



DAIKIN



DAIKIN APPLIED POSITIONED FOR THE FUTURE OF HVAC

Matthew J. Ledford, Senior Manager – EHS
December 6, 2017



GLOBAL PLAYER, INVESTING FOR A FUTURE AS #1

Sales
\$17+ BILLION

Revenue shift to U.S.
NOW 25%

**Solutions
Provider**

67,000+
Employees

Sold in over
150 COUNTRIES

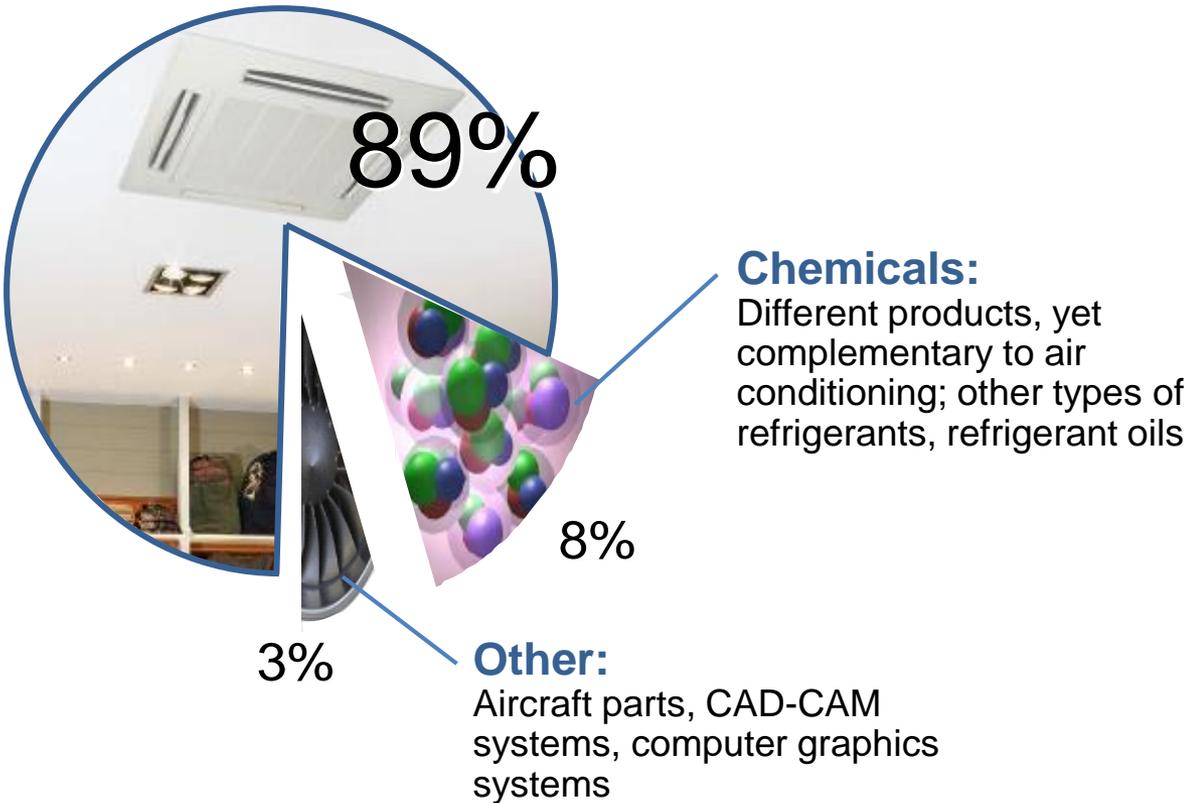
Technology
Investment
\$1 BILLION+

90
Production Bases
Worldwide

Founded In
1924

1000+
Locations Worldwide

ONLY COMPANY TO
MANUFACTURE A/C,
REFRIGERANTS, AND
COMPRESSORS



- › \$5B Net Sales
- › ~ 10,000 Employees
- › ~10 Production Sites



PROVEN PORTFOLIO, POSITIONED FOR THE FUTURE

Applied HVAC Chiller and Airside Systems

Magnetic bearing centrifugal chiller	Water-cooled centrifugal chiller	Air-cooled (screw & scroll) chiller	Water-cooled screw chiller	VAV
				
Custom, semi-custom & commercial air handlers	Indoor/Outdoor	Fan coils	Unit ventilators	
				

Water Source Heat Pumps



Modular Central Plants



Packaged Rooftop Systems

Commercial*	Light Commercial
	
	
	

*Available with Inverter compressor, integral energy recovery, and in 100% outdoor air configuration.

