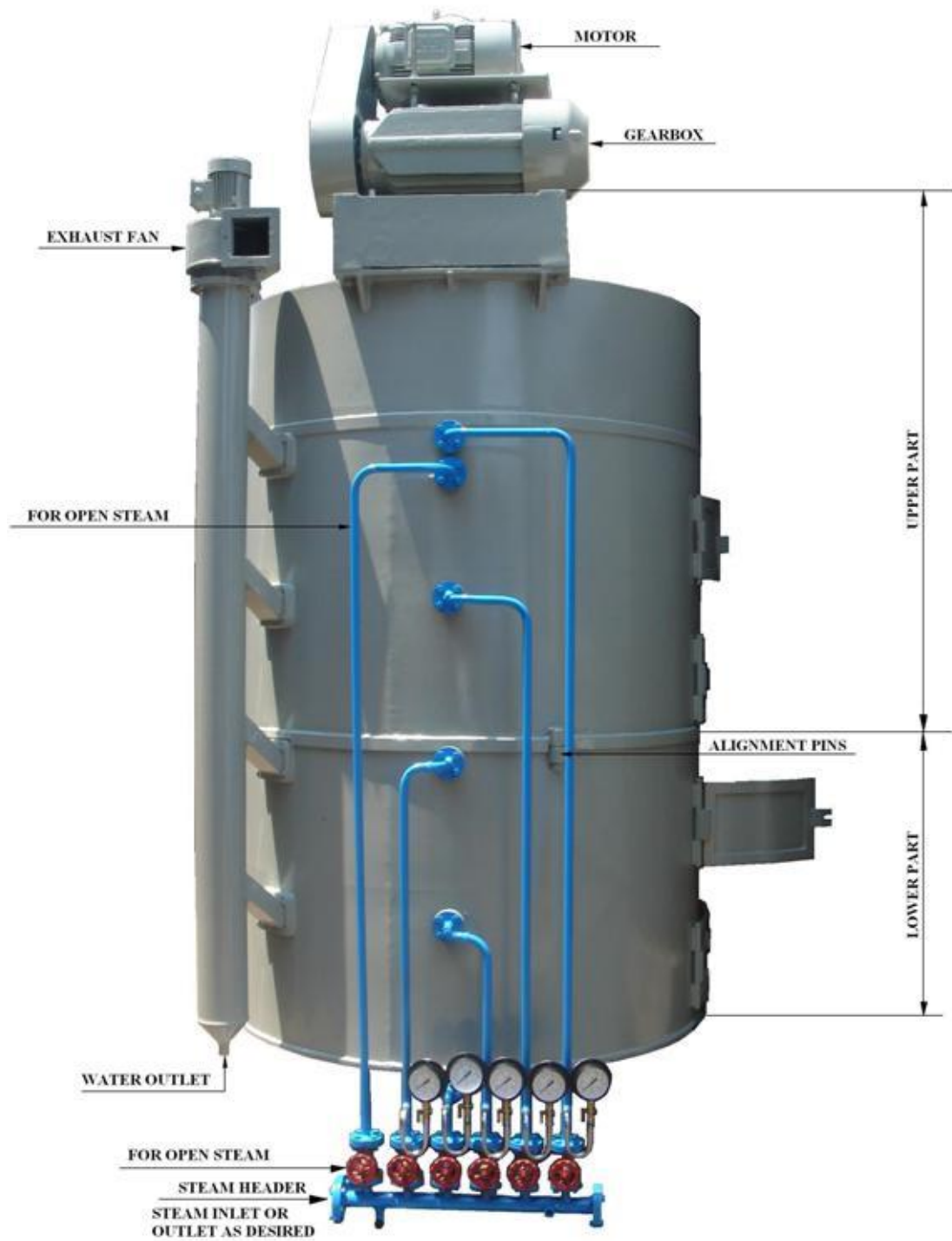


Handling of the expeller during transportation is easy as arrangement is done on the expeller.



The expeller in the plywood box is being transported to the nearest dry dock.





The cooker is fitted with Steam traps( not seen in the picture), steam stop valves, aspirator system. And on top, gearbox and motor for driving the agitator shaft fitted inside.



The gear box is being fitted with the help of crane.



Steam Jackets to be fitted in the Cooker Drum



The thickness of the plate for making Steam jackets is 20mm Thick.