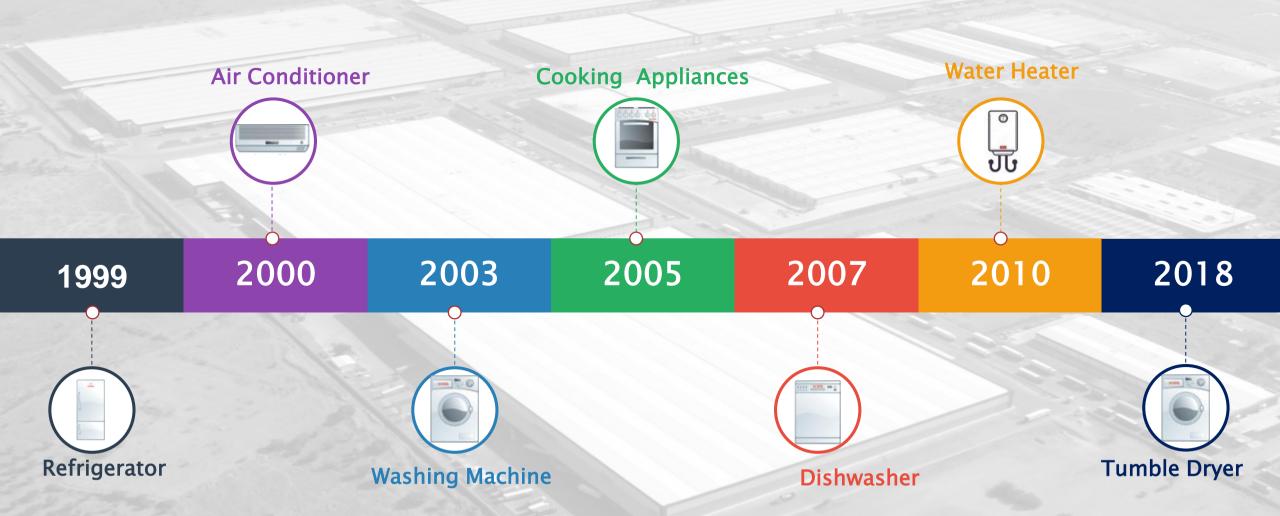


OUR PRODUCTS







PRODUCTION CAPACITY





Daily 11.400





Daily 15.000

Daily 2.850

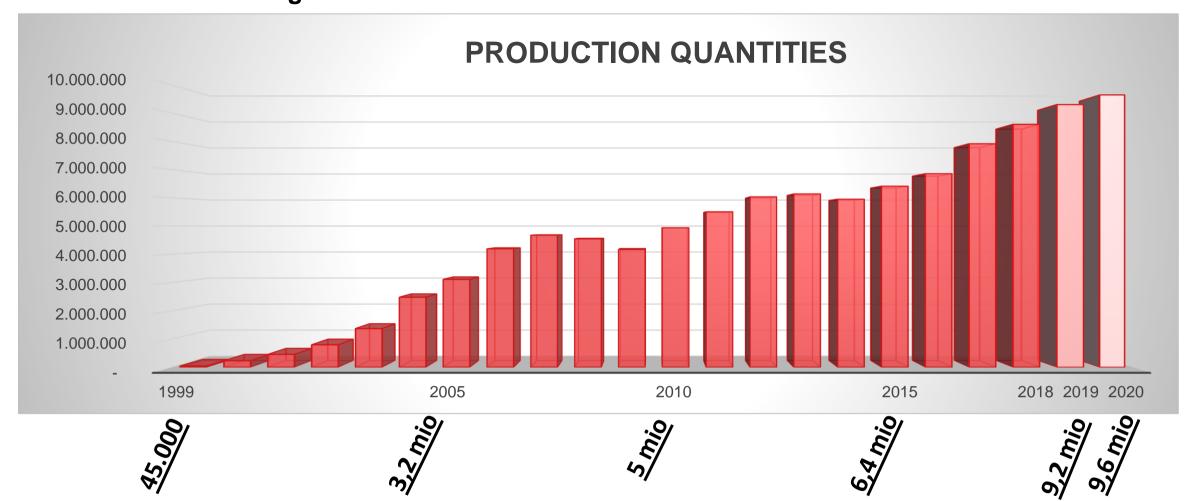
Daily 8.000

Daily 6.000

PRODUCTION QUANTITIES



From 2010 to 2020 % 92 growth



Exporting to 157 countries Appliance Total Production Speed Customers 500 + 1,88s/Pc **56.000** models in **550** MDA platforms

