Tamas
Hydronic Systems Inc.

Product Catalogue

Residential & Commercial Hydronic Solutions

Custom, Reliable Hydronic Systems

WWW.TAMASHYDRONIC.COM

TABLE OF CONTENTS


02 | Z-BLOCK


04 | LOW LOSS HEADER PANELS


05 | BOILER PANELS


09 | LOW TEMPERATURE PANELS


10 | ISOLATION PANELS


11 | TANK-LESS PANELS


12 | MANIFOLD CABINET PANELS


13 | SNOW MELT PANELS


14 | PUMP ENERGY AUDITS


15 | TAMAS PUMP PACKAGES


16 | MRI COOLING CABINETS


17 | BTU METERING CABINETS


18 | BOILER PACKAGES


19 | MODULAR MECH. ROOMS


20 | CONTROL BOXES


21 | CHILLER PANELS

For additional Tamas Hydronic products or job site specific projects, contact us at 1-403-279-0020 or at info@tamashydronic.com

Who is Tamas Hydronic Systems?

Tamas Hydronic Systems Inc.

CUSTOM, RELIABLE HYDRONIC SYSTEMS

Tamas Hydronic Systems for nearly 25 years has been focused on the design and manufacture of hydronic heating/cooling equipment. Based in Western Canada, Tamas has created energy efficient radiant heating/cooling systems and snow melt systems for throughout North America. With continued innovation, and the focus on reliable, high quality panels/packages we look to further cement ourselves as an industry leader in the hydronic equipment market.

Design to Manufacture

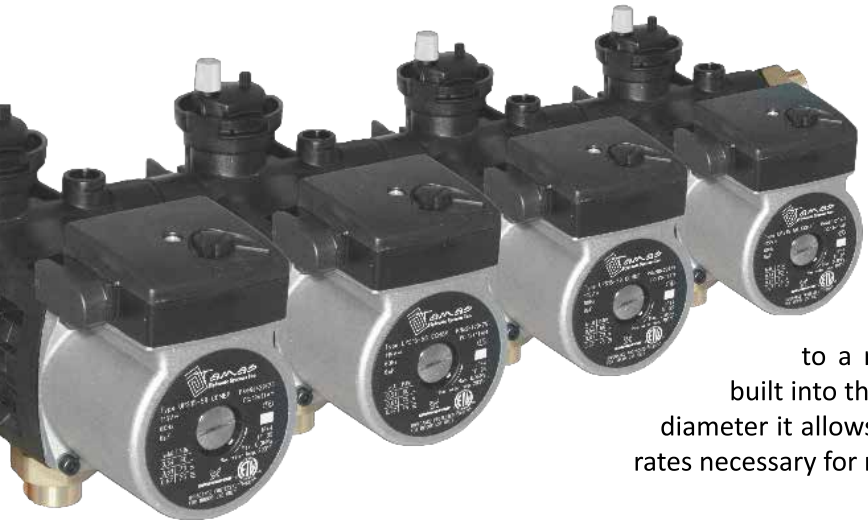
Our heating/cooling systems promote a quick and simplified installation for contractors and building owners alike, reducing time spent on site and on site issues.

Through the focus on high quality, compact and pre-engineered packages for the residential, commercial, and industrial radiant market The Tamas products have made the installation of hydronic systems.

Tamas Z-Block - Hydronic Zoning Block

The Future of Hydronics

The Z-Block is a revolutionary zoning device, capable of running an entire zone from one small compact unit. It can be expanded with additional Z- Blocks to suit a variety of Residential, Commercial and Industrial applications. The Z-Block is easy to assemble and install, making it suitable for all skill levels. This unique design allows the Z-Block to be installed in a variety of small spaces for new installations or retro-fits.



Expandability

The Z-block can be utilized as a single zone, or expanded to a multi zone pump manifold. The supply/return headers built into the volute consist of 1 1/4” diameter composite. With this diameter it allows the Tamas zone block to offer a varying degree of flow rates necessary for numerous applications (High and Low Temp).

