

Worldwide Leader In Advanced Cleaning Systems



## **Daimer's All-About Guide to Steam Cleaners**

## Table of Contents

Overview of Steam Cleaners: Page 3  
Products and technology.

Expert Buying Advice: Page 5  
Our plain-English shopping guide, plus the five questions you must ask before buying a steam cleaner.

Product Spotlights: Page 8  
Sanitization and gum removal.

Reseller Programs: Page 10  
Whether you want to resell or brand, Daimer® has a steam cleaner reseller program for you.

# Overview of Steam Cleaners

## The Need

Steam cleaners were invented in Italy more than twenty years ago and have recently become popular with consumers and commercial customers in the U.S. The products use vaporized water to clean and disinfect. This type of cleaning is effective for sanitizing in food and healthcare environments, as well as eliminating allergens, such as dust mites and molds.

Daimer®'s KleenJet® steam cleaners use dry vapor, which is about 5% water, to remove dirt, grime, oil, grease, stubborn buildup and stains. The machines, which require direct contact with the surface, are ideal for spot upholstery/carpet cleaning, hard surface and floor cleaning, and tile and grout cleaning. Customers can also use the products on appliance surfaces, counter tops, bathrooms, vinyl floors, sealed hardwood floors.

Steam cleaners reach pressure levels of up to 150 psi and temperatures of up to 360° F, depending on the model. Other professional-grade products, such as power washers, generate higher levels of pressure but clean using water or wet steam, which is inappropriate for dry steam cleaner applications.

## The Products

The KleenJet® line includes more than 80 products, ranging from residential/light commercial steam cleaners with 4-liter boilers to industrial machines with 14-liters boilers for the toughest applications. The line includes equipment with vacuums, as well as specialty systems for gum-removal machines and anti-bacterial applications.

## Basic Technology

A steam cleaner uses "dry" vapor steam to clean, sanitize/disinfect, and remove most stains and buildup. The machines are ideal for hard surfaces, like sealed floors and tile and grout, and spot cleaning of softer materials, like carpets and upholstery. The devices generally use low pressure levels of up to 150 psi. However, the use of high steam temperatures up to 360° F allows these machines to readily dissolve and loosen a variety of residues to make cleaning quick and effective.

Water in a steam cleaner is heated in a boiler, which converts the liquid to vapor that exits the machine via a nozzle. The steam loosens dirt on hard surfaces and in soft fibers, so it can be wiped or vacuumed. The vapor in a steam cleaner is drier than the air we breathe. Some steam cleaners work with cleaning solutions and detergents. Others include vacuums.

## Steam Cleaners Include the Following Components:

### *Boiler:*

The boiler does what the name implies: boils water and turns it into steam. Boilers are subjected to extreme heat and pressure, so top-grade versions of this component are made of stainless steel. One key feature is a replaceable heating element, which means customers can have a single low-cost heating rod replaced instead of the entire costly boiler. Industrial-grade steam cleaners sport boilers of up to 14 liters. Daimer® offers a lifetime boiler warranty with all KleenJet® models.

### *Refill Tank:*

Some residential and most commercial grade steam cleaners include a non-pressurized refill tank that allows the operator to add water to the machine while it's still running. For systems without a refill tank, the operator must depressurize the system, add water to the boiler, and wait up to 20 minutes for the water to heat.

### *Automatic Refill:*

Some industrial steam cleaners include a direct water feed that connects the machine to a water outlet and refills the boiler as needed. (Automatic refill systems can also be refilled manually if a water line is not available.)

### *Detergent Tanks:*

These tanks hold and dispense cleaning chemicals. Some steam cleaning machines include simple handle controls that allow the operator to control the detergent and steam flow while cleaning. Industrial steam cleaners can have detergent tanks in excess of 20 liters.

