EXPERIENCE
EFFICIENCY

Welcome to 33 Turner Road

Belimo invites you to take a closer look inside their headquarters; one of the world's premiere leaders in valve and actuator manufacturing. Featuring live product demonstrations and hands-on testing, our interactive tour is designed to allow visitors to experience first-hand how Belimo's innovative products and solutions can be used to cut energy costs, increase building efficiency, and improve environmental sustainability. Whether you're a consulting engineer, contractor, distributor, building owner, or manager, we welcome you to step inside our facility and see our state-of-the-art, field-proven technologies in action!

EXPERIENCE **EFFICIENCY**

Leadership in Energy and Environmental Design (LEED)

Leadership in Energy & Environmental Design (LEED) is a green building certification program that recognizes best-in-class building strategies and practices. LEED Certification is recognized across the globe as the premier mark of achievement in sustainable/green design and is implemented using traditional design guidelines and a LEED scorecard.

Designed to meet LEED Gold standards, Belimo Americas' new headquarters was constructed from the ground-up using some of the most innovative green building techniques on the market today. The facility also incorporates many of our very own energy-saving products and puts them on display so that visitors can see how they are being used in real-world applications. LEED for Building Design and Construction (LEED BD+C) provided us with the framework for building our holistic green facility and allowed us to maximize its sustainability by taking full advantage of the benefits provided by our innovative line of products.

LEED Building Points

Sustainable Sites (SS)

The Sustainable Sites category evaluates a project based on decisions made regarding the environment surrounding the building, with credits that emphasize the vital relationships between buildings, ecosystems, and ecosystem services. It is focused on restoring project site elements, integrating the site with local and regional ecosystems, and preserving the biodiversity that natural systems rely on.

Site Selection *Used existing building site, not forest land reserve, agricultural, or park land.*	1 Credit
Development Density and Community Connectivity	5 Credits
Brownfield Redevelopment	1 Credit
Alternative Transportation	TBD
Bicycle Storage & Changing Rooms	1 Credit
Low Emitting & Fuel Efficient Vehicles	3 Credits
Parking Capacity	2 Credits
Site Development	
Protect or Restore Habitat	TBD
Maximize Open Space	1 Credit
Stormwater Design, Quality Control	1 Credit
Heat Island Effect, Roof	1 Credit
Light Pollution Reduction	1 Credit

Water Efficiency (WE)

The Water Efficiency category evaluates a project's use and management of water and wastewater, looking at indoor use, outdoor use, specialized uses, and metering. The category focuses on an "efficiency first" approach and aims to promote smarter use of water in an effort to minimize consumption.

Water Use Reduction (20% reduction)	2 Credits
Water Efficient Landscaping (Reduce by 50%)	2 Credits
Water Efficient Landscaping (No Potable Use or No Irrigation)	2 Credits
Innovative Wastewater Technologies	2 Credits
Water Use Reduction:	
30% Reduction	2 Credits
35% Reduction	1 Credit
40% Reduction	1 Credit

LEED Building Points

Energy & Atmosphere (EA)

The Energy and Atmosphere category evaluates a project based on its economic and environmental impacts with regards to energy usage. It aims to promote power reduction, energy-efficient design strategies, and utilization of renewable energy sources.

Optimize Energy Performance	13 Credits
On-Site Renewable Energy	7 Credits
Enhanced Commissioning	TBD
Enhanced Refrigerant Management	3 Credits
Measurement and Verification	3 Credits
Green Power	TBD

Materials & Resources (MR)

The Materials and Resources category focuses on minimizing the embodied energy and other impacts associated with the extraction, processing, transport, maintenance, and disposal of building materials. The requirements are designed to support a life-cycle approach that improves performance and promotes resource efficiency.

Storage and Collection of Recyclables	Prereq. 1
Building Reuse	
Maintain 55% of Existing Walls, Floors and Roof	1 Credit
Maintain 75% of Existing Walls, Floors and Roof	1 Credit
Maintain 95% of Existing Walls, Floors and Roof	1 Credit
Building Reuse	1 Credit
Construction Waste Management	1 Credit
Material Reuse	2 Credits
Recycle Materials	TBD
Regional Materials	TBD
Rapidly Renewable Materials	1 Credit
Certified Wood	TBD

LEED Building Points

Indoor Environmental Quality (IEQ)

The Indoor Environmental Quality category evaluates a project with regards to the state of its indoor environment. It aims to promote better indoor air quality and utilization of natural daylight.