Additional Accessories

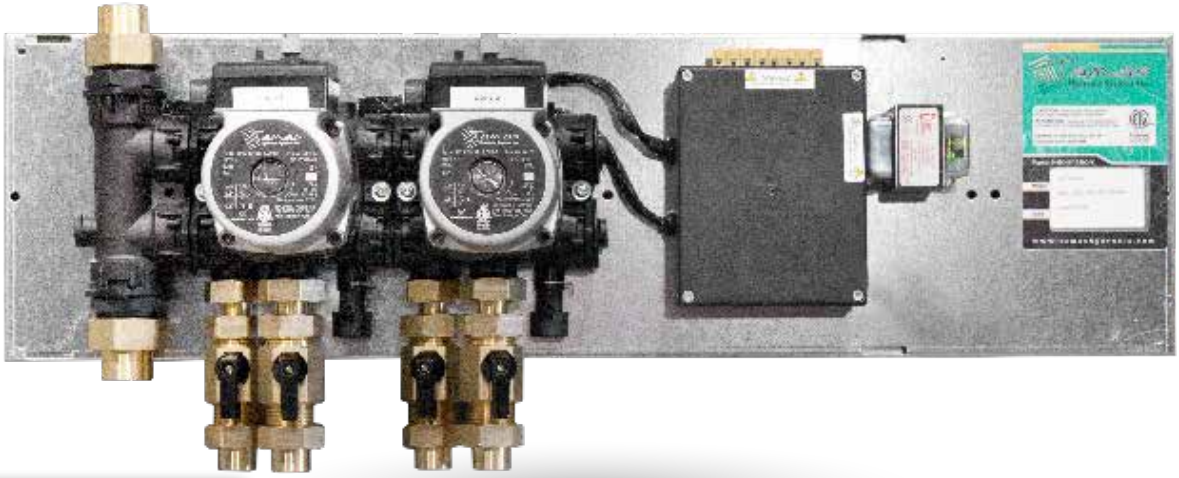
The Z-Block line features an array of accessories and components to perfectly match your installation requirements.

Thermostatic Mixing Module

Easily mix temperatures in your Z-Block applications with the new TMV mixing device.

Multiple Pumps Available!

The Tamas Z-Block is available with the UPS 15-58 pump and Grundfos Alpha Pump.



Optional Shut Off Valve kit available with this product.

Standard Boiler Panel

The Tamas standard boiler panel now features an all new compact enclosure and is now one of the most economically viable distribution panels for boiler systems. It can be installed horizontally or vertically, depending on the requirements of the installation or customer preference. The panel is available up to five zones with a expansion back pan for the control box. The panel is ideal for retrofit applications where space is limited, but can also be utilized for new installs as well. Optional ball valve kits are also available for each supply/return on the panel.

FEATURES

- All new compact and versatile panel
- Industry leading Z-block design
- Most economic boiler panel
- Plug and play design for a quick installation
- Simple wiring guide
- Certified to CSA 22.2 No. 14-85

