

AMB NEER –APPLICATIONS

WHY AMB IS BEST SOLUTION FOR VARIOUS APPLICATIONS?

We are not just any other water-treatment device—we are giving a solution to scaling, water wastage, chemical dependency, maintenance and efficiency problems created by water. Wherever water is circulated, heated, cooled, processed or reused, there can be scaling, silica-related deposits, corrosion, fouling, water loss, chemical consumption, maintenance, heat-transfer loss, RO membrane fouling, regeneration, ETP load and downtime. AMB is a salt-free, chemical-free technology designed to reduce scaling, chemical dependency, water wastage and operational problems while improving the effectiveness and efficiency of existing water-treatment systems.

“We want to understand why scaling is still occurring after conventional treatment and evaluate whether AMB can address the scaling behaviour of the water and optimize your existing system.”

Simple answer is: YES, in all respects. This is power of AMB Tech. of Japan.

FIVE BIG AMB VALUE DRIVERS

WATER SAVING: Potential reduction in unnecessary water loss/blowdown where application conditions permit.

CHEMICAL REDUCTION: Chemical-free technology; potential reduction in chemical dependency subject to application validation.

SCALING CONTROL: Core opportunity—control scaling and its operational consequences.

MAINTENANCE REDUCTION: Less scaling can mean less cleaning and intervention.

EFFICIENCY: Cleaner heat-transfer surfaces can support improved operational efficiency.

8. CUSTOMER TYPES & APPLICATIONS

CUSTOMER TYPE	MAIN PROBLEM	HOW AMB HELPS?
Industries with Heat Exchangers (Cooling Towers, Boilers, etc.)	Silica & mineral scaling, heat loss, high maintenance	Complete solution to scaling, corrosion, reduce blow down, reduce ETP load, extends equipment life
RO Users	Frequent membrane fouling, high replacement costs	Reduces scale deposits, extends membrane life by significantly.
Ion Exchange Users	Resin fouling, frequent regeneration, high salt usage	Prevents scale buildup, reduces resin regeneration frequency
Commercial Buildings & Residential Users	Hard water scaling, plumbing damage	Reduces scaling, limescale, lowers maintenance costs (almost zero), zero chemical or salt use, Improves efficiency, reduces downtime: feel like spa water.
Hotels, Hospitals, and Malls	Scaling in hot water systems, increased energy use	

9. AMB VS TRADITIONAL TREATMENT

FEATURE	TRADITIONAL CHEMICAL TREATMENT	AMB TREATED WATER	AMB ADVANTAGE
Water Blowdown	Frequent due to rising TDS/chemical concentration	Greatly reduced – no added chemicals	Potential water saving
Chemical Usage	Regular anti-scalant/chemical dosing	Zero chemicals needed	Lower chemical cost & handling
Salt/Brine Discharge	Brine flushes create discharge	No brine discharge	Eco-friendly operation
Maintenance	Descaling, regeneration & downtime	Low-maintenance technology	Less intervention
Regeneration Water	Water required for backwash/flushing	None	Reduced water wastage
Heat Exchange Efficiency	Falls as scale builds	Scale tendency is reduced	Potential efficiency improvement
Compressor Scaling	Scaling can contribute to breakdown/repair	Helps control scale formation	Potential maintenance saving
Environmental Impact	Chemical discharge & water waste	No chemical dosing/discharge	Supports sustainability objectives

HIGH-VALUE APPLICATION AREAS

APPLICATION SECTOR	AMB BENEFITS
Industrial Cooling Towers	Prevents scale & rust, reduces chemical use, improves efficiency
Power Plants	Reduces scaling in boilers & cooling systems, supports equipment life
Sugar Mills	Addresses scale in evaporators & heat exchangers, reduces maintenance
Distilleries & Breweries	Improves water quality, reduces fouling-related issues
Textile & Leather Industry	Helps control scale, supports process efficiency
Edible Oil Mills	Reduces scaling in processing equipment
Milk & Dairy Processing	Supports hygiene and scale control
Ice Cream & Packaged Food	Supports water quality and equipment cleanliness
Agricultural Greenhouses	Potential water & fertilizer optimization
Hospitals & Public Places	Helps prevent pipe scaling and maintenance issues
Concrete Industry	Potential water & chemical-use reduction
Swimming Pools	Helps reduce scale and corrosion-related problems
Livestock Farming	Application-specific water-quality opportunity
Household & Laundry	Helps reduce scale and detergent dependency
Ships, Trains & Aircraft	Scale control and maintenance opportunity
Medical Dialysis Equipment	Supports RO/membrane life and scale control
Packaged Meat & Food Storage	Water-quality and hygiene-related opportunity
Agricultural Irrigation	Potential water absorption/irrigation optimization
Hostel, Hotel, Commercial Building	Reduces scaling and maintenance

12. SECTOR-WISE INDUSTRIAL OPPORTUNITY

INDUSTRY	WATER APPLICATION	COMMON WATER ISSUES	AMB OPPORTUNITY
HVAC	Cooling towers, chilled-water systems	Scaling, biofilm, corrosion	Scale control, reduced blowdown, efficiency
Cold Storage & Refrigeration	Condenser/compressor cooling	Scaling, sludge, overheating	Condenser fouling & scale control
Heat Exchangers	Industrial heat transfer	Hard-water scaling, fouling, biofilm	Improve heat transfer, reduce scaling
Power Plants	Boiler feedwater, steam, cooling	Scaling, corrosion, sludge	Reduce scaling & chemical dependency

Steel & Metal Processing	Cooling, quenching, boiler feed	Scale, high TDS	Scaling control, lower maintenance
Textile & Dyeing	Dyeing, washing, boiler feed	Scaling, chemical load	Scale/water-use optimization
Chemical & Pharmaceutical	Process, steam, cooling	Scaling, contamination	Water-system optimization
Pulp & Paper	Pulp processing, boiler, cooling	Hardness, scaling, organic load	Scale control, water reuse
Sugar & Distilleries	Juice, boiler, ethanol	Scaling, deposits	Scale-control opportunity
Food & Beverage	Cleaning, processing, cooling	Hardness, contamination	Water-quality & scale management
Oil & Petrochemical	Steam, cooling towers	Scaling, corrosion	Heat-exchanger & scale optimization
Cement	Cooling, mixing, dust control	Water scarcity, loss	Water-efficiency opportunity
Automobile & Manufacturing	Paint, cooling, boiler	Hardness, scaling	Process & equipment protection
Mining	Ore washing, cooling	TDS, sludge, scaling	Water reuse & scale management
Construction	Concrete, curing, dust control	Water scarcity	Water-efficiency opportunity
Leather/Tanneries	Cleaning, processing, dyeing	High salts, ETP load	Water recyclability opportunity
Electronics/Semiconductor	Ultra-pure water	Scaling, filtration	Filter/DI performance support
Hospitals/Healthcare	Dialysis, sterilization, boiler	Hardness, contamination	Water-quality & scale control

LESS SCALING + LESS CHEMICAL + LESS WATER WASTE + LESS MAINTENANCE + BETTER EFFICIENCY + LONGER EQUIPMENT LIFE .



SAVE WATER



CREATE WEALTH



HEAL EARTH