

# MFS and ECT join forces!

Where MFS has many years of experience in the gas turbine market, offering workshop services, field services, parts services and tooling services, ECT manufactures gas turbine compressor cleaners for the turbomachinery.

MFS is a devoted user of the cleaner of ECT for their clients and is distributor for Europe, Pakistan and Mexico for the aviation, industrial gas turbine as well as other turbomachinery markets.









Your power is our care!

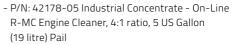
### Why clean

During operation the gas turbine compressor accumulates foulants. Contamination such as; dust, sand, oil, grease, hydrocarbons and salts or a combination. Over time this gradual process, will have a big aerodynamic impact. This causes an efficiency loss of the gas turbine by degradation of the pressure ratio and air mass flow. MFS can help you to assure your gas turbine is used as efficiently as possible.

### **Cleaning Products ECT**

MFS offers you the following ECT products:

- Off-Line Crank-Soak Compressor Cleaning
  - P/N: 42174-05 PowerBack Concentrate Crank Wash Engine Cleaner, 4:1 ratio, 5 US Gallon (19 litre) Pail
  - P/N: 4074-05 PowerBack Ready to use Crank Wash Engine Cleaner, 5 US Gallon (19 litre) Pail
- On-Line Compressor Cleaning



- P/N: 4078-05 Industrial ready to use - On-Line R-MC Engine Cleaner, 5 US Gallon (19 litre) Pail

## PowerBack Crank wash Compressor Cleaner

Crank washing is vital to efficient gas turbine operation. Contamination and fowling can disturb airflow, degrade compressor efficiency, increase fuel use and subject hot section components to excessive thermal effects. Compressor crank washing on a regular schedule can optimize engine efficiency and even extend the time between needed inspections and repairs.

### Solvent-free detergent for off-line

PowerBack is the most efficient solvent-free detergent available. Amine based formula with twice the active ingredient used for aeroderivative and

#### PowerBack Benefits

- Low Foaming
- Available as a ready to use (P/N 4074) or a C4 concentrate (P/N 42174)
- Requires NO Agitation; Mix 6 parts demineralized water with 1 part R-MC PowerBack C4
- Non-Toxic; Contains no alkalis, phosphate acids or 2-butoxyethano
- Biodegradable; Mixture of cationic surface active agents and deionized water
- Non-Flammable; Contains no petroleum by-products
- User Friendly ECT's products do not require special D.O.T. restrictions
- Meets OEM Specifications for flight and ground turbines

heavy duty gas turbine cleaning by crank washing. Packaged to deliver 6% solids when mixed it contains twice the active materials versus all other specialty crank washes. PowerBack's proprietary anti foaming chemistry improves rinsing and reduces the time required to crank wash. It is Biodegradable, nontoxic & non-flammable, and meets all OEM specifications.



### Questions or Order

If you have questions about the PowerBack or R-MC gas turbine compressor cleaners or if you want to order, please contact sales@mfsupport.com. You can also use our MFS Partfinder on our website.

### R-MC Industrial Compressor Wash

The outcome is predictable when fouling accumulates in the compressor of a gas turbine engine:

- Power sharply reduced.
- Running temperatures are elevated.
- Fuel consumption is increased with possible stalls and vibration occurring during acceleration.



#### Industrial Concentrate Benefits

- · Safe for On-line Use Contains no solvents
- Non-Toxic Contains no alkalis, phosphate acids or 2-butoxyethonol
- Biodegradable Mixture of cationic surface active agents and deionized water.
- Non-Flammable Contains no petroleum byproducts
- Products do not require special D.O.T. restrictions
- Meets Specifications for flight and ground turbines.
  R-MC was formulated to be effective, economical and environmentally safe.

R-MC is a unique combination of cationic, surface active agents in a water based carrier which has no harmful effect on fuels, lubricants or engine components. The product can also be used as a crank wash product where cleaning is required before overhaul or inspection.

### Water based remedy for on-line

The remedy is R-MC Engine Cleaner for aeroderivative and heavy duty gas turbines. This patented gas path cleaner inhibits and removes contaminant buildup. It is available as a ready to use product (P/N 4078) or a C4 concentrate mixed with 4 parts of demineralized water (P/N 42178). It can be injected without shutting down the engine and regular use removes layered deposits and discharges them as a fine white ash along with the exhaust gases.

## MFS, taking care of power!

MFS, founded in the Netherlands in 2001 is specialized in gas turbine maintenance, services, parts, site management, consultancy and training.

We have 20+ years' experience as a worldwide, independently operating organization in the gas turbine market. Including oil & gas installations, power generation plants and commercial marine propulsion.

It is our mission to improve your profitability, reduce the downtime of your gas turbine and decrease your total cost of ownership.





Address: Weerbroek 13 6666 ML Heteren The Netherlands General: info@mfsupport.com +31 (26) 479 999 9 Sales: sales@mfsupport.com