Tamas Low Loss Header Hydronic Panel

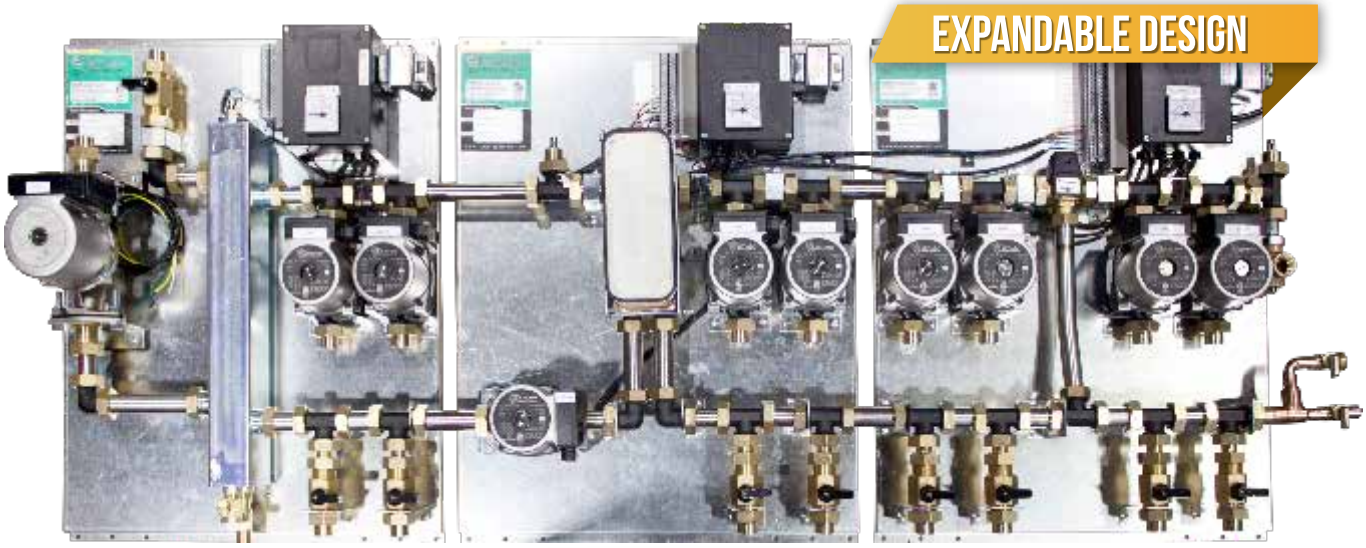
Low Loss Header Panel

Tamas Low Loss Header Boiler Panels are designed to work in unison with any boiler brand. Through the use of a low loss header the panel is able to provide a primary/secondary loop to the system. The panel regulates the water distribution to ensure each specified zone demand is being met. When the room temperature is satisfied, the thermostat or aquastat disconnects the heat source and pump. The panel is also capable of providing domestic hot water priority and can be configured with additional zones on an additional panel.

FEATURES

- Pre-designed and assembled
- Function & pressure tested
- Packaged, compact design
- Certified to CSA C22.2 No. 14-95
- Conforms to UL Standard 598A

EXPANDABLE DESIGN



T-BO-VO-1200

Plug-and-Play Hydronic Panel

Tamas Boiler Panels are designed for ease of installation and maintenance. Each boiler brand specific panel is engineered to specifically fit the connections on the boiler, allowing for a quick and hassle free install.

Tamas Boiler Panels feature a plug and play design on all boiler panels, with 24V wiring terminals and plug in power. System specific wiring accommodates to each boiler's functions. All panels also feature a galvanized back pan as well as a sleek powder coated cover.

VIESMANN

IBC Energy Saving Technologies
Condensing Boilers

BOSCH
Invented for life

KNIGHT HEATING BOILER

NAVIEN

WEIL-McLAIN

NTI NY THERMAL INC.

BRADFORD WHITE

Dimensions (“)	W-21.5 H-27 D-12
Dimensions (mm)	W-546 H-686 D-305
Panel Enclosure	Powder Coated Steel
Flow Range (15-58)	0 - 17.5 GPM
Head Range (15-58)	0 - 19 feet
Max. Operating Temperature	95 °C / 203°F
Max. Operating Pressure	10 Bar / 145 PSI
Max. Ambient Temperature	50°C / 122°F
Power Supply	120V 15A

Tamas Boiler Hydronic Panel

VIESMANN

Vitodens 100-W™ B1HE Boiler Panel

The Tamas Viessmann B1HA Series Boiler Panel regulates the water distribution quantity to accommodate demand. Optional secondary injection mixing components, as well as low and high temperature zones can be added to the system. The panel can accommodate up to 5 zones.

FEATURES

- Pre-designed and assembled
- Function & pressure tested
- Packaged, compact design
- Certified to CSA C22.2 No. 14-95
- Conforms to UL Standard 598A

IBC Energy Saving Technologies
Condensing Boilers

IBC-SL Boiler Panel

The Tamas IBC SL panel features a primary pump and up to 4 zones in this SL specific panel that directly line up with the boilers connections. The panel also features long pump cables to wire directly to the boiler for a cost saving choice for utilizing the boiler control.

FEATURES

- IBC HC and VX specific boiler panel also available
- All components covered by a single warranty
- UPS 26-99 Boiler pump available for larger SL boiler

BOSCH
Invented for life

Bosch Boiler Panel

The Bosch Greenstar boiler panel is designed to fit directly underneath the boiler. This allows for a quick and easy install as the supply/return connections on the panel line up directly of those on the boiler. The panel is fully wired and pressure and function tested to ensure a trouble free installation. The Greenstar boiler panels can be configured in a variety of fashions to suite any new install or retro fit requirements.

FEATURES

- Pre-designed and assembled
- Function & pressure tested
- Packaged, compact design
- Certified to CSA C22.2 No. 14-95
- Conforms to UL Standard 598A

Navien

Navien Boiler Panel

The Navien Boiler Series panel is designed to match the Navien boilers supply/return connection. Making for a quick and simplified installation. A fully wired panel controlled by the Tamas control box, a complete plug and play design. All panels are function and pressure tested.