Outside Air Delivery Monitoring	1 Credit
Increased Ventilation	1 Credit
Construction IAQ Management Plan	TBD
Low-Emitting Materials	TBD
Indoor Chemical and Pollutant Source Control	1 Credit
Controllability of Systems, Lighting	1 Credit
Controllability of Systems, Thermal Comfort	1 Credit
Thermal Comfort – Design	1 Credit
Thermal Comfort – Verification	TBD
Daylight & Views	1 Credit
Daylight & Views	1 Credit

Innovation & Design Process (ID)

The Innovation and Design Process category evaluates a project with regards to the sustainable design measures taken that are not covered under the five LEED credit categories.

Green Cleaning	1 Credit
Low Mercury Lighting	1 Credit
LEED Accredited Professional	1 Credit

Regional Priority Credits (RP)

Regional Priority Credit:

SSc3 Brownfield Redevelopment	1 Credit
SS5.2 Site Development	1 Credit
SS7.1 Heat Island Effect, Non-Roof	1 Credit

Reception

Belimo is a world-leader in the development, production, and marketing of actuator and valve technology for controlling heating, ventilation and air conditioning systems. Actuators and control valves make up the company's core business.

Experience Efficiency

Belimo through collaboration with our customers develops some of the most innovative products taking into consideration Comfort, Energy, Safety, Installation and Maintenance (CESIM) to help you achieve your energy objectives in a quicker, easier, and more economical manner than you ever thought possible.

Training

Belimo University offers outstanding training programs for a wide range of HVAC professionals. From our very own "Belimo 101: An Introduction to Air Damper Actuators and Control Valves", to state-approved Professional Development Hour (PDH) courses that qualify as continuing education credits for Professional Engineers. Belimo University offers users an easy way to access online modules and broaden their knowledge base; whenever and wherever they want.

Café

With natural sunlight and views of the courtyard, our Café is the perfect place to sit down and enjoy a healthy meal, have a cup of coffee, or relax and converse with other employees/visitors.

Quality Assurance

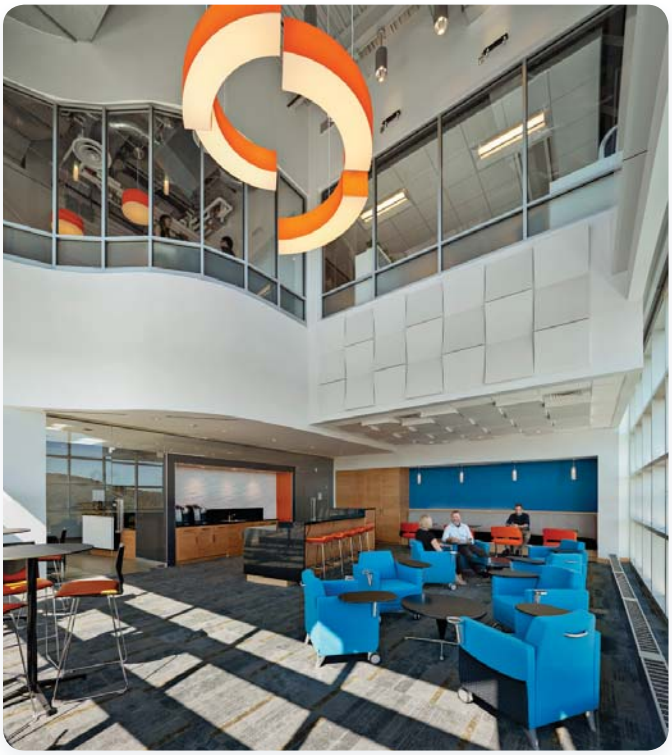
Our Quality Management team ensures that all of our products and services are consistent with regards to planning, control, assurance, and improvement. Belimo is ISO 9001 and ISO 14001 certified.

Production Planning

Production Planning maintains planning and settings in Systems, Applications & Products (SAP), and pieces that are used by Production and Purchasing to ensure that all material meets and/or exceeds customer requirements. The department is responsible for all master data including material masters, bills of material, and routings.

Purchasing

Purchasing works closely with all departments to procure inventory that supports production, shipping, and receiving, as well as non-inventory materials for engineering and test machines that are used in production.



