

Containerised Oil Expelling Plant - 400 kg/hr

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Project brief: A customer in East Africa wanted a self-contained vegetable oil expelling and filtration system that could be moved conveniently between farms and could operate securely without shelter.

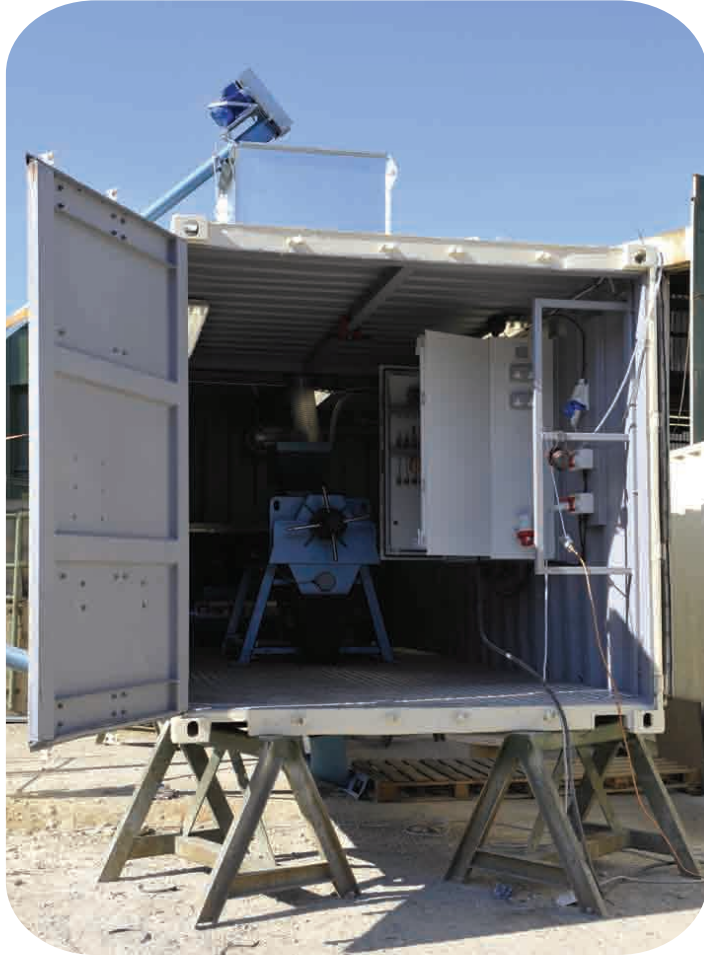
Solution: Alvan Blanch developed a system based around two 20ft shipping containers - one with expeller, control panel and plant services, and the other for oil settling and filtration. The fully integrated design incorporates interconnecting oil pipe lines and electrical wiring



← Containerised Oil Expelling Plant
-Trials at factory.

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↑ Oil expelling container.



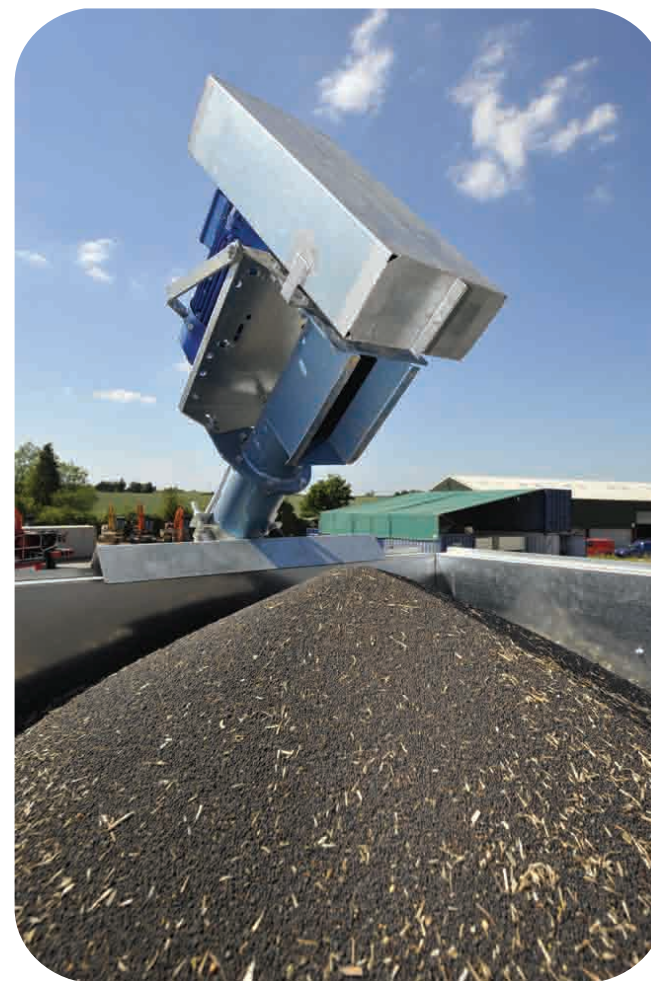
↑ Feed hopper skid mounted onto expelling container for quick removal by forklift/telehandler.

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↑ Auger delivers OSR (oilseed rape) to overhead hopper.



↑ When the hopper is full the probe switch automatically stops the feed auger.

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↑ Oil expelling container with XP300 Oil Press - before seed flow commences.



↑ Hopper feed gate is open and seed flows down into the oil expeller below.



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↑ Cake emerges from the expelling chamber.



↑ Cake exits the press into the collection hopper below

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↑ Cake auger collects from chute underneath container and delivers to bulk bag



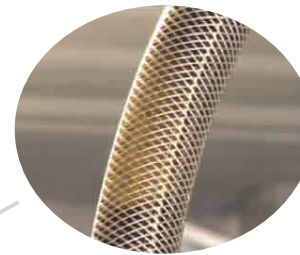
↑ Cake collects in a big bag.

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← Oil filtration container - twin pass filter system in foreground, settling tanks at the rear.



← Oil surging from the oil press



← Oil enters settling tanks from pipes connected through to the oil expeller container.

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↑ Plate type primary filters with the secondary filters for final clearance.

Oil outlet taps from plate filter press →
with collection tray.



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↑ Oil conveyance is via heavy duty pneumatic pumps.

Air compressor and large sludge pump - mounted under a work bench, oil pipes and electrical cables neatly arranged. →



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↑ Inside control panel with speed control inverters.

Plant control panel. →



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The system packed away for convenient transportation as conventional shipping containers - can be made operational again on arrival at site within a matter of just a few hours