FEATURES

- Pre-designed and assembled
- Function & pressure tested
- Conforms to UL Standard 598A
- HC Boiler specific control box

Tamas Boiler Hydronic Panel

Laars/Bradford White Boiler Panel

The FT Series boiler panel pipes directly underneath the boiler for a seamless fit for the primary loop connections. The boiler panel also features boiler specific wiring greater for applications greater than 2 zones.

FEATURES

- Powder coated cover to match boiler look
- Convenient plug and play design
- Panels are pressure and electrically tested
- Boiler panel designed for Bradford Brute FT and Larrs Mascot FT

High/Low Temp Panel

The Tamas high/low is specifically designed to accommodate multiple temperature applications in the same system, up to a maximum of 7 zones. This versatile panel can also be used with a dedicated condensing boiler. The 3-speed pumps used will accommodate the flow requirements for most warm and hot water requirements. A DHW priority configuration is also an option for this panel. With a compact design the panel allows for a great option for retrofit or new installs.

FEATURES

- Pre-designed and assembled
- Function & pressure tested
- Packaged, compact design
- Certified to CSA C22.2 No. 14-95
- Conforms to UL Standard 598A

Stainless Steel Low Temp Panel

Up to 3 Zones

The Tamas Low Temperature hydronic panel (T-LO-TP-0010,0020,0030) is designed for distributing hydronic heat for radiant floor heating systems. The panel can be utilized for floor warming and area heating such as bathrooms, basements, kitchens, sun rooms and tiled floors. The panel uses a microprocessor based hydronic control which receives a signal from the buildings thermostat, this provides consistent heat distribution through the system. Thermostatic mixing valves and 3 speed circulating pumps function to temper and distribute the water to the system.

FEATURES

- Pre-Designed and Assembled
- Function and Pressure Tested
- Compact, Plug-and-Play Design
- Certified to CSA C22.2 No. 14-95
- Available up to three zones in a Stainless Steel Panel

Multiple Zone Low Temp Panel

The Tamas Low Temperature hydronic panel is designed for distributing hydronic heat for radiant floor heating systems. A panel that will require three zones or greater will be featured in with copper piping. The panel uses a fully wired hydronic control which receives a signal from the buildings thermostat, this provides consistent heat distribution through the system. Thermostatic mixing valves and 3 speed circulating pumps function to temper and distribute the water to the system.

FEATURES

- Pre-designed and assembled
- Function & pressure tested
- Packaged, compact design
- Certified to CSA C22.2 No. 14-95
- Polished Copper Piping

Tamas Isolation Hydronic Panel

Isolation Panel

Low Temperature, Single Zone

The Tamas Isolation panel is designed to be used in applications where isolation of water/glycol mixtures is needed. (Or for poly B applications).

When a Tamas Isolation panel is connected to a hot water tank system the panel regulates the water distribution and temperature to accommodate demand.

FEATURES

- Adaptable to almost all hot water tank systems
- Function & pressure tested
- Trouble-free wiring
- Plug & Play design
- Quick & easy installation; saves time & money

Isolation Panel

Low Temperature, Multiple Zones

The Tamas Isolation panel is designed to be used in applications where isolation of water/glycol mixtures is needed. (Or for poly B applications).

When a Tamas Isolation panel is connected to a hot water tank system the panel regulates the water distribution and temperature to accommodate demand.

FEATURES

- Adaptable to almost all hot water tank systems
- Function & pressure tested
- Trouble-free wiring
- Handles up to 2 zones
- Quick & easy installation; saves time & money

Tank-Less Water Heater Panel

The Tank-less water heater panel is designed to be used in applications where domestic hot water (D.H.W.) and another load are present. (i.e. floor warming, fan coil). The panel is designed where isolation of water/ glycol mixtures is needed via a flat plate heat exchanger to isolate the domestic water from the load.

When the Tamas Tank-Less Water Heater Panel is connected to a tank-less water heater (instantaneous water heater) the panel regulates the water distribution and temperature to accommodate demand. If the room, or floor temperature falls below the users desired setting on a thermostat, the panel initiates a signal to the tank-less unit to turn on the primary pump and the zone pump. The two pumps will turn off once the demand temperature has been satisfied, or there has been a demand for D.H.W.

In the event that the tank-less unit is on for domestic hot water production, water flows through the flow switch on the Tamas panel to disengage the pumps to allow for the DHW priority. Once the hot water demand in the dwelling has been satisfied, and water stops flowing through the flow switch, and if there is still a zone demand present, the pumps on the Tamas panel will turn back on and continue heating the space that is calling for heat.