CERTIFIED
ISO 9001
COMPANY

CERTIFIED
COMPANY
ISO 14001

Level One

Production Assembly

Production Assembly is primarily a make-to-stock (MTS) function. They produce higher volume Belimo labeled products as well as a number of OEM and customer-specific applications. Their goal is to ensure that the warehouse is supplied with two weeks of inventory at any given time.

Incoming Inspection

Incoming Inspection provides support and services for the warehouse, made-to-order (MTO) and MTS assembly, purchasing, planning, and engineering. They ensure that all materials provided by our vendors conform to the specifications set forth by our engineering team. Incoming inspection also assists with Q-case investigations, prototype and first article inspections, and maintains facility calibration records.

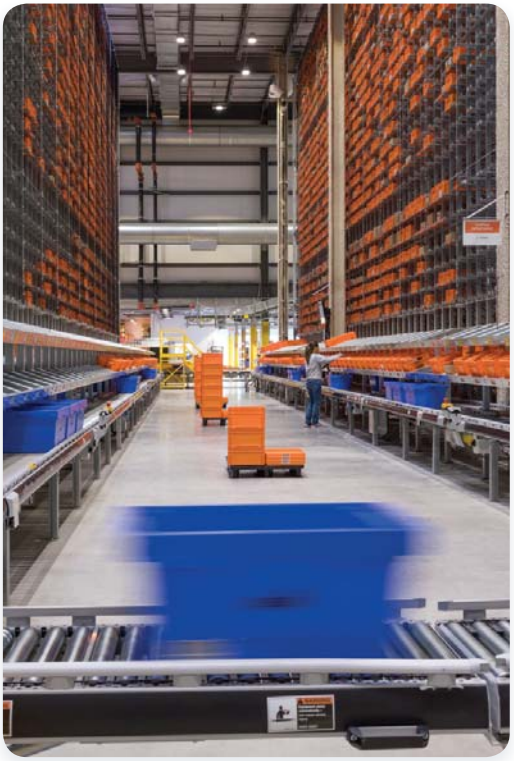
Warehouse Design

The warehouse space was designed to store materials, as well as to allow for manufacturing, assembly, testing, and shipping of products. Essential to this space is the capacity to accommodate vertical storage, space for vehicle material movement, and high-floor loads. The narrow aisle design along with our Automated Storage and Retrieval System (ASRS or AS/RS) allows for optimal use of operating space. The ASRS consists of a variety of computer-controlled systems for automatically placing and retrieving loads from defined storage locations. ASRS was incorporated to handle a very high volume of product loads, which allows Belimo to move items into and out of storage more efficiently. The system's computerized controls help maintain the inventory of stored products. Retrieval of items is accomplished by specifying the item type and quantity to be retrieved. The computer determines where in the storage area the item is located and then schedules its retrieval. The system has conveyors that take the loads into and out of the storage area and moves them to the manufacturing floor or loading docks. To store items, the container is placed at an input station for the system and the inventoried information is entered into a computer ASRS system, which moves the load to the storage area. As items are stored, the computer updates its inventory. The benefits of having an ASRS system include reduced labor for transporting items, lower inventory levels, more accurate tracking of inventory, and more efficient storage of products due to conservation of space.

Ability Beyond

Belimo's long standing commitment to Ability Beyond began over 15 years ago. Now with over 40 individuals helping contribute to Belimo's success it is the largest single worksite for Ability Beyond. We have created more space and pledged to increase the workforce, and utilized the expertise of Ability Beyond ensuring the building's design will accommodate a workforce of varying disabilities.

Along with being an employment partner, Belimo steadily increases its support each year in other areas. Employees annually volunteer their time to improve Ability Beyond homes, and Belimo is a frequent sponsor of Ability Beyond fundraising events.



ability beyond

QUALITY FIRST ☑

Belimo's statement

Ground Level

Innovation - Valve Development/Engineering US

The Innovation team designs, develops, tests, and provides product support for actuated valves located in Danbury. The team produces innovative solutions by leveraging both internal and external supplier knowledge. We demonstrate excellence in project management and provide manufacturing engineering support for valves and actuators made within our production facility.

We are constantly innovating and expanding our range of damper actuators and control valves to include new products and technologies, offering energy efficient HVAC control system solutions from actuators for VAV units, to large chilled water valves.