### *Steam Vacuum:*

Steam cleaners can also be equipped with vacuums that empty their contents automatically into extraction tanks of up to 35 liters. Steam vacuum cleaners can boost productivity dramatically since they allow users to clean and extract without the use of towels. For example, while cleaning gum a steam vacuum cleaner will extract the sticky residues leaving the surface cleaner, faster. Non-vacuum steam cleaners require the use of a towel to wipe the moisture and residue left behind.

### *Accessories:*

Steam cleaners usually include a collection of brushes in various shapes and sizes with and without towel clips; small detail brushes; squeegees for glass and mirrors; microfiber towels; plungers for sink drains.

## **Daimer®'s Unique Technologies**

For long life and low-maintenance, KleenJet® steam cleaners feature a replaceable heating element technology that lets customers have a low-cost heating rod replaced instead of a costly boiler.

Advanced Thermal Ionic Sanitization™ (ATIS®) is a technology that killed 99.99% of disease-causing bacteria and mold in independent tests conducted by a nationally recognized laboratory. The technology is ideal for healthcare and food service environments.

A variable pressure dial, which operates like a radio knob, lets users of lower-powered machines finely adjust the pressure, depending on the needs of the job. Many steam cleaners under 80 psi are limited to three settings, including a low setting that is often too light for most surfaces and a high setting, which is too high for the machine to maintain for more than a few minutes before pressure and temperature drop dramatically. As a result, users are left performing most jobs with the medium setting.

## **For More Information**

Questions and requests for additional information about Daimer® steam cleaners can be directed to Matthew Baratta by calling (888) 507-2220.

## Expert Buying Advice

### Key Features to Consider when Buying a Steam Cleaner:

#### *Continuous Refill:*

Steam cleaners with this feature have two water chambers -- a pressurized boiler tank and a non-pressurized tank. To refill the machines, water is added to the non-pressurized tank. As water is needed, water is added to the super-heated water in the boiler tank from the non-pressurized tank. This maintains constant steam temperatures while allowing users to refill as needed. This allows for non-stop operation of the machines.

Daimer® vapor steam cleaners take this technology a step further by managing internal boiler tank refills very precisely with a patented electro-mechanical device. As a result, the machines avoid drops in pressure and temperature during use.

#### *Boiler Size:*

For products without continuous refill, the larger the boiler size, the longer the product can operate between refills. Boiler sizes can range from 4 liters residential/light commercial steam cleaners to 14 liters for machines designed for industrial applications.

#### *Replaceable Heating Elements:*

This technology saves money because customers can have a single low-cost heating rod replaced instead of a costly boiler.

#### *Vacuums:*

Some steam cleaners come with wet/dry vacuums that empty their contents automatically into extraction tanks. Wet vacuums save time because users can clean without the use of towels. Non-vacuum steam cleaners require the use of a towel to wipe residue left behind. Daimer's wet/dry vacuums remove allergens and dust, which can simply be poured down a drain or toilet.

#### *Detergent Chambers:*

These tanks hold and dispense cleaning chemicals. Some steam cleaning machines include simple handle controls that allow the operator to control the detergent and steam flow while cleaning. Detergent chambers can range in size from 3 liters for residential/light commercial machines to more than 20 liters for equipment designed for industrial applications.

#### *Extraction Chambers:*

Waste extracted via the vacuum -- detergent, water and dry debris -- is dumped into an extraction chamber for removal at a later time. These chambers can range from 4 liters to 35 liters.

### *Special Sanitizing Features:*

For applications in healthcare and food service environments, consider steam cleaners with enhanced features for eliminating microorganisms.

Advanced Thermal Ionic Sanitization™ (ATIS®) is a technology that killed 99.99% of disease-causing bacteria and mold in independent tests conducted by a nationally recognized laboratory

A water-filtration-based vacuum featuring a high efficiency particulate air (HEPA) filter, which traps allergens and bacteria, is also worth considering. Vacuums draw in air, which gets expelled through the machine. Passing the expelled air through a HEPA filter prevents the spread of harmful particles.