FEATURES

- Pre-designed and assembled
- Function & pressure tested
- Trouble-free wiring
- Packaged, compact design
- Expandable system capabilities
- DHW priority flow switch
- Certified to CSA C22.2 No. 14-95
- Conforms to UL Standard 598A

Dimensions (“)	W-21.5 H-27 D-12
Dimensions (mm)	W-546 H-686 D-305
Panel Enclosure	Powder Coated Steel
Flow Range (15-58)	0 - 17.5 GPM
Head Range (15-58)	0 - 19 feet
Max. Operating Temperature	95 °C / 203°F
Max. Operating Pressure	10 Bar / 145 PSI
Max. Ambient Temperature	50°C / 122°F
Power Supply	120V 15A

Tamas Manifold Hydronic Panel

Manifold Hydronic Zoning Panel

The Tamas Manifold panel series has been designed as a complete time saving solution for in floor heating and snowmelt applications. The panel can be manufactured for many different configurations to suite site requirements. As well many different enclosure options are available from recessed, powder coated, stainless steel and standard galvanized.

The manifold panels combine a system pump, mixing valve, and stainless steel manifold for the purposes of distributing water for a heating or cooling system. All assembled inside a complete cabinet for a time saving installation, reducing any on site issues.

Manifold only cabinets also available, featuring a recessed, powder coated design.

FEATURES

- Galvanized Enclosure
- Stainless Steel Piping
- Thermostatic Mixing Valve
- Actuators and Larger Pumps Available
- Stainless Steel or Powder Coated Enclosure Available

Manifold Snow Melt Panel

The snow melt manifold panel utilizes a snow melt WIFI control and slab sensor. This allows for the slab to get the right water temperature with the 3 way mixing valve when snow is recognized on the slab sensor. Many control options are available, such as BMS option for commercial snow melt systems and pump size options to ensure performance of the snow melt system.

FEATURES

- Pressure & Electrically Tested for No On-Site Issues
- Fully Wired for Plug-and-Play Installation
- Includes 1¼” Large Flow Stainless Steel Manifolds
- Includes Snow Melt Control System

Complete Snow Melt System

Tamas snow melt panels are a safe, reliable alternative to manual snow and ice removal. With a unique injection mixing design through the heat exchanger we are able to significantly reduce the side of major components without effecting the snow melting performance, making for a more compact and cost saving alternative to traditional snowmelt systems.

Custom sizing is also available to ensure optimal performance for each snowmelt application.

FEATURES

- Pre-engineered packages ranging from 50K to 1.5 million BTU's
- Custom Snow Melt Panels available on request
- Controls pre-wired and mounted
- Easy to hook up, supply/ return connections to boiler and slab
- Stainless steel back pan
- Lockable enclosure available upon request
- WiFi Enabled Snow Control with remote access

Optional Lockable Enclosure Available!

Dimensions (")	W-24.3 H-36 D-13.5
Dimensions (mm)	W-617 H-915 D-343
Panel Enclosure	Powder Coated Steel
Flow Range	0 - 64 GPM
Head Range	0 - 30 feet
Max. Operating Temperature	93 °C / 200°F
Max. Operating Pressure	10 Bar / 145 PSI
Max. Ambient Temperature	49°C / 120°F
Power Supply	120V 15A

HOW MUCH DOES ENERGY WASTE COST YOU EVERY YEAR?

IF YOU DON'T KNOW, IT'S TIME TO FIND OUT

Pump Energy Audits: The Simple Solution

Pump Audits show that up to 60% of the energy consumed by pumps could be saved. A Pump audit is performed by our specialists based on measurements. It focuses on the amount of material the pump is handling and flow variations during a relatively short and well-defined period. The audit assesses the overall efficiency of your pumps and proposes changes to be made to improve efficiency. The proposals are supported by calculations of the savings to be made, the reduction in CO2 emissions, and the payback time on any investment. The benefits are operational cost savings and not least a significant reduction to installation carbon footprint.