Valve Test Lab

Belimo's performance testing verifies that our products comply with industry and trade association specifications, including ANSI, EN, IEC, ISA, MSS, and VDI/VDE. Our testing is performed with ISO 9000 traceability.

Our performance testing provides assurance to our customers that they've made the right decision by choosing Belimo. Flow testing includes: equal percentage curve, pressure independent curve, and rangeability. Shell testing is performed for threaded and flanged valves up to 5,000 psi. Automated systems for flow testing improve accuracy, precision, repeatability, and efficiency. Our lab's flow testing capacity is 6,000 GPM (with the largest pump capable of providing 3,000 GPM).

Our durability testing involves subjecting valves to 100,000 cycles at worst-case temperature and differential pressure. We have the capacity to test over 240 valves ranging from DN 10 to DN 150, with a maximum media temperature of 302°F (150°C). With 12,000 GPM durability testing capacity, we could fill one Olympic size swimming pool every hour or one standard above-ground pool every minute. We also perform Long Life testing, where the valve is subjected to application conditions for months to even years at a time.

Machine Shop

The Belimo Machine Shop is responsible for the creation of new prototypes, modification of existing products, and the support of our manufacturing facility machinery. We have the capability to mill, turn, saw, and weld various metals and plastics used in the production of valves and actuators. Assembly equipment for production is also created and maintained in our shop. New computer numerical control (CNC) milling and turning machinery was added increase our capabilities and provide faster turnaround times for our Engineering, Test Lab, and Production departments.

IEC

UL LISTED

ANSI American National Standards Institute

5 YEAR WARRANTY

2 YEAR WARRANTY

ISA

Mechanical Equipment

Mechanical Room

Although the mechanical room is normally closed off from the public, we've made it part of our interactive facility tour so visitors can see our products in action. The room features infographics and color-coded pipes to help customers see each system in operation.

Roof Top Unit (RTU), Heat Recovery Ventilator (HRV) and Humidifiers

Carrier – RTU-M1, M2, M3, M4 and W1

- Serve – Manufacturing, Warehouse and Shipping and Receiving.
- RTU's are equipped with Energy Valves for both heating and cooling coils, except for RTU-M4, which is a DX unit equipped with the ZIP Economizer.
- RTU uses Belimo actuation for their respective control dampers.

TRANE – RTU-L1 and RTU-O1

- Utilizing the TRANE CDQ™ (Cool, Dry, Quiet) line for superior dehumidification.
- RTU-L1 serves the Test Lab.
- RTU-O1 serves all office area Chilled Beams.
- Equipped with Energy Valves for both heating and cooling coils.
- Uses Belimo actuation for their respective control dampers.

Innovent – HRV-1 and HRV-2

- Serve – Bathrooms, Locker Rooms and Kitchen areas.
- Provide 100% outside air, while also saving energy by using the exhausted air to condition the incoming fresh air.
- Equipped with Energy Valves for both heating and cooling coils.
- Uses Belimo actuation for their respective control dampers.

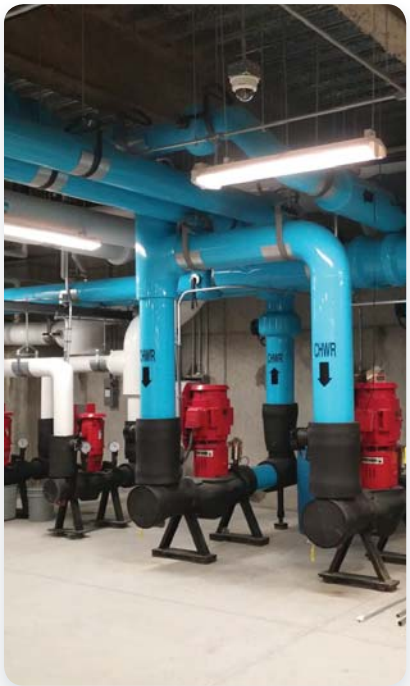
Dri-Steem – Humidifiers

- GTS (gas-to-steam) humidifiers.
- Maintain a minimum humidity level to prevent static electricity buildup, and ensure a comfortable and healthy environment for all occupants.
- Equipped with the Vapor-logic microprocessor controller and communicates with building automation systems via BACnet.

