



**PROFESSIONALS IN GAS TURBINE
COMPRESSOR CLEANING**



CLEANING CHEMICALS

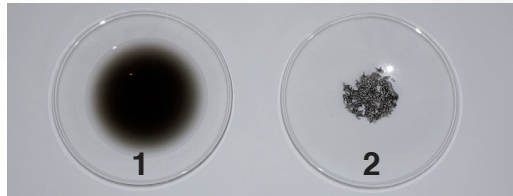
TURBOTECT 2020, water-based, biodegradable and biphasic

DESCRIPTION TURBOTECT 2020 is a superior quality, water-based compressor cleaner designed for both on- and off-line applications. It provides an extremely high cleaning performance that is comparable to solvent-based products. TURBOTECT 2020 is formulated from a unique blend of non-ionic surfactants and solubilisers in a water-based system.

KEY FEATURES Highly effective water-based compressor cleaner outperforming all other water-based compressor cleaners, low-foaming product, high performance with cold or hot water, low non-volatile residue, biodegradable, meeting specification of all major gas turbine manufacturers.

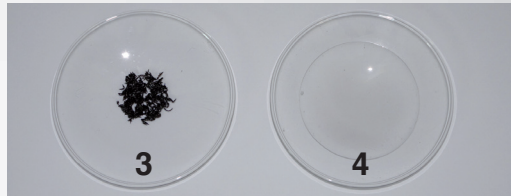
PACKAGING & SHIPPING TURBOTECT 2020 is available in cans, drums or IBCs and is classed as non-hazardous for transportation. For precautionary advice please ask for the MSDS.

METRATEST® result with TURBOTECT 2020



TURBOTECT 2020 solubilizes the foulant from the aluminium beads and transfers it to the cleaning solution (1) – resulting in clean aluminium beads (2).

METRATEST® result with a typical water-based competitor cleaner



The carbonaceous foulant remains on the aluminium beads (3) and the cleaning solution remains clear (4).

TURBOTECT ARF-301 antifreeze and rinsing fluid

DESCRIPTION TURBOTECT ARF-301 is a ready to use, superior quality, high purity, specially designed propylene glycol-based gas turbine compressor antifreeze and rinsing fluid which can be used with all Turbotect compressor cleaners for both on- and off-line cleaning in low ambient temperature conditions.

KEY FEATURES Formulated for on-line compressor cleaning at outside ambient air temperatures between +10°C down to a minimum of -10°C; non-hazardous, high flash and high boiling point.

CLEANING CHEMICALS

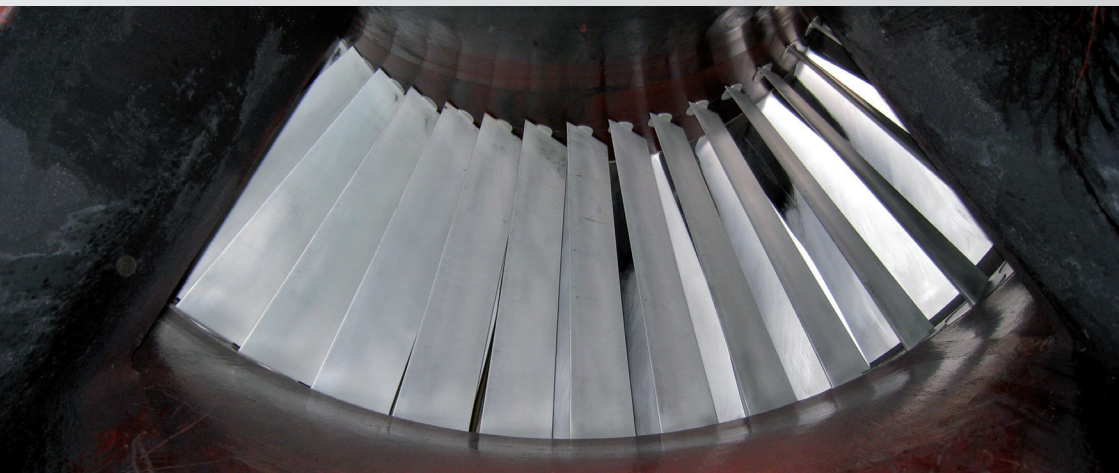
TURBOTECT 950, water based, biodegradable and monophasic

DESCRIPTION	TURBOTECT 950 is a high quality, water-based compressor cleaner designed for both on- and off-line applications.
KEY FEATURES	High effective water based compressor cleaner for cold or hot water washing, low non-volatile residue, biodegradable, meeting specification of all major gas turbine manufacturers.
PACKAGING & SHIPPING	TURBOTECT 950 is available in cans, drums or IBCs and is classed as non-hazardous for transportation. For precautionary advice please ask for the MSDS.