SALES TURNOVER







MAJOR CLIENTS



SAMSUNG

TOSHIBA

Leading Innovation >>>



SHARP

Panasonic

HITACHI Inspire the Next























AMICA

vestfrost



B/S/H/











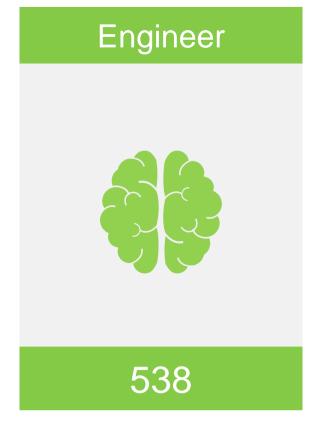


EMPLOYEES











RESEARCH & DEVELOPMENT







90 MSc & higher



31 Average Age



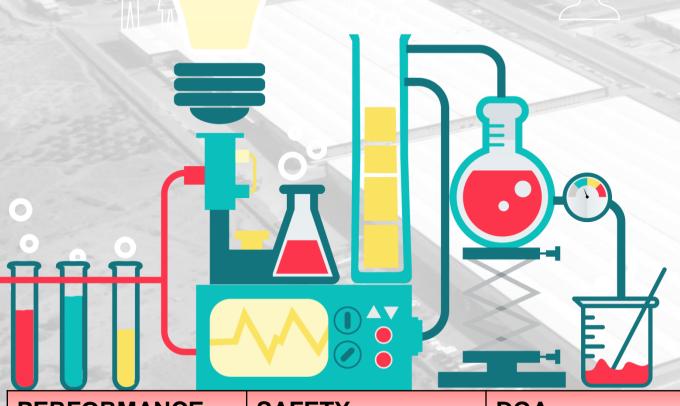


%2,2 R&D Share of Turnover

RESEARCH & DEVELOPMENT













Akreditasyon No





DEKRA Akademie GmbH



PERFORMANCE

SAFETY

DQA

RELIABILITY

CALIBRATION

How We Design?











Tests & Product Validation

Prototype Studies

Analyses

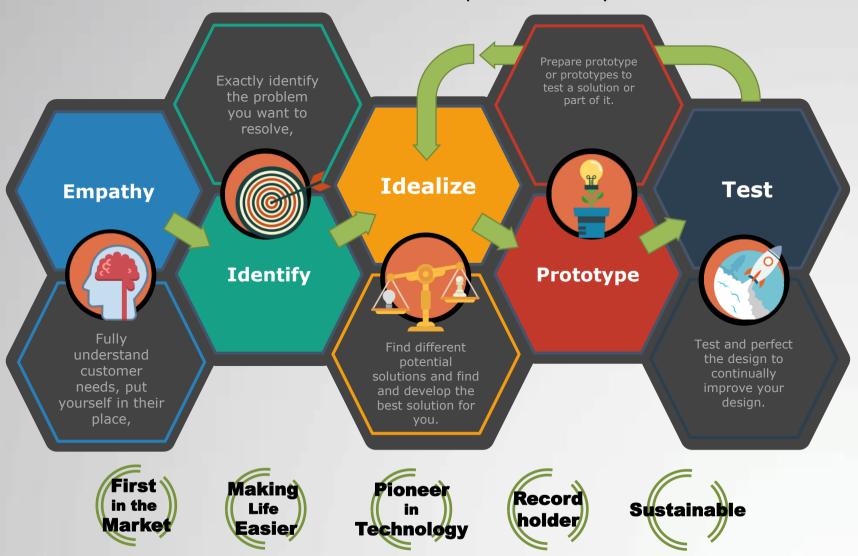
Structural Design

Conceptual Design



Innovation Journey

New Product Development Journey



Innovation Ecosystem

Innovation Stakeholders

Internal Stakeholders

Central R&D Team

Cross-functional, expert in different disciplines, mastering all product groups for company-wide knowledge sharing and R & D partnership, Central R&D Group.

In-house Open Innovation

Instead of relying on external innovation resources, providing a platform for innovation and ideas for internal employees and rewarding.

Product Focused R&D Teams

Full-time employees who work to develop innovation strategies, manage and activate innovation projects of the product group in which they work, and who are experts in their field and product group.

