

What you must do

Edwards has always informed the necessity of periodical overhaul through the instruction manual, to guide customers on how to use STP pump correctly to maximise reliability and minimise risk. Although the exact timing is depend on the specific process conditions, below are typical recommendations as a guide for customers.

Process resulting in large amount of process by-product	: every 1 year
No process by-product but corrosive exhaust gas	: every 2 years
Other process	: every 5 years

For safety, rotor blade replacement is recommended for STP pumps used for 5 years or more as part of the overhaul.

Overhaul process conducted by Edwards includes decontamination of process by-product, parts inspection, rotor balancing, safety bearings replacement and pump performance inspection.

Technical information

- Process by-product may have accumulated inside the TMP depending upon the type of process tool and process gases. If periodic overhauls are not conducted then excessive build-up of process by-product inside the TMP may in rare cases lead to a malfunction or the following failure modes:
 - Rotor breakage due to contact of the rotor with the process by-product.
 - Damage of process chamber and valve due to ejected rotor debris.
 - Damage of cooling water lines due to shock from rotor breakage.
- On certain processes, rotor contact with process by-product can lead to chemical reaction between the process by-product and aluminium powder generated from the rotor. This may result in abnormal combustion and sudden pressure increase.
- Damage may be caused not only to the TMP but also the vacuum equipment where the TMP is installed and the surroundings.

If you need help

The intent of this notification is to remind our customers how to ensure optimum performance and maximum safe operating conditions for our STP products. We are here to help deal with any issues raised. If you have any questions whatsoever, please contact:

- *Please enter a named person with specific contact details by each region*
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Yours sincerely,



Paul Neller
VP Engineering Programmes
edwardsvacuum.com



Sara Fry
Head of Safety, Health, Environment for VTBA