Case Study Examples

Condominium Tower
Edmonton, AB
Heating Pump Application

	Before	After
# of Pumps	2	2
Output Power	10 HP	7.5HP
Energy Use	398,797 KWh	142,873 KWh

Energy Savings (%)	Energy Savings ($)	CO2 Savings (Metric Tons)
64.17%	*$35,829.00*	*232.12*

Data Collected over 1299 Days of Operation

Apartment Complex
Edmonton, AB
Booster Pump Application

	Before	After
# of Pumps	2	2
Output Power	15 HP	5HP
Energy Use	463,132 KWh	164,395 KWh

Energy Savings (%)	Energy Savings ($)	CO2 Savings (Metric Tons)
64%	*$41,823.00*	*270.95*

Data Collected over 862Days of Operation

Apartment Building
Edmonton, AB
Heating Pump Application

	Before	After
# of Pumps	2	2
Output Power	10 HP	5HP
Energy Use	305,464 KWh	116,177 KWh

Energy Savings (%)	Energy Savings ($)	CO2 Savings (Metric Tons)
61.97%	*$26,500.00*	*171.68*

Data Collected over 570 Days of Operation

Booster & Heat/Cool Pump Packages

The Tamas Hydronic Booster Pump package is a versatile and adaptable system that can be assembled in many different configurations to suit site needs. We offer pumps from major manufacturers, and our Hydronic VFD is programmable for up to five pumps.

The Tamas control box that is attached to our pump package frame comes with L.E.D. operational lights, and manual override switches that can be set to automatic (V.F.D. run), or manual(full output), or in the off position. These features allow any potentially servicing that may be required to be carried out in safe manner without having to compromise the building load and keep the system running.

FEATURES

- Highly efficient, saves on operating costs
- Available in cascade or parallel applications
- Can run up to 5 pumps
- Pump sizes from ½ HP to 300 HP
- Control Logic: Able to be wired to accommodate duty standby, parallel, and cascade applications.
- Booster Pumps (up to 5 per VFD Controller)
- Variable Frequency Drive (VFD)
- 3 Contactor bypass
- Manual and auto select switch
- Pressure transmitters
- Skid mounted setup

Tamas MRI Cooling Cabinets

How can you maximize the uptime of your MRI?

Your MRI's uptime depends significantly on the cooling system. You can increase the system's availability by adding redundant components, such as the MediCool Hydronic Cooling Cabinet solution from Tamas Hydronic Systems.

A typical MRI cooling system relies on a dedicated chilled water system to supply the cold water that cools the various components of the MRI machine, including the superconducting magnet and helium compressor. Tamas Hydronic MRI solution offers cooling Cabinets to meet this requirement reliably and efficiently.

The Tamas MRI Hydronic Cabinets are designed for distributing hydronic cool for a medical imagining equipment. The Cabinets can be utilized for cooling the superconducting magnet and helium compressor of a MRI machine.

Tamas MediCool System

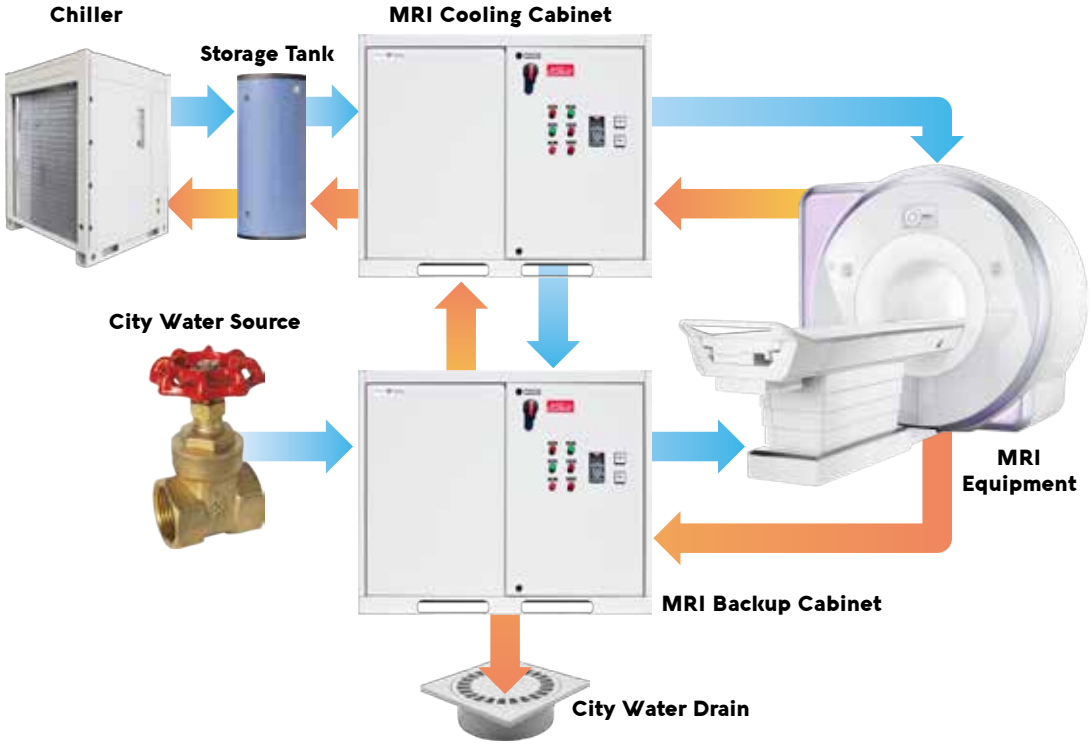
Tamas MRI hydronic cooling cabinets will be connected to the chiller and city water on one end and the superconducting magnet and helium compressor on the other end. If the chiller is at fault, the cooling cabinet will automatically switch to city water to cool the helium compressor indirectly, through the heat exchanger.