Aftermarket

- Daikin factory service & repair
- Maintenance agreements
- Turnkey solutions
- Rental chillers
- Parts

Intelligent Solutions® Intelligent Systems™ and Intelligent Equipment®



100% CONFIGURABLE, 22+ IPLV AIR-COOLED CHILLER



1st

TO EXCEED 22 IPLV
TO DRIVE EFFICIENCY REGARDLESS OF
OPERATING CONDITIONS

PATENTED VARIABLE VOLUME RATIO
COMPRESSOR TECHNOLOGY TO MATCH
PERFORMANCE IN REAL-TIME TO ANY
CONDITION, ANY TIME OF DAY

PROVEN ENERGY EFFICIENCY LEADERSHIP: MAGNITUDE[®] MAGNETIC BEARING CHILLER



40% MORE EFFICIENT
THAN TRADITIONAL
CENTRIFUGAL CHILLERS

PROVEN PERFORMER
WITH WORLD'S LARGEST
INSTALLED BASE

STAUNTON FACILITY

- Building erected in 1954
- Commercial Chiller Manufacturing Facility
 - Centrifugal, Screw and Scroll Chillers
 - 10 Tons – 2,700 Tons
 - Magnitude® Magnetic Bearing Technology
- Skilled Manufacturing Employees
 - Approximately 600 Employees
 - CNC experience
 - Brazing
 - Blueprint-focused assembly
- AHRI Certified Test Facility
- Campus ~ 83 Acres
- 750,000 sq. ft. of manufacturing space
- Customer base – Asia/Pacific, Middle East, North America, South America.



SCOPE OF ISO14001

- › Our management system only incorporates 3 manufacturing sites at DAA
 - Staunton, Va
 - Faribault, MN
 - Owatonna, MN
- › We intend to expand the certification to include Phoenix and San Luis Potosi by year end 2019
- › DAA has a Corporate EMS Structure.



Certificate of Registration

ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2004

This is to certify that: Daikin Applied Americas, Inc.
300 24th Street NW
Faribault
Minnesota
55021
USA

Holds Certificate No: **EMS 551516**
and operates an Environmental Management System which complies with the requirements of ISO 14001:2004 for the following scope:

The management of environmental risks associated with the support of the manufacturing of commercial, industrial and institutional Heating, Ventilating, Air Conditioning and Refrigeration Units.

For and on behalf of BSI: Reg Blake, VP Regulatory Affairs, BSI Group America Inc.

Original Registration Date: 03/03/2010 Effective Date: 03/03/2016
Latest Revision Date: 02/26/2016 Expiry Date: 09/14/2018



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...making excellence a habit.™

Certificate No: **EMS 551516**

Location	Registered Activities
Daikin Applied Americas, Inc. 300 24th Street NW Faribault Minnesota 55021 USA	The management of environmental risks associated with the support and manufacturing of commercial, industrial and institutional Heating, Ventilating, Air Conditioning and Refrigeration Units.
Daikin Applied Americas, Inc. 1001 21st Avenue NW Owatonna Minnesota 55060 USA	The management of environmental risks associated with the support and assembly of the air handling units for commercial, industrial and institutional Heating, Ventilating, Air Conditioning and Refrigeration units.
Daikin Applied Americas, Inc. 207 Laurel Hill Road Verona Virginia 24482 USA	The management of environmental risks associated with the support of the assembly of commercial, industrial and institutional Heating, Ventilating, Air Conditioning and Refrigeration Units that includes painting processes.



Environmental, Health and Safety Policy

Daikin is committed to protecting the health and safety of our employees, customers, and the communities in which we do business. We are environmentally responsible in all aspects of our business operations. Conducting business in a way that provides for the health and safety of our employees and the conservation of our natural resources is a core value.

