

## ■ ULVAC Surface Treatment Technology

Under the consideration  
of Environment

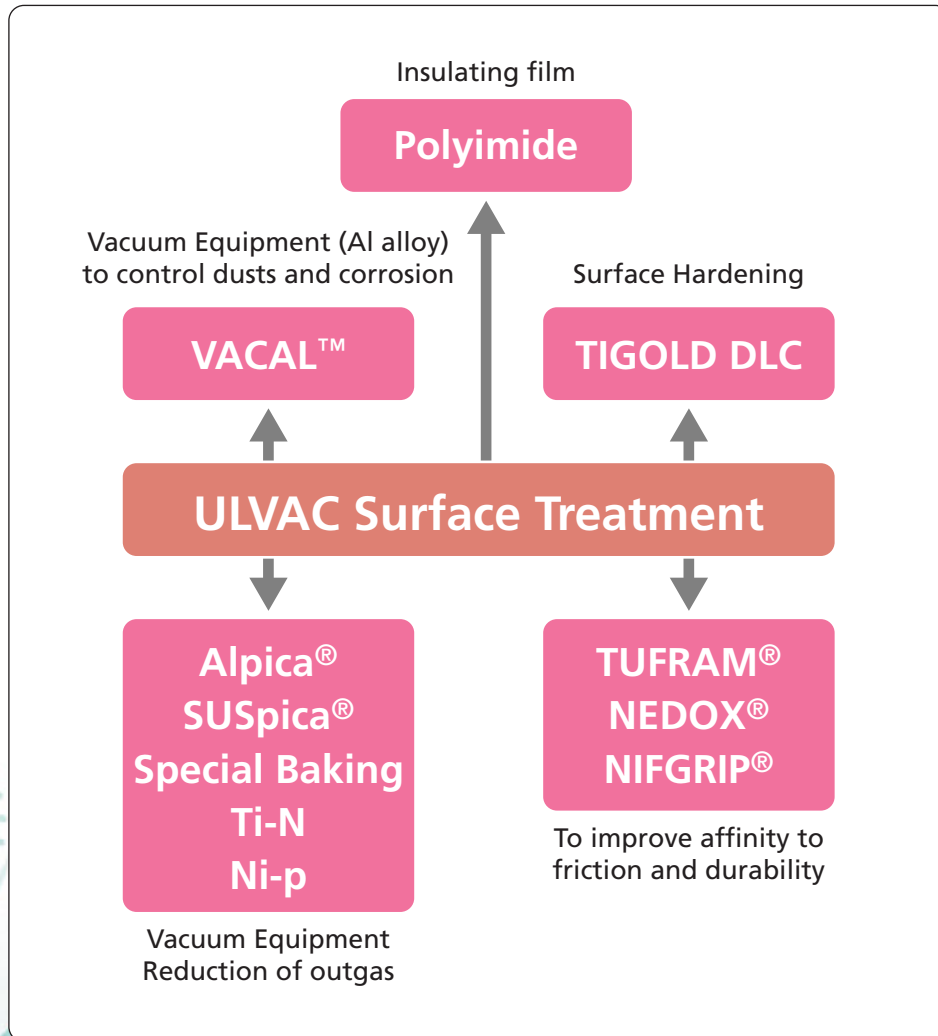
To improve the productivity

ULVAC make a proposal in the field  
of Surface Treatment Technology

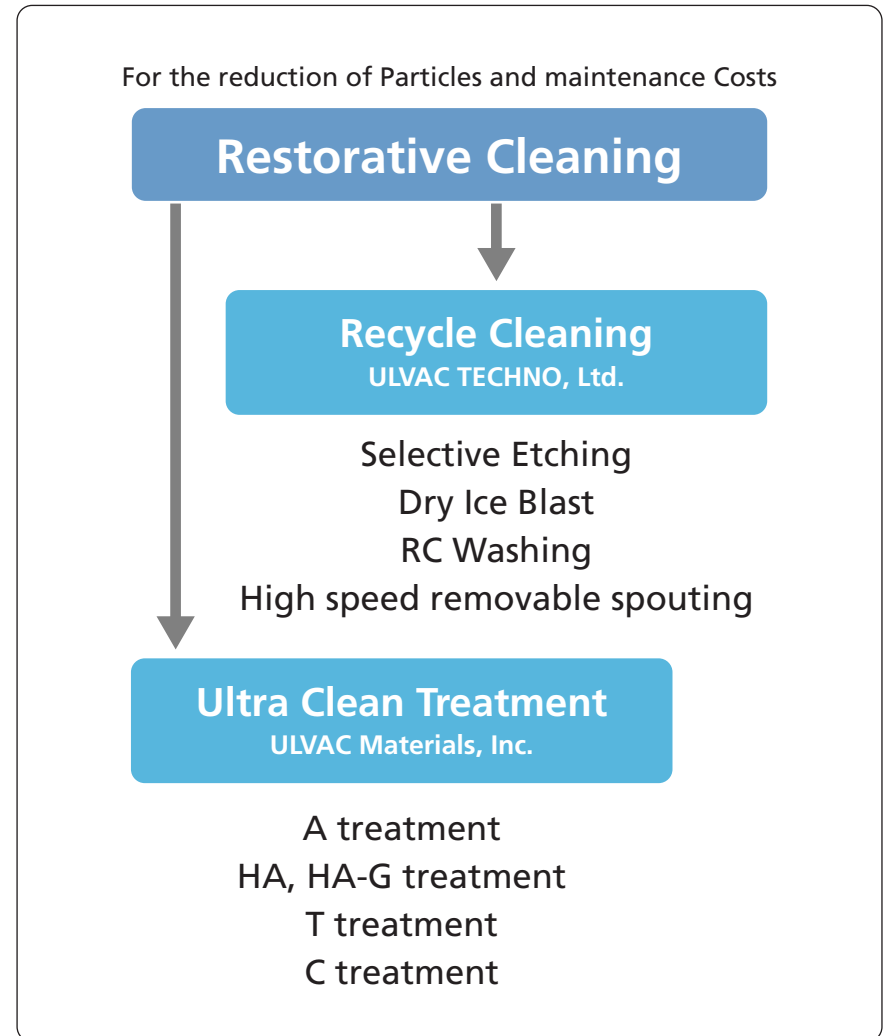
Low outgas  
of Vacuum Equipment

Challenge to low cost,  
high speed, and high quality

## ■ Surface Treatment



## ■ Restorative Cleaning



## Examples for Solutions

Special hard alumite deposition treatment, reduced the surface crack drastically

### VACAL®



By VACAL®, the generation of corrosion and dusts caused by surface crack at the heated areas near the plasma region of CVD and etching equipment are prevented.

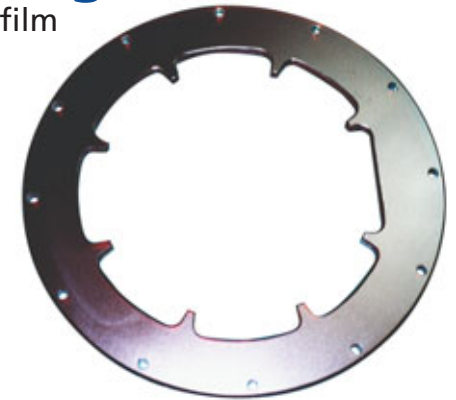
VACAL® is original developed technology by ULVAC TECHNO, Ltd.

### Polyimide Coating

Example : Shock absorbed film

Etcher Parts  
Silica made; Si wafer holder

In order to get shield effects, film is deposited on silica substrate.



Surface Treatment for Low outgas in a vacuum

### SUSpica®

Available materials  
SUS304, SUS304L  
SUS316, SUS316L

Feature: Low outgas



### UC-Treatment

For cost reduction on maintenance, and higher productivity with particle reduction.



- Long time operation without maintenance and high productivity with lower particle.
- Applicable to ultra-high vacuum.