



MOTORIZED PALM OIL EXTRACTOR

This machine, designed by our partner CODEART, is ideal for the transformation of the palm oil fruit in rural areas. Its simple and robust design makes it an essential tool to help develop this sector. The use of the motor allows a significant increase in productivity.



CPO-160-MO
500 Kg/h



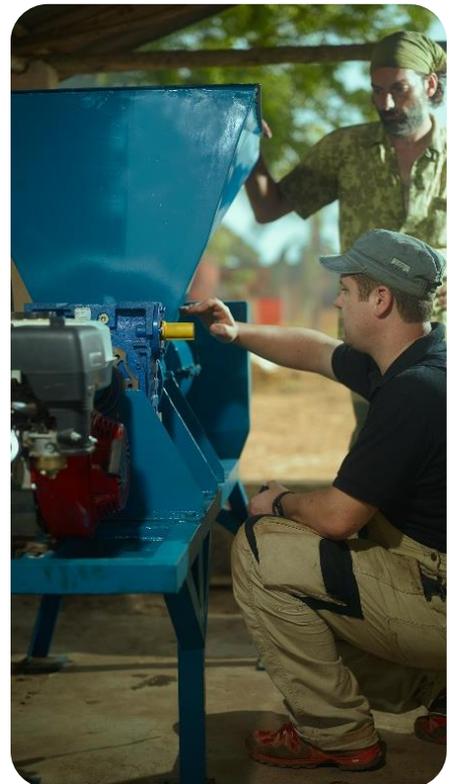
Engine HONDA
270CC – 9CV

It is a screw press inspired by the French double-screw press COLIN which used to be widespread in Africa.

Thanks to its engine, this machine allows to effortlessly extract palm oil with a high flow rate.

This machine can be maintained locally by mechanics trained by our technical service.

The palm oil press is the main tool of the palm oil fruit processing chain. This chain, inspired by the traditional ancestral method is easily appropriated by artisans. It is also composed of a steam cooker and a clarifier.





Operation

The press is made of a 160mm diameter screw. The screw is driven by a 7-horsepower heat engine via a speed reducer. After cooking, the fruits are introduced into the press via the feeding hopper and are driven by the worm screw.

A cone mounted on springs obstructs the exit, which allows the passage of palm nuts without damaging them. The closing pressure is adjustable to obtain optimal extraction.

Finally, the oil is obtained under the press and recovered in basins.

Technical data (dura nut):

- Flow: about 500Kg of fruit / h
- Consumption: 2L / ton of processed fruits
- Gross extraction *: 20%

* The gross extraction represents the ratio of pressed fruit masses and oil obtained and therefore does not constitute a yield. Example: for 100Kg of processed fruit 20Kg of oil is obtained. This value is an average and strongly depends on the type of nuts (DURA 15% - TENERA 30%) as well as its quality.

Advantages:

- ✓ Reduction of physical effort compared to mixing (traditional method).
- ✓ The screw press is used to extract freshly cut palm fruit oil, the rate of free fatty acids is reduced, which increases the quality and therefore the selling price of the oil.
- ✓ Drastic reduction of the amount of water used. The traditional method of mixing requires 1000 litres of water (often polluted) to treat 300 kg of fruit.



The fibers (right) can be used to enrich soils or as fuel.



T4D offers technical training services related to the machines provided.

T4D also offers additional equipment such as: a cooker, a clarifier or a palm nut crusher.