MALIK'S PET AND ANIMAL FEED EXTRUDER

Malik Engineers, Vasai, manufacture Pet and Animal feed Extruder which is suitable for manufacturing feeds from Wheat, Soy, Maize with or without other additives such as fish meal, meat, bone, etc. to suit the animal requirement.

Extrusion of pet foods is an interesting subject in India where the demand for pet food is immense but faced by lack of good extruders available indigenuiously. We at MALIK'S constantly strive to produce good quality Extruders here in India and thus save costly foreign exchange from flowing out.

It is a known fact, that, Extrusion cooking of animal food not only destroys bacteria and inhibits harmful activity of certain food cereals, but also improves palatability and digestion by the animal. Further, vitamins and flavorings could be added in processing to give a rich and fortified feed to the animal thus improving its overall health and growth.

The Extruder can be used to produce feeds for Horse, Cat, Dog, Cattle or Fish, Etc. The Extruder or Cooker, comprises a specially profiled cooking screw rotating inside a stationery barrel which is assembled in segments and either heated by steam or electric heaters. This cooking screw rotates at high speed and driven through heavy duty Electric motor with v-belts drive arrangement through Bearing housing to take the heavy thrust loads which is developed during extrusion of cooked material through the die openings. This is a medium shear or water aided extrusion process with moisture (water) in the base raw-materials added in proportions upto 40% m.c.w.b. The Moisture is added into the premixed dry materials inside a suitable Preconditioning tank mounted at top of the Extruder. To help in even absorption of water in the flour, water is sprayed over the material as it travels inside the preconditioner towards the Extruder feed opening. The premixed and hydrated ingredients drop over the feed zone of cooking screw which transports the materails continuosly forward towards the die openings to shape the product. The cooking screw, by virtue of its profile, compresses and cooks (with aid of heat taken from heaters or steam) the starchy materials as they travel forward. Additionally, adiabitic or friction heating results due to action of screw and this also helps to cook the materials. The die which determines the shape of product, e.g round hole will produce rod or pellet, is fitted with a rotating cutter

to cut the product into small lengths as it comes out of the die. The wet product, or pellets, are continuously conveyed into a continuous hot air dryer to remove the excess moisture from the product (to less than 10% in final product). The dry material emerges out of the Dryer. If necessary, oil or fat can be sprayed on the dry pellets and coating of vitamins and pigments applied in a coating pan afterwards.

The Medium shear Cooking Extruder is available in output capacities of 100 Kgs, 200 kgs and 400 kgs/hour respectively.

For further information, write-to:

MALIK ENGINEERS,

Unit no. 1, Shailesh Ind. Estate-1, Navghar, Vasai Road (East)-401 210, Maharashtra, India Email: <u>info@malikengg.com</u>

Tel: 0250-2390839, Mob: +919821676012



Pet Food Extruder machine