TURBOTECT 927, solvent-based

DESCRIPTION	TURBOTECT 927 is a high quality, solvent-based cleaner designed for both on- and off-line applications. It is specifically formulated from organic solvents, surfactants and emulsifiers designed to remove grease, oil, soot and other deposits commonly found on gas turbine compressors.
KEY FEATURES	Most effective solvent-based compressor cleaner for removing severe hydrophobic contamination.
PACKAGING & SHIPPING	TURBOTECT 927 is available in steel drums. For shipping information and precautionary advice please ask for the MSDS.

Off-line compressor cleaning result with TURBOTECT 927 on IGV's of an F-class gas turbine compressor



WASH SYSTEMS

Wash Skid and Wash Cart

DESCRIPTION

Turbotect wash skids and wash carts are provided as compact, workshop-assembled, pre-tested, ready-to-install units designed to match specific engine requirements and a variety of customer needs. Stationary wash skids and mobile wash carts are tailored to customer specification to serve one or multiple gas turbines. They can be operated manually or with full integration into the GT control system.

KEY FEATURES

Manually controlled to fully automatic, stand-alone or GT control system embedded, customer specific engineering, possibility to connect to multiple gas turbine units.

REFERENCE EXAMPLE

Stationary wash skid supplied and installed in an 840 MW CCPP for on- and off-line washing of two F-Class gas turbines.

Supply of a mobile wash cart for off-line washing of four GE Frame 5 gas turbines in a power plant in Africa. The mobile wash cart can be connected to the off-line system manifold of each GT providing a uniform flow of wash fluid to the nozzles.



Stationary wash skid

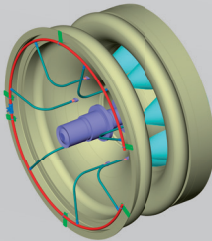


Mobile wash cart

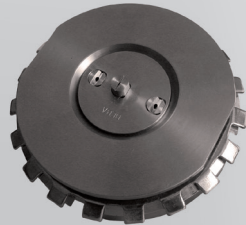
WASH SYSTEMS

Wash nozzles for on- and off-line washing

DESCRIPTION	Turbotect on-line nozzles for ideal droplet distribution. Patented Mk3 nozzles with air support to ensure complete wetting of compressor IGV's on large F- and H-Class engines. Range of off-line nozzles for different gas turbine models.
KEY FEATURES	On-line: Optimized droplet distribution, low pressure, low flow system (LPLF). Off-line: Direct spray with full IGV coverage.
REFERENCE EXAMPLE	Off-line nozzle installation on three GE Frame 5 gas turbines. Washing with the newly installed Turbotect off-line nozzles resulted in a power recovery of over 3MW, restoring the power output to the design value.



Off-line nozzle system for GE Frame 5



Turbotect Mk3 on-line nozzle

OFF-LINE WASH AUDIT

DESCRIPTION	Our off-line wash audit assistance service is designed to share our company's 40 years of experience in cleaning of industrial gas turbines by assisting power plant operators to achieve optimum benefits from off-line compressor washing – thereby minimizing power degradation losses, maximizing power recovery and improving overall plant efficiency and profitability.
KEY FEATURES	Optimizing wash procedures, nozzle functionality and alignment testing, maximizing profit, on-the job operator training.
REFERENCE EXAMPLE	Marchwood Power Station, United Kingdom, improving effectiveness of off-line washing by optimizing the original OEM nozzle alignment. Customer reference letter available upon request.

INFORMATION

Company information

Turbotect Limited was founded in 1978 in Baden, Switzerland. The company is striving to help its customers to improve the efficiency and profitability of their gas turbines primarily in the technology areas of gas turbine fuel treatment and gas turbine compressor

cleaning. Turbotect products and services are recognized and endorsed by the gas turbine operators and the OEMs alike, providing excellent local service through a worldwide network of subsidiaries and representatives.

All products are developed in Switzerland and stand for Swiss Quality.



TURBOTECT products are approved by:

SIEMENS
Ingenuity for life



ANSALDO
ENERGIA

ALSTOM

and many more...

CONTACT

Do you wish to profit from our expertise?

We are happy to assist you!
Please contact our head office or our local partner in your area.

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