Chillers

Multistack – MagLev Air Cooled Chiller

- Serves entire building comfort load.
- Flooded 4-pass evaporator provides low-flow turndown at extreme efficiency levels.
- MagLev two-stage variable speed centrifugal compressor technology delivers high efficiency with unprecedented part-load performance.
- Belimo Electronic Pressure Independent Valve (ePIV) serves as a Bypass Control Valve to maintain the minimum flow rate through the Evaporator as required for safe operation of the Chiller.


CHWR
CHWR
CHWR

Mechanical Equipment

Terminal Equipment

Trox Active Chilled Beams

- Serves majority of spaces in Office building excluding Laboratory.
- 168 Chilled beams are installed.
- High cooling capacity with low conditioned fresh air flow rates.
- Two pipe heat exchangers coupled with the Belimo 6-Way valve for heating and cooling changeover and modulating control.
- Belimo Pressure Independent Characterized Control Valves (PICCV) act as automatic balancing valves for each branch ensuring the design flow is always maintained.
- On the Airside, the Belimo VAV Compact maintains the design air flow based on occupancy and independent of system pressure changes.

Fan Coil Unit (FCU)

- Utilized in the Customer Lounge, Lobby area and Upper Stairwells.
- Equipped with a Belimo Energy Valve to monitor and optimize energy consumption in every space.

Cabinet Unit Heater (CUH) and Unit Heater (UH)

- CUH and UH are utilized in the Loading Dock, Stairwells and Vestibules.
- Through individual control, conditions can be varied to suit diverse requirements or activities in each space.
- Equipped with its own Belimo Energy Valve to monitor and optimize energy consumption at each unit.

Central Plant Equipment

Aerco – Benchmark 3000 Gas fired Boilers

- Designed for condensing application in a closed loop hydronic system.
- Modulates to match fluctuating system loads yielding the highest possible efficiency.
- Belimo 2-way HDU Butterfly valve series are utilized on each boiler for isolation.

Armstrong – Intelligent Variable Speed (IVS) Pumps

- Armstrong IVS pumps utilize a sensorless design that adjusts the speed of the pump to meet the immediate load on the HVAC system. This results in each pump responding instantaneously to system demand and pumping only what is required.
- Up to 75% in energy savings over traditional constant speed and variable frequency operated pump installations.

Belimo – Valves and Actuators
Butterfly Valves

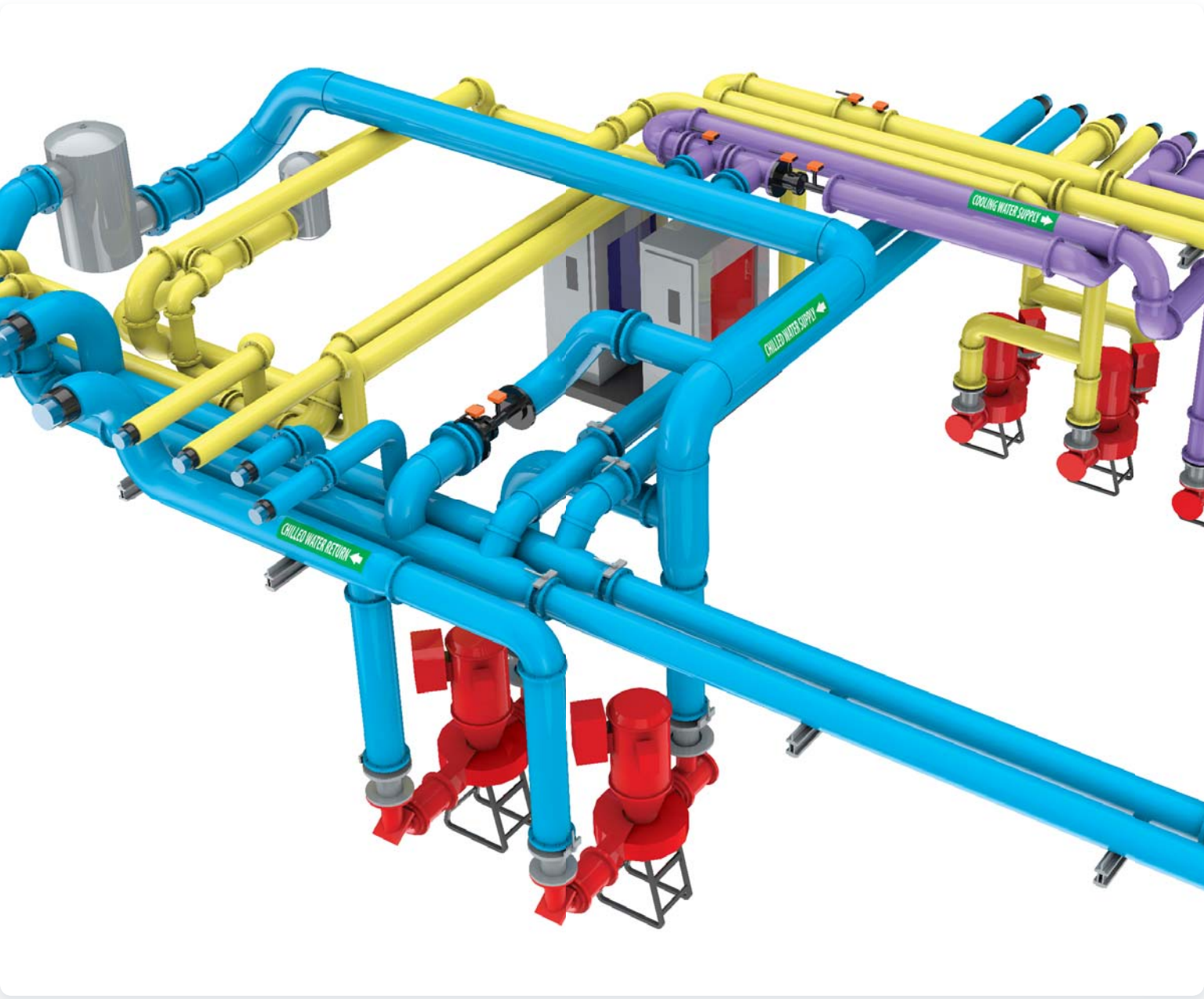
- HDU Butterfly valve series for isolation of mechanical equipment and systems.
- 3-way HDU Butterfly valve series used for blending Return Chilled Water (54°F [12°C]) with recirculated Chilled Beam Chilled Water (63°F [17°C]) to maintain the supply water temperature to the Chilled Beam System of 57°F (14°C).