### **Five Questions to Ask before Buying a Steam cleaner**

#### *1) Do I need a steam cleaner?*

Steam cleaners are ideal for hard surfaces, such as sealed floors, tile and bathrooms. The machines also can be used on upholstery and to spot clean many carpets. (Once notable exception: Natural fibers, like wool, which cannot handle high heat.)

Steam cleaners generate temperatures of up to 360° F with pressure levels of up to 150 psi. The machines produce a "dry" vapor steam that contains as little as 5% water. This makes the equipment ideal for sanitizing and killing mold, bacteria, and allergens.

Steam cleaning is often, but not always, a chemical-free process. If you need chemicals look for green products appropriate for the application or surface. The cleaning solutions can be pre-sprayed onto surfaces prior to applying the steam.

For more on the difference between steam cleaners, steam pressure washers and carpet steam cleaners see our article "Carpet Steam Cleaners vs. Steam Cleaners vs. Steam Pressure Washers." *See the difference at <http://www.daimer.com/steam-cleaning-products/>.*

#### *2) Do I need a residential, commercial or industrial machine?*

Residential and light commercial grade steam cleaners offer convenience and ease of use. Some units offer wet and dry vacuums, extraction tanks and continuous refill options for non-stop cleaning.

Commercial grade machines offer higher pressure levels and steam temperatures, plus features such as detergent chambers that allow cleaning solutions to be ejected with steam via simple handle controls. Read more about residential and commercial steam cleaners. *Learn more at <http://www.daimer.com/steam-cleaners/>.*

Industrial grade machines offer the highest pressure levels, the highest steam temperatures, massive boilers and

chambers, and special capabilities, such the ability to connect directly to a water feed similar to pressure washers. *Read more about industrial steam cleaners at <http://www.daimer.com/industrial-steam-cleaners/>.*

### *3) How much pressure do I need?*

Steam cleaners use relatively low pressure levels of up to only 150 psi, as compared to up to or exceeding 5000 psi for pressure washers. Daimer steam cleaners match the pressure levels to the grade of the steam cleaner. As noted above, residential machines have lower pressures, while industrial machines have the highest pressures.

### *4) Do I need vacuum capability?*

Steam cleaners can be equipped with wet/dry vacuums that empty their contents automatically into extraction tanks of up to 35 liters. The wet vacuum capabilities boost productivity because they let users clean without the use of towels. Non-vacuum steam cleaners require the use of a towel to wipe the moisture and residue left behind.

Dry vacuums extract pollen, dust mites and other allergens, and deposit them into water for easy disposal.

### *5) Do I need special sanitizing capabilities?*

For applications in hospitals, nursing homes and other specialized environments where eliminating disease-causing bacteria and mold are critical, consider steam cleaners with enhanced features.

Advanced Thermal Ionic Sanitization ® (ATIS®) is a technology that killed 99.99% of disease-causing bacteria and mold in independent laboratory tests.

A water-filtration-based vacuum featuring a high efficiency particulate air (HEPA) filter, which traps allergens and microorganisms, is also worth considering. Vacuums draw in air, which is later expelled through the machine. Ideally, the expelled air should pass through a HEPA filter to prevent the spread of harmful particles.

*Read more about anti-bacterial steam cleaners at <http://www.daimer.com/steam-cleaners-certified-anti-bacterial/>.*



## Product Spotlights

### Sanitizing: ATIS

Advanced Thermal Ionic Sanitization™ (ATIS®) is an ISO Certified, Patent Pending, EPA Registered, anti-bacterial/anti-microbial technology proven by a nationally accredited testing laboratory to kill 99.99% of disease-causing bacteria and mold. Steam cleaners employing the ATIS® killed staph infections, E. coli, salmonella, mold, and more.

KleenJet steam cleaners with ATIS® have pressure levels starting at up to 75 psi and temperatures starting at up to 310°F. The combination allows these machines to sanitize, disinfect, deodorize, and kill allergens such as dust mites, mold and mildew. ATIS® steam cleaners are ideal for schools, hospitals, medical centers, nursing homes, and residential properties owned by sufferers of allergies and asthma.

