

Integrated Systems Engineering

Hydraulics • Pneumatics • Electronics www.nfpc.co.uk

> Cetop approved education



Technical Section

Let me introduce myself, I am **Graham Rowley**, and I am the **CONTAMINATION SYSTEMS MANAGER** here at the National Fluid Power Centre

For over 15 years I have taken the lead at the NFPC, supported by our Advisory Member Companies to improve the performance of our many Customers in the area of Contamination Management.

We have a fully equipped Contamination Analysis Laboratory to support the delivery of our various Training Courses.

CHECK YOUR KNOWLEDGE

Having read the questions below you may consider attending a training course at the NFPC as part of your Learning and Development Plan

- 1. Do you fully understand the term Target Cleanliness level ?
- 2. What is the required Target Cleanliness level of your own system ?
- 3. Do you know how to establish a required Target Cleanliness level ?
- 4. If you have your Hydraulic Oil analysed, do you understand the content of the report?
- 5. Do you understand the term Flushing and how it is achieved?
- 6. If you looked at an oil sample under a microscope, would you be able to recognise the nature of the Contaminants ?
- 7. Do you know the major places where contaminant can entre a Hydraulic System?
- 9. Do you know the cleanliness level of your new oil?
- 10 Do you know the cleanliness level of your new hydraulic hoses ?
- 11. Do you know the Beta Ratio and micron rating of your hydraulic filters?
- 12 Did you know that a filter does not take out all of the necessary Contaminants during a single pass.





Just look at that Black Metal What is the ISO Code?

www.nfpc.co.uk Reserve you places online or contact Anne Clarke (0)1909 504539 /aclarke@nfpc.co.uk

Keeping you up to date



NOTHING BEATS HANDS ON TRAINING for developing your SKILLS The NFPC has an outstanding Practical Training Area, and Oil Analysis Laboratory.

Every Hydraulics Course has a section relating to Contamination Control. We are kept up to date in this vital area by our Advisory Members namely: Hydac Technology, Pall Corporation, Parker and MP Filtri

THE REAL HARD FACTS

- 70-80% of hydraulic failures and deterioration in performance can be contributed to poor contamination control
- A large percentage of Maintenance Staff are contaminating
- their own systems "Why"
- Even the best designed system will fail due to poor maintenance and good contamination control procedures are vital at all times





The Hydraulic Oil may look OK to the Human Eye? but the microscope tells another story



The human eye can see down to about 40 microns "Suddenly size is important"

HERE AT THE NFPC- we offer TWO training courses specific to Contamination Control and how to better manage your Systems involving Hydraulics

- 1. Contamination Management (1 Day Course)
- 2. Contamination Assessment (1 Day Course)

These Courses are available on request Visit the NFPC Website for full details

www.nfpc.co.uk.

We do recommend you to attend the NFPC Stage 1 Hydraulics Course prior to attending- OR check your current knowledge levels using our FOC online Self -Assessment

John R Savage NFPC Managing Director