

## Case History no. 9 – Waste Oil Recovery

Fluid : miscellaneous waste oils form a wide variety of sources.  
Temperature : 40 deg C  
Pressure : atmospheric  
Flow rate : 1 million ltrs p/a  
Line size :

A client collects waste oil from every type of industry and cleans up for reuse as fuel for burners, power generation & heating systems..

### **Problem:-**

In order for the oil to be suitable for reuse it must meet high quality criteria. Since it comes from every conceivable source and contains all sorts of contaminations from nuts & bolts to cigarette butts, work gloves, fibres etc. In the past they have tried pressure filters in the way of baskets but find that some of the contaminants extrude through the filter media and they require frequent cleaning and do not remove the very fine fibres. They have used centrifuges on this application but these units cost €317,450.00+

### **Solution:-**

We needed to provide them with a gentle filtration process at reasonable expense that is easy to clean / service. So we provided them with circular vibratory separators. In total to date they have purchased 3 off 1200mm diameter and 1 800mm diameter units. They are single deck units with covers and inspection ports with rubber bungs. They use a 74 micron synthetic mesh bonded to a polyurethane frame. As the frames tend to absorb the oil as they are immersed in it constantly it is not feasible to re-mesh the frames via machine tension bonding because the oil weeps out of the frames making it hard to bond to them.

### **Result:-**

The client is happy with quality of the oil produced and the service & product we supply and should be purchasing more units in the future.