Currently, Daimer sells more than 70 KleenJets models with ATIS® technology in configurations offering up to 150 psi and in a variety of voltages for uses worldwide.

The KleenJet® line includes the Mega 1000CVP-ATIS®, a continuous refill, steam vacuum cleaner with a detergent chamber and a feature that allows for non-stop operation by adding water while the machine is powered and working. The machine provides steam pressure up to 89 psi and steam temperatures up to 320°F. *These machines can be viewed at <http://www.daimer.com/steam-cleaners-certified-anti-bacterial/>.*

### Chewing Gum Removal

Many cleaning professionals generate extra income using Daimer Industries' steam cleaners with chewing gum removal to eliminate gum in outdoor surfaces, like playgrounds and sidewalks. The products can remove up to 500 pieces of gum per hour.

This is on top of the revenue -- more than \$1 per square foot -- cleaning professionals can earn year-round using these machines for tile and grout cleaning. The machines are also effective indoors for chewing gum removal, as well as hard surface cleaning and disinfecting walls, floors and even some soft surfaces like upholstery.

Daimer offers chewing gum removal features for six of its commercial-grade steam cleaners: the CV and CVP models of the KleenJet® Mega 1000, Supreme 3000, and Ultra 5000. Customers can buy chewing gum removal bundled with the machines in CVG and CVGP models or as add-on kits for their existing Mega 1000, Supreme 3000, or Ultra 5000 CV or CVP equipment. All six of these steam cleaners include vacuums.

The pressure levels and steam temperatures range from as much as 89 psi and 320°F, respectively, for the KleenJet® 1000 to 120 psi and 329°F for the KleenJet® 5000.

Like all steam cleaners, these products are ideal for tile and grout cleaning, and surfaces such as vinyl/VCT floors and sealed hardwood. These steam cleaners feature special chewing gum removal components, including a steam vac squeegee with a stainless steel brush and a bottle of specially-formulated gum dissolving chemical concentrate. The chewing gum removal kits are effective for a variety of hard surface cleaning including: concrete, cement, sidewalks, parking lots, pavers, walkways, and some indoor floors.

Though steam pressure washers can also perform chewing gum removal, the machines expel large amounts of water and are not practical for many applications, particularly indoors.

All three machines offer commercial grade components and features, such as detergent tanks, extraction chambers and continuous refill tanks for non-stop cleaning. The CVGP models include Daimer's unique sanitizing technology called ATIS® Anti-Bacterial Steam Cleaner Technology, which kills disease-cause bacteria and mold. The Mega 1000 CVGP and Ultra 5000 CVGP include HEPA filtration to remove allergens.

*These gum removal steam cleaners can be viewed at <http://www.daimer.com/gum-removal-equipment/>.*

## Reseller Programs

Daimer® offers resellers its entire line of more than KleenJet® steam cleaners. KleenJet® steam cleaners are available to resellers in more than 250 countries, including: Argentina, Aruba, The Bahamas, Bolivia, Brazil, Colombia, Ecuador, Hong Kong, Mexico, New Zealand, Poland, Taiwan, Thailand, Ukraine, and Vietnam.

To view a list of countries where KleenJet® steam cleaners are available for resale, please visit <http://www.daimer.com/steam-cleaners-countries/>.

Daimer® works with resellers by:

1. Handling labeling of private-labeled equipment.
2. Providing specification sheets.
3. Assisting with the choice and configurations of products for special markets, such as those with 230V or 440V, 50 or 60 Hz power requirements.

Requirements:

1. Minimum orders are necessary for involvement in the Daimer® reseller programs.
2. Freight cost will be added to invoices.

Contact Daimer® at (888) 507-2220 to speak with a Product Specialist or email us at [www.daimer.com/reseller-programs](http://www.daimer.com/reseller-programs) and describe your needs.