

PumpAction..... Issue 18

CASE STUDY

Viking pump package proves the good oil

Kelair's customer required a pump package that was going to be used in Fiji for several applications, including:



- The bulk transfer of coconut oil from a storage vessel onto a barge
- The transfer of oil from the barge onto a ship

The unit also needed to be fully skid-mounted to:

- Enable the user to transport the unit
- Enable the user to move the unit from a jetty onto the barge via a crane

The customer also requested an engine-driven unit, as an electrical source was not available at all locations and it needed to be capable of 'lifting' the coconut oil at ambient temperatures, from below the barge at a depth of three metres.

Kelair was able to provide a fully-transportable package comprising a Viking Model QS124A, 6" universal bracket internal gear positive displacement pump in cast iron construction, specially modified for the conditions and for the handling of food-grade coconut oil.

The pump modifications included carbon graphite product lubricated bushings in lieu of standard bronze bushings (as standard bronze material is not suitable for food applications), and FDA-approved sanitary gland packing. The pump was driven using a diesel-driven engine fitted with electric start, control panel, 48 litre fuel tank, geared reducer and couplings all mounted on a fabricated mild steel heavy-duty base plate.

The manufactured unit is geared down to provide the desired flow of 90 m³/hr and has an approximate dry weight of 950 kg.