



**AWAS
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**AWAS Branch
Offices Germany**

Dresden
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Tribsees
Berlin-Wildau

**AWAS Branch
Offices International**

Warsaw / Poland
Moscow / Russia
Lviv / Ukraine
Taschkent / Usbekistan
Sibiu / Romania
Zagreb / Croatia
Salenstein / Switzerland
Techiman / Ghana

AWAS product range:

- 
treating
 Water recycling
 Sector-specific processes
 Biological treatment plants
 Chemical/physical treatment
 Adsorption plants
- 
separating
 Separators for light liquids
 Large separator plants
 Simultaneous oil- and particles separation
- 
clarifying
 Biological reactors
 UV-A-bio water processor
 Cavitation-biology
- 
Service
 Analysis
 Project planning
 Installation
 Maintenance
 General inspection



• Regelmäßige Betreuung
• Fachbetrieb gemäß VDI



Surface Technology

Process Water
Recycling Plants



cleaning and recycling of process water from the surface pre-treatment

The German AWAS group has been specializing in industrial waste water treatment plants and wash water recycling systems for over 40 years. For the cleaning and recycling of wash and rinse waters from degreasing processes AWAS developed several solutions which are individually designed for surface cleaning by detergents, solvents, phosphating and combinations thereof. AWAS offers also solutions for single or combined discharge systems with wash and rinse water.

The AWAS solution:

Compact Two-stage Recycling System ADF-STT consists of:

1. Mechanical Pre Cleaning Stage:

- band filter
 - to separate particles from the wash water
 - to drain foam and scum from the flotation plant
- patented light liquid separator as Vortex separator for the separation of free oil and floating impurities
- process water storage tank with system pump for the automatic feed of the following process steps

2. Final Treatment Stage:

- saturator for an optimal enrichment and saturation of the process water with aerial oxygen
- pressure release stage to create micro-bubbles for unique air filtration (flotation)
 - foam and scum are tightly attached to the micro-air bubbles in a process pipe
 - foam and scum are safely floated to the top and drained on the band filter

- reduction of germs by cavitation
- process water storage tank with booster pump to feed the high pressure cleaner
- control panel with PLC and display
- dosing of wash chemicals by proportional dosing pump, adjusted to fresh water make up
- (Optional) Monitoring of the process control via data transmission
- (Optional) chemical addition to crack emulsions (can be operated temporarily)
- (Optional) individual and site tailored solutions

3. High-Pressure Cleaners

- with gas, oil or electrical heating

AWAS Features:

- **process water treatment to 100%**
no connection to the public sewer plant required
- **constant water cleaning**
by separating particles and light liquids reducing germs enriching the water with micro air bubbles
- **compact design**
small footprint
easy set up and installation
- **PLC control with operator panel**
for automatic and manual operation of the plant
- **low maintenance**

Economic Advantages benefit from the specific AWAS design and our know-how:

- **well proven single plant components**
technical state of the art technology
- **safe wash liquids**
- **low energy costs**
- **reduce fresh water cost**
only water loss by evaporation needs to be added
- **less amount of waste**
only concentrated sludge needs to be disposed
- **short pay back time**

