

7.5 HP SINGLE MINI-SCREW EXTRUDER

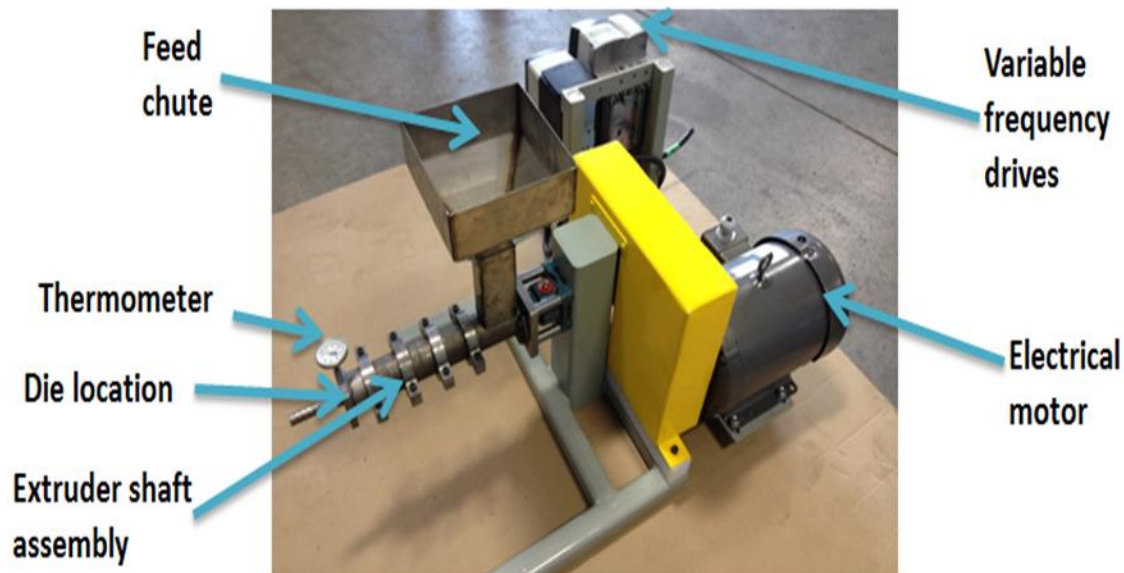


Figure 1: Single screw extruder designed by Purdue and developed by Technochem (This picture is obtained from Technochem manual which I have attached in case you want to cite and use the picture in the newsletter)

The 7.5 horsepower mini-extruder developed by Purdue university was meant to feed people on mars but is fast making debut in Africa (<https://phys.org/news/2017-04-device-meant-astronauts-mars-debut.html>). This extruder is being used to process cereals and snacks. My colleague and I from the university of Eldoret, Kenya, have established a Food processing incubation center through funding from USAID-Food Processing Innovation Lab (FPL), through Purdue university as one of our collaboration universities in the USA. We have previously done consumers' willingness to pay for instant fortified flours in western Kenya (together with an economist from CYMMIT, Nairobi) and submitted a manuscript for publication. We shall share the results soon with you guys (See some pictures on the next stage during extrusion trials). I'm also doing some experiments with a twin screw extruder of cereal brans with aim of increasing their fermentation by beneficial colon bacteria and thereby increase production of short chain fatty acids especially butyrate (in the colon), which has diverse roles in managing metabolic syndrome.





Twin screw extruder