Cooling Mode

Chilled water cools the MRI machine equipment.

Backup Mode

City water provides cooling while chiller is maintained/ repaired.



BTU Metering Cabinets

The BTU Metering Cabinets provides highly accurate thermal energy measurement in chilled water, hot water, domestic hot and cold water based on signal inputs from two matched temperature and flow sensors (included). The basic model provides local indication of energy, flow, and temperature data through a mobile app.

FEATURES

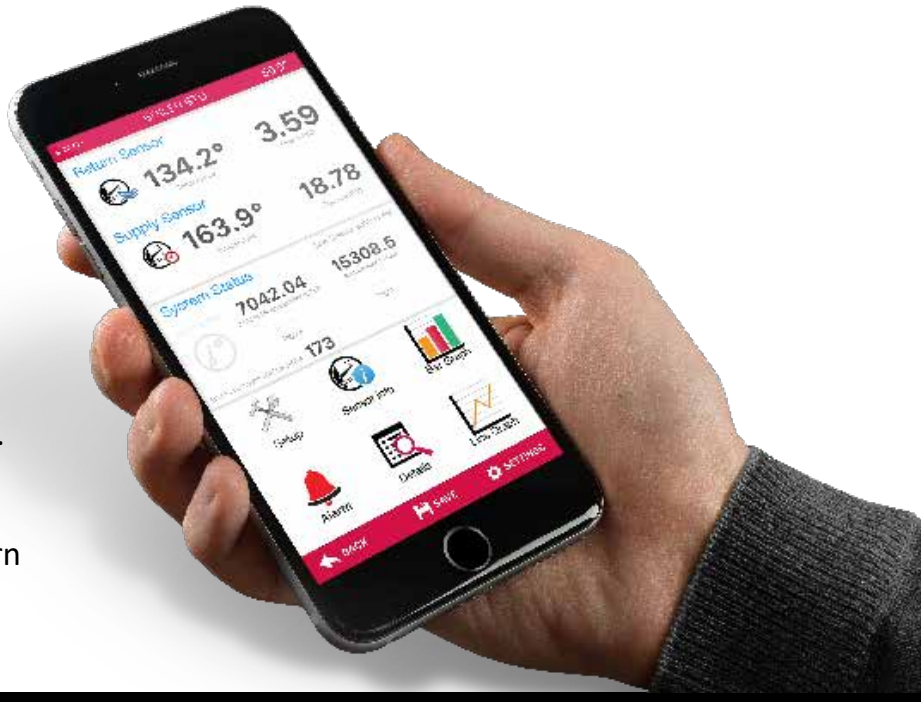
- Horizontal or vertical assembly (not upside down)
- Wi-Fi enabled through mobile app
- Lockable galvanized paintable steel cover
- 3/4” Connections
- Configured for your Specific Application

ThermoLinx™ Hydronic Network

GET IT ON Google Play | Download on the App Store

Used in conjunction with the ThermoLinx™ Mobile App, users have access to real time data collection for system flow, pressure and temperatures with the ability to view graph calculated BTU’s based on hour, day, week, and month.

The Thermolinx app also allows to receive alarm notifications on your supply and return temperatures.



Tamas Boiler Packages

Complete Boiler Packages

Tamas Boiler packages are designed to cut down on installation time and to ensure costs are managed through a fixed complete package. This complete boiler package also safeguards against the risk of installation delay and downtimes for a retrofit application. Tamas Boiler Packages can be ordered in a variety of configurations with different boilers.

