

DECANTER CENTRIFUGES & PLANTS FOR SOLID/LIQUID SEPARATION



CONTINUOUS PRODUCTION OF PALM OIL WITH HILLER DECANTER TECHNOLOGY

HILLER PROCESS

The oilpalm originates from the Gulf of Guinea. Nowadays, this palm is growing within 10° around the equator. The main production areas are Indonesia and Malaysia.

Palm oil is one of the most widely produced vegetable oils in the world and generates a large variety of products for the food industry as well as for other industry sectors. The HILLER three-phase Decanter separates 3-phase mixtures.

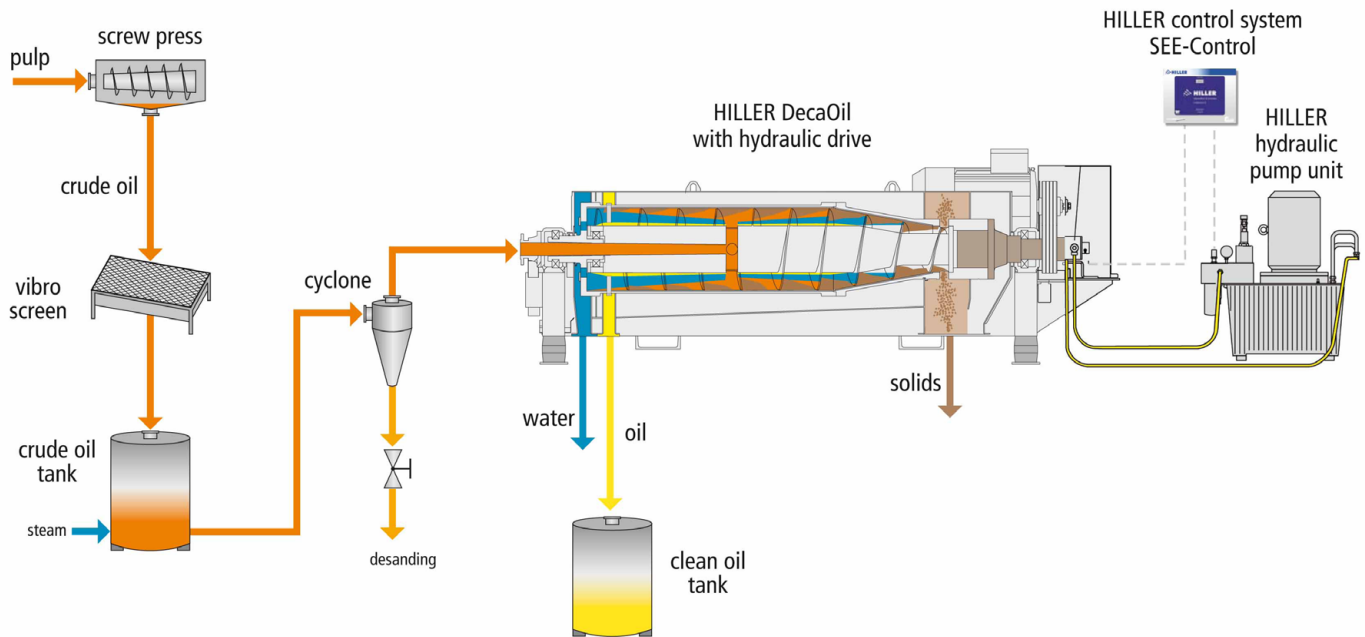
This process is a simultaneous separation of two immiscible liquids of different densities and the solid phase, which is heavier than the liquid phases.

The liquid phases can be discharged by means of overflow weirs, dip tubes or centripetal pumps.

BENEFITS

- high quality oil
- high yields
- reduction in operating costs like saving on chemicals, filtration aids, water and personnel
- continuous and gentle processing
- maximum hygienic standards
- extreme shortening of the process time
- minimum oil and heat loss
- minimum waste water
- maximum flexibility

SCHEMATIC DIAGRAM of a HILLER DecaOil centrifuge system with hydraulic drive for palm oil production



1. Direct crude oil clarification after the screw press (process shown above)

The crude palm oil from the screw press is filtered by a perforated vibrating screen and collected in the crude oil tank. This tank is equipped with a heating device and, if required, a low-speed mixer.

In the next step the crude oil will directly flow to the HILLER 3-phase decanter via a hydrocyclone to separate the sand.

2. Oil recovery after the sludge tank

The crude palm oil is sent to continuous sedimentation tanks. Sludge will be collected and pre-thickened in the sludge tank.

In the next step the crude oil will directly flow to the HILLER 3-phase decanter via a hydrocyclone to separate the sand.

-> no additional clarification process necessary!

