

FRI₃ oil system



THE ULTIMATE AC&R FLUSHING SOLUTION...

Water Contamination

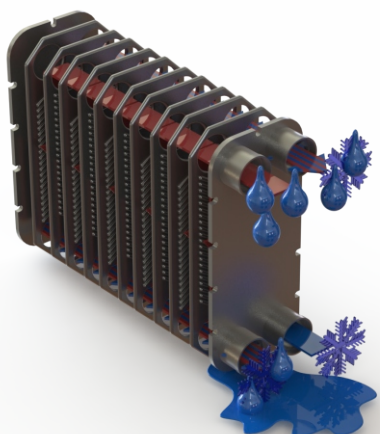
- Heat Exchanger Freeze-Up
- Over-Pressurisation
- Mechanical Damage
- Moisture Ingress

Oil Flushing/Retrofitting

- Mineral Oil Removal
- Oil Contamination
- Decomposed Oil & Sludge
- Hygroscopically Absorbed Moisture

Acid Removal

- Acid Contamination
- Compressor Burnout Debris
- Acidic Oil & Refrigerant Cleansing
- Broken down Drier Particulates



The Fri₃Oil System works quickly and efficiently to cleanse and resolve all of these problems, "recycling" and cleansing your refrigerant to an as-new condition.

No more refrigerant destruction costs

Prevent repeated failures of compressors/motors and components

Avoid costly pipework and component replacement due to contamination

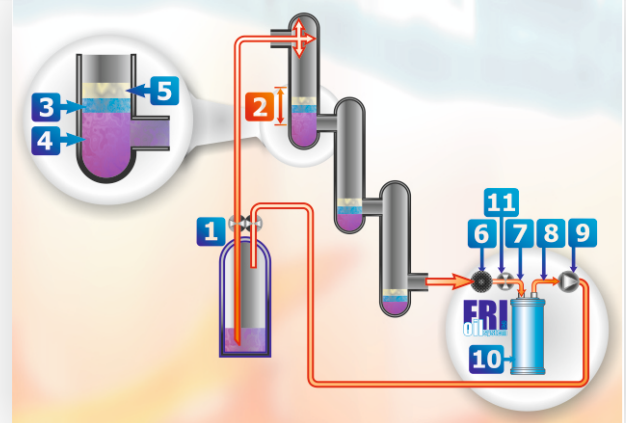


Air Conditioning, Refrigeration Products & Services

The Cleansing Process

Component Parts and Cleansing Actions:

1. Refrigerant & Suction Cylinder
2. Rise & Fall of Liquid Refrigerant within the System
3. Water floating on top of refrigerant
4. Liquid Refrigerant
5. Oils + Acids + Suspended Particles
6. Liquid Separation Vessel
7. Suction Pressure Sensor
8. Compressor Inlet
9. Discharge Pressure Sensor
10. Expansion Device
11. User Process Control and Monitoring Visual Sight Glass



**Complete cleanliness
via FRI3OIL process**

Contaminated Cooling Systems

System breakdowns due to contamination are very costly in downtime, costs for diagnosis and subsequent repair can easily run into £1000's. Fri₃Oil dramatically reduces costs and downtime.

A compressor motor burnout can contaminate the entire system with acids and sludge. Left untreated, the new compressor motor is highly likely to fail as a result of ongoing acid attack.

A split heat exchanger, following a freeze-up, causes a rapid loss of refrigerant, which is followed by water flooding the refrigerant circuit, leaving the system inoperable until all water is removed. This is easily accomplished with Fri₃Oil.

Traditional methods of repair often require replacement of all inter-connecting pipe work and plant items (Compressor, Condenser, Expansion Valve, Evaporator). Fri₃Oil eliminates massive capital cost and down-time.

Remove Oil and Cleanse the Refrigerant

R22 replacement and retrofit operations often require complete oil removal with a high degree of cleanliness. Fri₃Oil removes oil and refrigerant quickly and cleans (Recycles) your refrigerant to an 'as-new' condition.

Traditionally, oil traces will remain in the Compressor, Evaporator, Condenser and pipework traps. Fri₃Oil recovers oil from all components (Compressor, Vessels, TEV's, Liquid Receivers, Filters, etc.)

Fri₃Oil will literally remove water in liquid form from within the Compressor, Oil Separators, Liquid Receivers and Suction Accumulators. It then separates the recovered water and refrigerant!

Fri₃Oil accomplishes rapid refrigerant recovery (up to 1.3kg/minute) and charging far quicker than traditional methods with conventional tools, resulting in reduced site time and system downtime.



**Even complex, hard to reach areas
are fully cleansed with FRI3OIL**



Fri3Oil works quickly and automatically

The Fri₃Oil system is a unique machine that has been successfully applied across Europe, with over 200 Fri₃Oil systems in the field.

The Fri₃Oil machine removes oil, water and contaminants and then cleans the original refrigerant for re-use. Contaminants are separated, thus eliminating high destruction costs and new refrigerant purchase.

Fri₃Oil rapidly removes water, oil, sludge, solid contaminants, acids and debris, cleans components and pipework, cleansing the refrigerant in the system to <600ppm, and down to <150ppm for HFC's.

The Fri₃Oil system is available for sale from Business Edge, or for hire with our experienced Engineers who will conduct the Flushing Operation at your Site.

Contact Business Edge for more details including the date of our next FREE Fri₃Oil Training Day

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