Internal Innovation Resources

Innovation resources including Vestel Home Appliances quality, production, planning, purchasing, and product management departments as well as Vestel Ticaret A.Ş. internal and external sales departments and marketing department.

Product Management & Sales and Marketting Teams

Products mangemnet and sales teams gathers innovation ideas from our customers and determines and transmits the markets needs to innovation departments



External Stakeholders

University Collaborations

To keep research resources open with university projects initiated by university cooperation projects, continuous cooperation with University Technology Transfer Offices.



R&D Observers

Whose job is to understand what is happening in a market, to connect with local initiatives, to follow the regional R&D trends, to follow the trends in foreign Technology and Market with R&D Offices.



Market and Technology Reports

To follow the pulse of the technology and the market with Mega, Macro and micro trend reports, market reports received from research companies in certain periods.



Open Innovation

R&D and Innovation are provided from external sources through support and angel investments for new venture companies.



R&D Partnerships

Establishing R&D partnerships with sub-industry companies, R&D offices startup companies on a specific project basis, or, in certain cases, acquiring and joining small companies specialized in a particular subject or region.



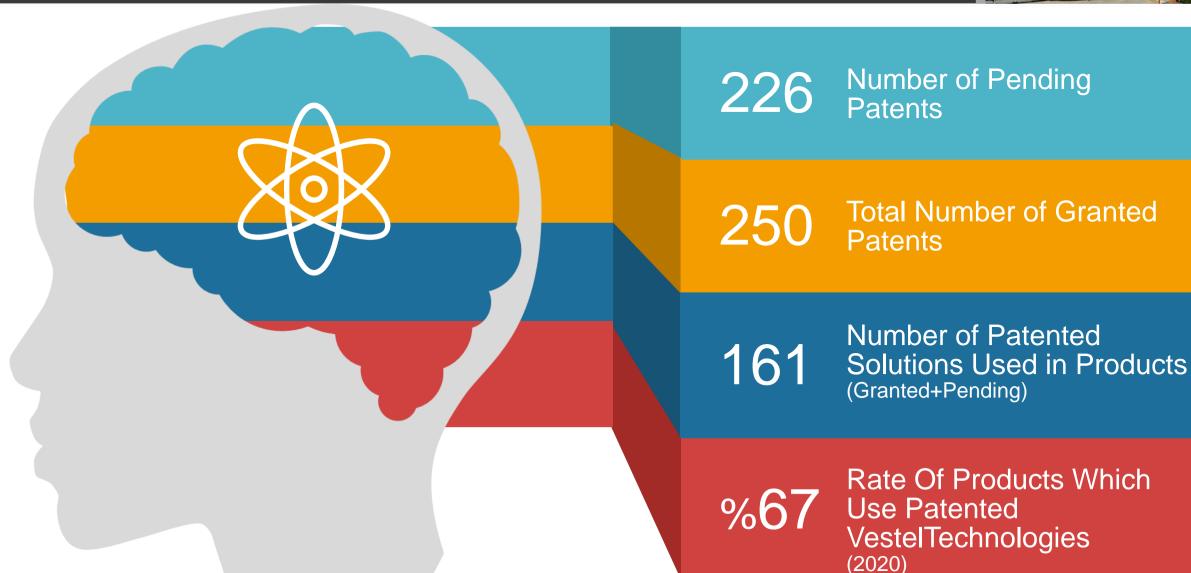




RESEARCH & DEVELOPEMENT

15/44
VVESTEL

Intellectual Property























VESTEL BEYAZ EŞYA

Vestel White Goods won 77 awards in the world's most prestigious design and innovation competitions in last two year.









