

Recommended products for compressor cleaning.

The following products are tested for compressor cleaning in SGT-500, SGT-600, SGT-700 and SGT-800 gas turbines.

Cleaning agents

The cleaning agents in table 1 may be used for off-line cleaning in accordance with relevant operation and maintenance instructions. These products meet the requirements as specified in seller's K-standard, K-8962-54 and K-8962-55.

Table 1. Cleaning agents.

Cleaning agents	Manufacturer
Turbotect 927, solvent based	Turbotect AG, Postfach 1411, Badstrasse 15 (Mäderhof), CH-5401 Baden, Switzerland Tel. +41 56 200 50 20, Fax +41 56 200 50 22 http://www.turbotect.com
Turbotect 950, water based	
Turbotect 2020, water based	
ZOK 27, water based	Airworthy Ltd., Elsted, Midhurst, W. Sussex, GU29 0JT, England Tel. +44 1730 811920, Fax +44 1730 811930 http://www.zok.com
Fyrewash F1, solvent based	Rochem Technical Services (Europe) Ltd., 11 Sun Valley Business Park, Winnell Close, Winchester, Hampshire SO23 0LB Tel. +44 1962 890089, Fax +44 1962 890090 http://www.rochemltd.com
Fyrewash F3, water based	
Turbo-K, water based	FP Turbomachinery Consultants GmbH, Wiesenstrasse 57, 79312 Emmendingen, Germany Tel. +49 7641 55346, Fax +49 7641 55319 http://www.fpturbo.com/
Conntect 5000, water based	Conntect Inc., 332 Federal Road, Brookfield, CT/USA Tel. +1 203-775-8445, Fax +1 203-775-9339 http://www.conntect.com
Protoklenz GT, water based	Minco UK Ltd, Mr. Bob Gronski, 6 Castle Rise, London Road, Stroud GLOS GL5 2 AW, England , Tel. +44 1453 764 149, Fax +44 1453 764 008

Anti-freeze agents

Tested anti-freeze agents are shown in table 2 and table 3. Anti-freeze agents have to fulfil the same requirements concerning purity and stickiness properties as the cleaning agents.

The anti-freeze agent in table 2 may be used both for off-line and on-line washing of SGT-500, SGT-600, SGT-700, and for off-line washing of SGT-800 turbines. The anti-freeze agent can be used down to -10°C (14°F) and it is compatible with both water and solvent based cleaning agents in table 1.

Table 2. Anti-freeze agent.

Anti-freeze agent	Manufacturer
Turbotect ARF-301,	Turbotect AG, Postfach 1411, Badstrasse 15 (Mäderhof), CH-5401 Baden, Switzerland Tel. +41 56 200 50 20, Fax +41 56 200 50 22 http://www.turbotect.com

Table 3. Anti-freeze agent.

Anti-freeze agent	Manufacturer
GTC Frostex	Skyline Technologies BV, Mient 201, 2564KL, Den Haag, Netherlands Tel. +31 70 3232060, Fax +31 70 3232635

The anti-freeze agent in table 3 may be used only for off-line washing. The anti-freeze agent is a "ready-to-use" mixture of water, cleaning agent (ZOK 27), and anti-freeze. The anti-freeze agent can be used down to -10°C (14°F) and it is compatible with ZOK 27.

If the operator uses an organic solvent as anti-freeze agent like alcohol's (methanol, ethanol or isopropanol), he has to adhere to local regulations concerning operational security. Seller takes no responsibility for inaccurate explosion protection for product incompatibilities.

General information and recommendations

The recommendation of products must not be considered as an acknowledgement of the product ability to efficiently clean the compressor blading, but is a statement of its compliance with requirements regarding purity, operability and environmental effects.

Seller reserves the right to withdraw an approval for any product in the above given lists, in case of quality failure of commercial deliveries (which are considered out-of-specification), deviations from submitted and approved specifications or adverse effect on gas turbine operation.

Seller recommends to use water based products. Only for persistent organic deposits, a solvent-based product may be applied. The recommendations of the supplier for proper concentration of the product and waste treatment shall be followed.