Daikin is committed to continuous improvement of our environmental, health, and safety management systems. We will accomplish this by:

- Conducting operations in compliance with all applicable laws, regulations, and other requirements
- Committing to a proactive approach toward ensuring the health and safety of all employees
- Taking actions to prevent pollution, reduce waste, and conserve our natural resources with the future of the earth in mind
- Measuring and monitoring our progress toward minimizing environmental impact and creating a healthy and safe workplace
- Continually striving for excellence in all aspects of environmental, health, and safety management systems



Michael Schwartz
Chief Executive Officer
December 2016



LEGAL AND REGULATORY REQUIREMENTS

Legal or Other Requirements	Faribault	Owatonna	Staunton
Hazardous Waste	X	X	X
Ind. WasteWater	NA	NA	X
Stormwater	X	X	X
Groundwater Inv.	X	NA	X
SPCC	X	X	X
Air Emissions (ST)	NA	NA	X
Air Emissions (Fed)	NA	NA	X
EPCRA 312	X	X	X
EPCRA 313	X	X	X
E-ggrt	X	NA	X
ISPM15 (Wood)	X	X	X
DEMIS (DIL)	X	X	X

ENVIRONMENTAL IMPROVEMENT PROJECTS

- › Single Stream Employee Recycling Station
- › \$370,000 Bathroom Reno – Low Flow, LED
- › 2 Mega Watt Solar Project – Largest in VA
- › 12 Acre's of New LED's
- › On-Site Cafeteria Composting
- › Dominion - Demand Response Program
- › Grey Water Reused For Toilet Flushing
- › Roofing Insulation Project
- › More Efficient Smaller Boilers Project
- › Landscaping being upgraded to meet USDA Ordinance & Reduce Storm Water
- › Discussing An Onsite Walking Path For Employees made from Recycled Rubber
- › JMU Environmental Intern Working on Improvement Projects

SINGLE STREAM RECYCLING



Single Stream Recycling Station for Employee Use



Waste Management Recycles

ACCEPTABLE RECYCLABLES



Newspapers, Magazines, & Mixed Paper	Cardboard & Chipboard	Glass Bottles & Glass Jars	Plastic Bottles, Jugs & Jars	Aluminum & Metal Cans
 Junk Mail Telephone Books Catalogs Computer Paper Envelopes Wrapping Paper Brochures Crayon Drawings Office Paper Copy Paper	 General Boxes Tissue Boxes Food Boxes Milk Cartons Juice Boxes Soda/Beer Cartons Egg Cartons (paper fiber) Paper Bags Cardboard Boxes Gift Boxes	 Juice Bottles Beer Bottles Wine Bottles Liquor Bottles Baby Food Jars Condiment Jars Jam Jars Jelly Jars Assorted Food Jars Salad Dressing Bottles	 Plastic Water Bottles Plastic Soda Bottles Plastic Milk Jugs Plastic Laundry Jugs Shampoo Bottles Lotian Bottles Food Bottles Condiment Bottles Vegetable Oil Bottles	 Aluminum Soda Cans Aluminum Beer Cans Fruit Cans Vegetable Cans Pet Food Cans Juice Cans Soup Cans Sauce Cans Assorted Food Cans Metal Margers

No Styrofoam, Wood, Green Waste or Food Waste

Please breakdown all boxes
 Please rinse all bottles, cans & jars before putting into containers.





- In-house standard for evaluating and certifying environmentally conscious plants.
- Plants scoring at least 85 points out of 100 are certified as Green Heart Factories.
 - **Staunton's GHF Score is a 90%**
- Plant scoring at least 95 points are certified as Super Green Heart Factories.



GREEN PROCUREMENT

■ Overview of Green Procurement Guidelines, 8th Edition

Essential conditions for suppliers' management

- Environmental Management System
We request our suppliers to structure environmental management system to obtain ISO 14001 certification.
- Compliance
- Promotion of voluntary activities of improving environment energy conservation, waste reduction, and improvement of transport means.
- Provision of information

Essential conditions for products

- Chemical substance management
 1. Restriction on use of chemical substances
 2. Cooperation to investigation of chemical substances
 3. Voluntary reduction of substances ranked to reduce, and the implementation of adequate management procedures of them
- Packaging materials
- When designing work is involved, eco-friendly design must be employed.

› For details, see the [Green Procurement Guidelines](#). (Supply Chain Management)

- Biodiversity
- Protecting water resources

WHAT MAKES OUR EMS WORK?



- › **C**ooperation & Transparency
- › **H**onesty
- › **I**nternal Communication
- › **L**eading Activism
- › **L**earning

Daikin Applied Environmental, Health & Safety Contact Information

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QUESTIONS?



THANK YOU.