Vacum Bag Refrigerator



T40 Washing Machine



Vestel Brillart Dishwasher



Nova Air Conditioning





Least Energy Consumption-World Records











B Energy Class 60 cm, 14 PS





A++ 65 l. Built-In



A+++ -%35
60 cm Prodrive BF
Refrigerator

Least Water Consumption-World Records







35 Liter/Cycle 8kg Pyrojet





5,4 Liter/Cycle 60 cm 14 PS

Most Silent-World Records





Fastest-World Records



Twinjet®
Washing Machine



12 min Washing 8kg Pyrojet JetWash® Dishwasher



14 min Washing 60 cm 14 PS

PowerDry®
Drying & Washing Machine



29 min Washing + Drying 9/6 kg Washer&Dryer Condenser type Tumble Dryer



12 min Drying 7/8/9 kg Tumble Dryer

IOT – Connected Appliances



WIFI – FRENCH DOOR REFRIGERATOR



WI-FI SMART DISHWASHER



WI-FI INVERTER SERIES AIR CONDITIONER WITH R32 GAS





WI-FI SMART
WASHING MACHINE









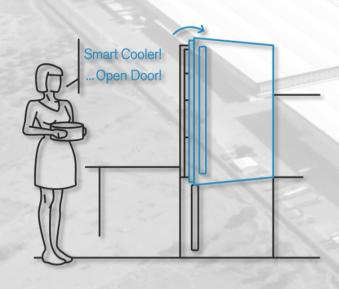
Refrigerator-Innovation



Voice controlled Smart Refrigerator

You can open the refrigerator door with Voice Control technology. Just Say "Smart Cooler... Open the Door"





Easy Access to Everyone



Refrigerator - Innovation



PureBeam Technology

Purebeam technology contains UV LED and air filter coated with TiO2 photocatalyst by producing hydroxyl radicals. These radicals breaks airborne microorganisms down into harmless molecules, eliminate odor, bad smell by air circulation.

Purebeam is highly-effective, true GREEN Technology: Chemical-free, Toxic residue-free, 100% Green

Purebeam Technology is a brand new, innovative air purification technology with VOC removal capability far superior to existing, alternative technologies

Advanced purification technology covering virtually all pollutants/odor

Purebeam technology without short-lasting filter or toxic chemicals

Highly effective in removal of unpleasant odors.



Refrigerator - Innovation



PureBeam Plus Technology

- Purebeam Plus technology with UV-C LED will be enabled to act on microorganisms in a shorter time.
- Purebeam Plus Technology removes 99.999% of bacteria and fungicides on the filter surface at the end of 30 minutes; 99.99% of viruses on the filter surface after 40 minutes.



Refrigerator - Innovation



MAXIFRESH PLUS Technology



MaxiFresh Plus Zone offers optimum storage conditions for fruits and vegetables. A fiber membrane is used to maintain humidity until 90%, the ideal relative humidity for the majority of fruits and vegetables. This ensures the shelf life of fresh foods is extended.













Refrigerator - Innovation



Vacuum BAG Technology KEEP FRESH UPTO THE LAST PART:







Generally foods like sausage, cheese and steak are not fully consumed in a single use and their life begin to go down once their package is opened. Bacteria and harmful microrganisms grow fast in the aerobic environment which is inappropriate for foods.

However, vacuum method could prevent oxygen to touch the food providing longer freshness.

You can easily vacuum your residue foods and so keep them fresh and healthy. This feature is easy to use and also easily accessible.

Refrigerator - Innovation







Fermentstore Technology

Turn your refrigerator to food factory

A whole new level for home-made foods. 7 different (yogurt, kefir, bread dough, wine, beer, vinegar, pickle) food fermentation function.

All in one technology

After the fermentation, your food will be chilled and stored at ust right conditions.

Improve your skills

Try different functions and different time sets. Optimize the conditions according to your needs.

Multi-functional

FermentStore zone also has cooling and freezing functions.

Healty-eaters best friend

Fermented food rich in probiotics which help restore balance in the gut and aid digestion and immune health.

Refrigerator - Innovation



Vakuum Jar Technology





Thanks to the jar vacuuming technology, the shelf life of the foods is extended by removing the air in the jar.

Refrigerator - Innovation



Alkaline Water Dispenser Technology





Benefits of Alkaline Water

- Antioxidant
- High Blood Pressure
- Ulcer Gastritis
- Bowel Irregularities
- > Allergy Eczema
- > Pre Eclamptic Toxemia
- Heart Diseases
- Digestive Problems
- Diabetes
- > Obesity
- Neurology
- Alzheimer's Disease
- Calcification of Knee
- > Asthma
- Chronic Fatigue

Vestel refrigerator alkaline water dispenser may prepare different level of alkaline water with anti-oxidation properties for you. Hydrogen-Rich alkaline water neutralizes free radicals in the body and protects cells from oxidation, contributing to the regeneration of damaged cells.

Refrigerator - Innovation



ConvertzoneTechnology



By this technology, freezer unit can be turned off or used as a cooler. So, when freezer unit is not needed, cooler units volume can be increased or energy is saved when it is turned off.