These packages come complete with a powder coated frame, boiler, pre-assembled panel, and control, allowing for an easy Plug-and-Play setup. Tamas Boiler Packages can be specifically designed for various applications to ensure correct sizing and meet customer needs. All packages are mechanically and electrically tested before leaving the facility for a trouble free installation.

FEATURES

- Pre-engineered to site specifications ensuring all sizing is correct
- Pre wired and assembled for quick site installation
- Durable white powder coated frames
- Pre-piped boiler loop & secondary loop
- Modular design for larger applications
- Ideal for retrofits and new installations

Tamas Modular Mechanical Rooms

The Tamas Modular mechanical room allows for quick and easy installation at a fixed cost that is pre-engineered for specific site applications. All of our Mechanical rooms are designed in 3D and meet approval ratings for all industry related standards while at the same time being fully customizable

Once the mechanical room has been delivered to site all that is needed is the connections to and from the various zones.

Product Applications:

- Boiler Packages/ Heating
- Pumping Systems
- Variable Frequency Drives (V.F.D.)
- Snow Melting

FEATURES

- Custom, Pre-Engineered Design
- Multiple Applications Available
- Fully Piped and Wired for Easy Installation
- Compact, Portable Design
- Reduce Installation Issues with a Pre-Assembled System

Tamas Control Box Packages

Tamas VFD Control Packages

The addition of a variable frequency drive and application specific controls can increase system efficiency, reduce equipment depreciation, and minimize maintenance costs in large scale boiler operations.

Adjustable variable frequency drives offer the ability to modulate flow rate and speed by sensing the pressure differential or temperature within the system. Distribution is regulated to meet the minimum output requirements to satisfy the system load.

FEATURES

- Runtime balancing
- Automatic/Manual Switch over
- Overload protection
- Alternation of the lead pump
- Automatic setpoint calculation

HVAC Control Packages

Tamas pre-assembled HVAC Control Panels help contractors speed up the installation process and reduce unnecessary costs associated with manual field assembly. Tamas HVAC Control Panels feature custom turnkey solutions designed to provide solid protection for the intelligent devices in HVAC systems.

FEATURES

- Pre-Wired Control Solution
- Function Tested
- Plug-and-Play design for easy installation
- Configured for your specific applications

Tamas Chilled Panel Packages

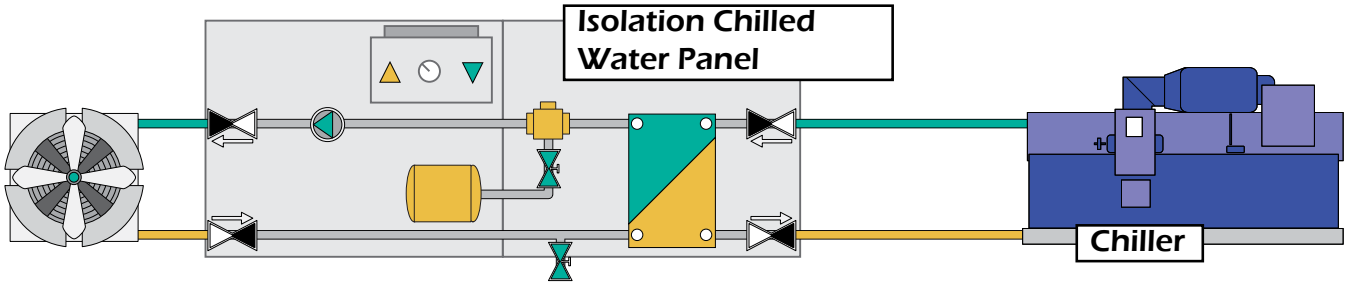
Tamas Hydronic Chiller packages are fully assembled and tested, ready to go on site. Reducing on site hassle and difficulties, the Tamas Chiller Panel offers a complete package for a simpler and quick installation.

The panel can be adapted to various sizing needs to meet site specific requirements. The system is isolated with the engineered heat exchanger to provide isolation between the main chiller system and the secondary load. All equipment on the panel is insulated, preventing condensation on all components.

The panel is equipped with balancing valves to provide flow rate adjustment, to achieve correct temperature balance on both sides of the heat exchanger.

FEATURES

- Galvanized steel back plate
- Fully insulated piping
- Convenient Plug-and-Play Design
- Fully Wired
- Configured for Specific Application



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If you are interested in becoming an authorized Tamas Hydronic agent, please call or email us.

Custom, Reliable Hydronic Systems

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