CNF series – Centrifuge Oil Treatment system

Most oils that are subject to treatment by conventional vacuum systems require a relatively low water content for the vacuum systems to operate efficiently. For example, high vacuum degasifier vacuum pump packages are usually unable to handle much more than a few hundred parts per million of water before giving virtually uncontrollable foaming issues. Even low vacuum treatment systems are typically limited to around 5000 PPM or 0.5% for effective treatment.



Given that a great deal of water is present in oil at traditional oil recycling facilities, it is prudent to pre-treat these oils prior to vacuum treatment, which produces an ultra-low moisture level. It is not uncommon to have water-in-oil values more than 15% or even 25%. The Redragon CNF series addresses the issue of high water levels by integrating commercially available high-speed vertical disk-stack centrifuges into packaged systems that are available as skid-mounted or trailer-mounted units – self-powered by integral diesel generators if required.

The CNF systems are often customized to include integral electric heaters to get the oils up to optimum processing temperatures, often between 60°C and 80°C.

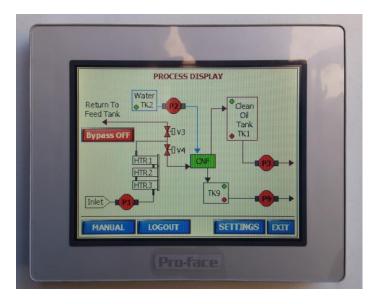
Additionally, the CNF systems are complete with stainless steel operating water and sludge tanks essentially making the system self-contained.



The high-speed centrifuge system typically produces more than 10000G and all modern units are auto-dumping. Liquid-liquid or liquid-liquid-solid separators are available in order to handle sludge or solid particulate contamination usually found in lubrication oil applications.

The CNF system is usually supplied as a complete standalone unit, almost a plug-and-play system, but can also be integrated into existing tank farms or other processing systems such as vacuum degasifiers or clay polishing systems. All CNF systems are PLC controlled using touchscreen HMI and these lend

themselves to easy integration to non-Redragon systems by means of Go/No go signals.



Sample system specification

- Voltage 220V, 460V, 380V, 575V, 50/60
 Hz
- Maximum recommended water level 25%, to less than 0.1%
- Flow rates 500, 1000, 2000 and 4000 litres per hour. Larger sizes on application
- Electrical heaters 16 kW increments
- Explosion-proof/NEMA 7 available



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- Vertical disk-stack centrifuge for faster posttreatment processing
- All stainless steel 304 or 316 piping and components optional. Stainless tanks are standard
- Skid-mount, tagalong or semi-trailer mounted





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