Refrigerator - Innovation



Metal Cooling Technology

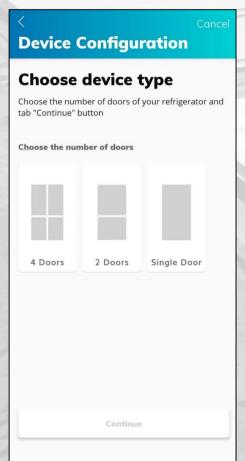
Metal cooling increases heat conduction and provides a more effective coolin. At the same time, it makes the temperature distribution between the shelves more uniform and helps the food to be stored with a homogeneous temperature distribution.



Refrigerator - Innovation



SmartTechnology





- Remote Access
- Control by Android and IOS App
- Big Data Collection
- Monitoring









Dishwasher -Innovation



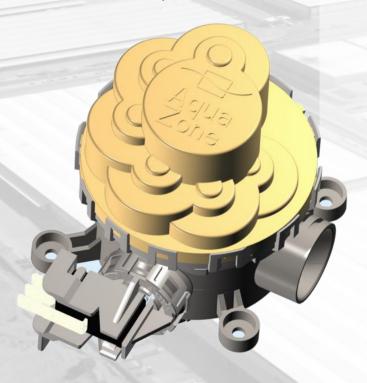
One Touch PRO DishWasher can check all parameters and performs best suitable washing cycle automatically only with one touch control.

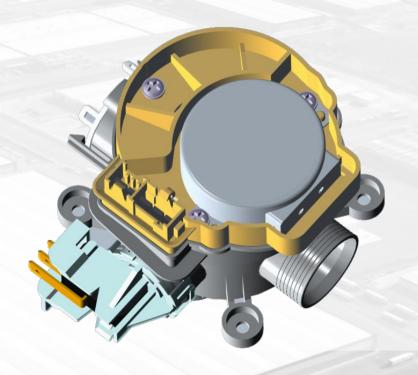


Dishwasher - Innovation



AQUA ZONE TECHNOLOGY





Aquazone enables spray arms to work in sequence without any electrical components just with the help of water. With this new technology, even the entry level dishwashers can consume %25 less water. Aquazone is one of the our biggest inventions for a greener future.

Water Consumption improvement from 12 to 9 lt for Low Segment Products

Dishwasher - Innovation

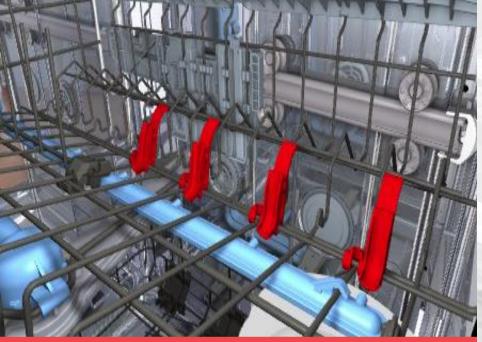


TRIPLE & DIRECT WASH

EFFICIENCY OF TRIPLE WASH & DIRECT WASH TECHNOLOGIES



Triple wash technology offers more effective washing performance for hardly soiled pans and cookers with extra sprays (Extra sprays are positioning under the lower spray arm.)



Direct wash technology provides washing directly with extra items and ensures better cleaning performance for glasses and baby bottles

Cooking Appliances - Innovation





• When oven door is opened during cooking, it creates an air stream between control panel and oven bottom panel. Hence, it prevents the hot and wet air coming out of the oven to reach the end user.



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Cooking Appliances -Innovation





- Cooking evenly at 5 levels simultaneously with the new hot air system.
- Up to 4 layers of cooking, no odor mixture for different kind of dishes (such as fish, cake, pizza, desert) cooked at the same time,
- Cooking level selection won't be a problem any more.
- First at the market for household cooking appliances.



Cooking Appliances-Smart Appliances







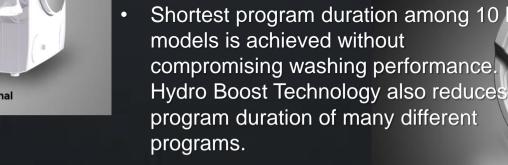
Innit Cooperation

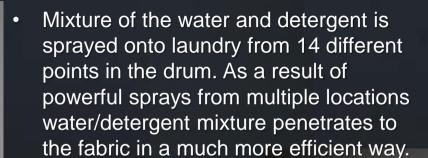
Washing Machines-Innovation - World Record



Hydro Boost Technology











Washing Machines – Smart Appliances



INTELLI-CARE





ONE TOUCH, PERFECT WASH!