Electronic Pressure Independent Valves (ePIV)

- Belimo Electronic Pressure Independent Valves (ePIV) are utilized Bypass Control Valves to maintain the minimum flow rate through the Chiller Evaporator and Gas Fired Boiler.

Energy Valve

- Utilized for the chilled and hot water supply to measure, control and optimize energy distribution and consumption throughout the entire building.
- 44 Energy Valves are installed on equipment ranging from Unit Heaters to Roof Top Units.


COOLING WATER SUPPLY
CHILLED WATER SUPPLY
CHILLED WATER RETURN

Level Two

Finance & Business Applications

Finance and Business Applications provides support and services to all departments of Belimo, along with our subsidiaries. Areas of support include budgeting, accounting principles, financial reporting, and information technology.

Human Resources

We attract and retain highly qualified talent by maintaining and providing a comprehensive benefits package and HR related programs and policies. It is the responsibility of our HR department to ensure that Belimo's values and integrity are upheld throughout the organization and to provide the highest level of service, advice, and counsel to all employees and managers.

Customer Service/Technical Support

The Customer Service and Technical Support group assists customers in making their product selections and helps ensure that all orders are delivered within the specified time frame. Other responsibilities of the group include relaying information on new products and software tools, training, quoting, ordering, and troubleshooting. The department is available 11 hours per day, Monday through Friday.

Product Management

Belimo's Product Management team is responsible for organizing, planning, and forecasting all stages of the product life cycle. They are also responsible for analyzing market conditions and defining the features a product will have, as well as the functions it will perform.

Marketing and Digital Communication

The Marketing and Digital Communication team is focused on maintaining Belimo's brand equity through the creation and execution of printed marketing collateral, trade and event planning, and online communications from digital media to website development. All of Belimo's marketing and public relations activities are executed in-house, from designing of magazine advertisements, to website creation to custom development and supply of collateral to our dealer network.

Follow Us

5 YEAR WARRANTY | GLOBAL SUPPORT | TESTED QUALITY | ON TIME DELIVERY | EXTENSIVE SERVICE

Belimo Americas

USA, Latin America, and the Caribbean: www.belimo.us
Canada: www.belimo.ca
Brazil: www.belimo.com.br

Belimo Worldwide: www.belimo.com

BELIMO