Machine can detects Automatically

- Laundry weight
 - Textile type
 - Stain level

According to the detected data machine can sets itself

- Water amount
- Temperature
- Spin speed
- Detergent and softener amount

-

Washing Machines— Smart Appliances



Low detergent / fabric softener detection





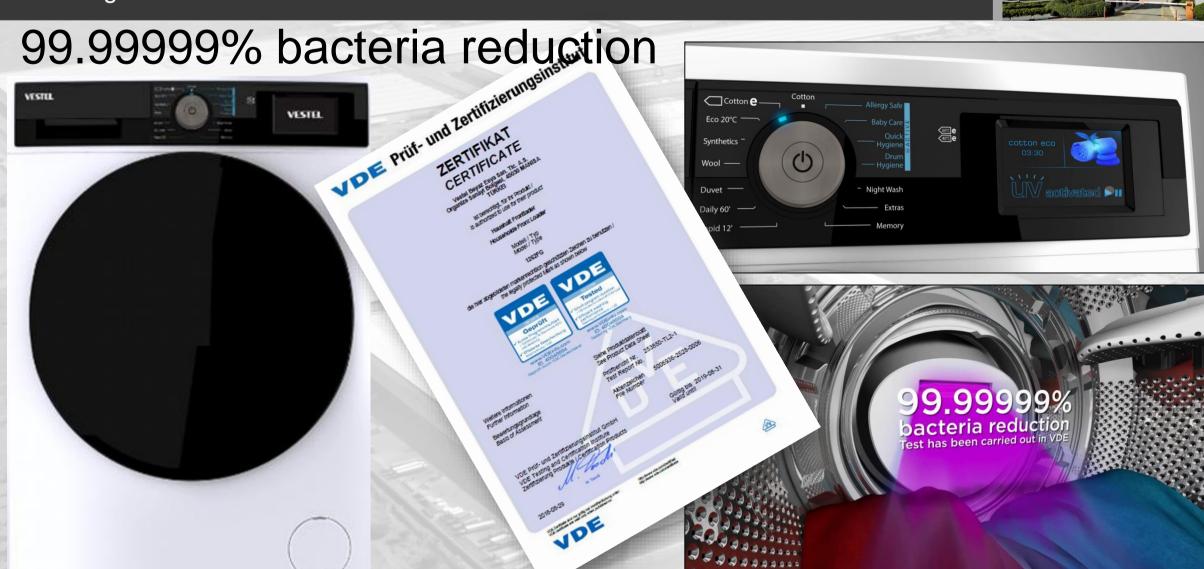
 Vestel Amazon Digital Dash machine has not only auto do sing system, also machine its elf can order detergent and s oftener from Amazon automat Order Delivery ically before it's finish.



Automatic Order

Washing Machines- Innovation





Tumble Dryers – Eco Friendly



Heat Pump Tumble Dryer With The Most Eco Friendly Refrigerant!



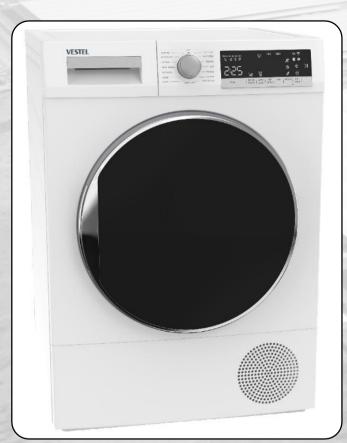


Tumble Dryers – Eco Friendly

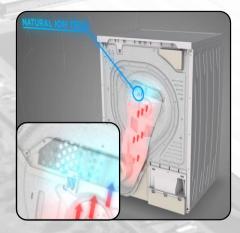




Natural Ion Tech Tumble Dryers







Natural Ion Tech Tumble Dryers has ion & ozone technology integrated into the drying system.

The negative ions created by the Natural IonTechnology interact with the particles in the air and neutralize them.

Along with the optimum air temperature maintained during the drying process, by sending the negatively charged ions to the drying air, an environment free from most allergens and pollen residues is provided.

Hygienic Drying
Highly effective in removal of unpleasant odors

Tumble Dryers – Best Product according to the Germany's leading test magazines







VESTEL Tumble Dryer "Best Product" in Germany

SHARP branded Tumble Dryer
manufactured by **VESTEL**,
was evaluated by "Haus & Garten Test" and "testbereichte.de",
Germany's leading test magazines,
and ranked as "BEST PRODUCT" among 763 models.

Low energy consumption with A+++ energy class, extensive program selection, sensor-controlled drying and LED-lightning drum features are shown as strengths.

Air Conditioners - Innovation



UV-C Inverter AC



Product Range:

VENTUM panel.

3rd Party Approval:

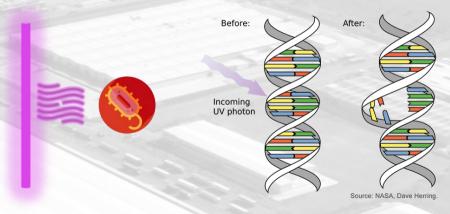
Guangzhou Institute of Microbiology

Claims to be highlighted for International Markets:

Inactivates airborne microorganisms such as bacteria and viruses can be eleminated by UV-C lighting technology.

Virus removal rate: %99,99 Bacteria removal rate: %99,99

How it Works:



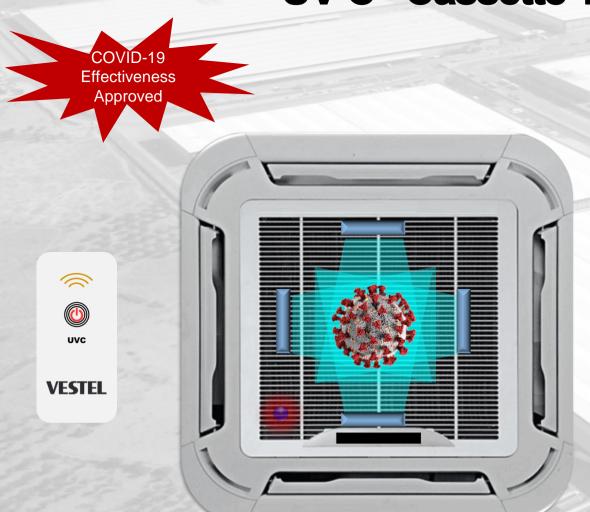
UV light provides effective inactivation of microorganisms such as bacteria, viruses, molds and pathogens without the use of chemicals. UV light works by causing permanent damage to the DNA or RNA found in all living species. Once DNA becomes damaged, or dimerized, the organism, such as Cryptosporidium, is unable to carry out the routine cell functions of the respiration, the assimilation of food and replication. Once the cell is rendered non-viable, the organism cannot cause infection.

Lifetime: 30.000 hours

Air Conditioners - Innovation



UV-C Cassette Type Disinfection Kit



- ➤ Our Cassette Type patented UV Disinfection System has been tested in Ministry of Health approved Laboratories and proven to be able to kill Polio Virus Type-1, Murine Norovirus, Sars CoV-2 (Covid-19) viruses and Staphylococcus Aureus bacteria at a rate of 99.99%.
- Approved by the Ministry of Health (Biocidal Product without Active Substance).
- ➤ The system is equipped with an automatic circuit breaker to ensure user safety by preventing UV exposure during cleaning and maintenance.
- Our UV Disinfection System does not cause ozone release.
- Life meter and fault indicator.
- ➤ It has an easy installation structure (10 minutes) that does not affect negatively the aesthetics and air flow of the air conditioner, does not create pressure loss.

Air Conditioners - Innovation



UV-C Duct Type Disinfection Kit







- ➤ Our Duct type patented UV Disinfection System has been tested in Ministry of Health approved Laboratories and proven to be able to kill Polio Virus Type-1, Murine Norovirus, Sars CoV-2 (Covid-19) viruses a nd Staphylococcus Aureus bacteria at a rate of 99.99%.
- Approved by the Ministry of Health (Biocidal Product without Active Substance).
- ➤ The system is equipped with an automatic circuit breaker to ensure user safety by preventing UV exposure during cleaning and maintenance.
- Our UV Disinfection System does not cause ozone release.
- Life meter and fault indicator
- ➤ It has an easy installation structure (10 minutes) that does not affect negatively the aesthetics and air flow of the air conditioner, does not create pressure loss.

Air Conditioners - Innovation



V-FRESH HYGIENE AC





- > Room air quality index tracking with RGB air quality indicator
- Daylight Pro Technology that can kill 99.99% of Covid-19 virus
- ➤ Catechin filter made from plant extracts in green tea leaves, which purifies the air from particles and increases indoor air quality.
- > Expose the air to cigarette smoke, pet odors, etc. deodorizing filter that purifies from odors.

Air Conditioners - Innovation



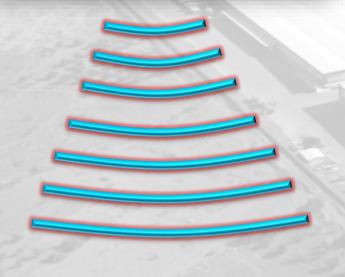
Easy Bill Smart Air Conditioner







- > Easy Bill feature aims to prevent users from unexpected excessive electricity consumption
- > The user defines an upper limit for electricity consumption.
- > When consumption reache s to the 80% of upper limit, mobile app starts to notify user.
- > Notifications will be repeat ed in every minute until AC is switched to ECO mode.











Water Heater



Low Cost Bottom Controlled Square&Cylindrical Water Heater Platforms







Applications









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Applications





7 Projects

STACKING & FEEDING





>115 Projects

CAMERA & SCREWING

PACKAGING & LABELING

7 AXIS APPLICATIONS

LASER TECHNOLOGY

Applications



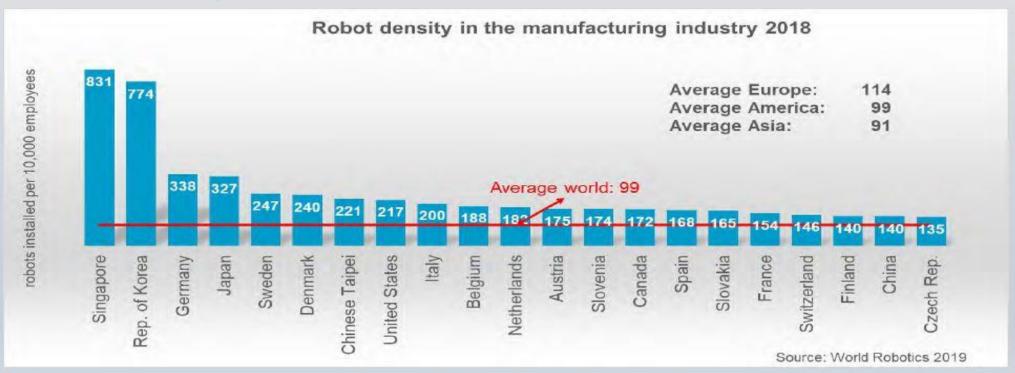
Highest Robot Density in Singapore - Iowest Average in Asia

IFR
International
Federation of
Robotics

~ 30 1111



VESTEL ~160 HOME APPLIANCES



Steven Wyatt Page 13 | 18 Sept. 2019

Applications



AG V



- Inductive Orientation
- Metal Strip Tracking
- Single Work



- Laser Orientation
- Virtual Routing
- Priority Trafic Control (Multi Tasking)
- Single Control Softwar for all 7 Factories



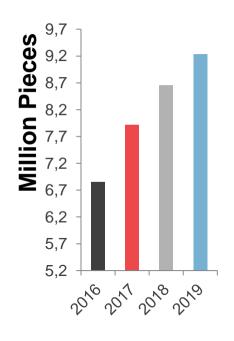
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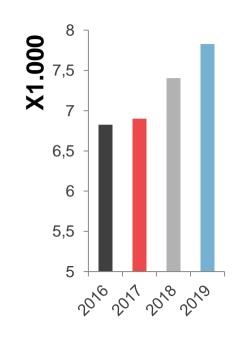
5 Pcs

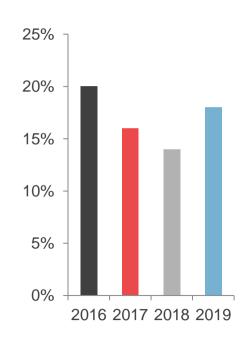
> 75 Pcs & Projects



Vestel Home Appliances Improvement











Total Employee

+ %15 Increase



Total Overtime

%10 Decrease

