

*It's All about Building a  
Better Product for Our Clients!*

## J&M Fluidics, Inc. Company Product Overview

*J&M Fluidics, Manufacturer of Air & Water-Cooled Process Chillers.  
Located in Telford, Pennsylvania*



*Visit us at: [www.jmchillers.com](http://www.jmchillers.com)  
or email us at: [info@jmchillers.com](mailto:info@jmchillers.com)*

# Company Product Overview:

*J&M Fluidics, Inc. is committed to serving our clients' application needs with innovative, high-quality process chillers, tank and pump skids, custom fluid cooling solutions and economizer products. Our products are built to support a large variety of applications with a diverse product line.*

*Our reputation is built on our commitment to excellence, advanced controls, user-friendly touch screen interface and our ability to **custom build units** exactly matched to your process application. **Your Satisfaction is what Drives Us!***



Aquariums



Laser Cooling



Ice Skating Rinks

## Typical J&M Chiller Applications (But Not Limited To)

### Commercial, Industrial & Residential Cooling Applications

- Air Conditioning
- Oil
- Injection Molding
- Plating Process
- Welding Machine
- Computer Room Air Conditioning
- Laser
- Dry Cleaning Machine
- Jacket Cooling
- Water-Cooled Condenser
- Printing Processing
- Swimming Pools
- Aquariums
- Fish Hatcheries
- Ice skating Rinks
- Commercial Ship Cooling Applications
- Low Temperature Process
- Plastics & Rubber Industries
- Military
- Anodizing Process Cooling
- Semiconductor Cooling
- Chemical
- Energy
- Plasma Cooling
- Data Center Cooling
- Cold Storage
- Extrusion Cooling
- Custom Cooling Innovation

### Food & Beverage Industry Applications

- Bakery Processing
- Brewery
- Winery
- Drinking Water Fountain
- Batch Cooling
- Ice Machine Pre-Cool
- Fruit and Vegetable Washing and Processing
- Candy Manufacturing
- Dairy Cooling
- Soft Drink/Beverage Cooling



Dairy Cooling / Beverage Cooling



Winery & Brewery Process Cooling

### Medical & Pharmaceutical Applications

- M.R.I. Imager Cooling
- Operating Room Air Conditioning
- P.E.T. Scan
- C.A.T. Scan
- Lab Cooling
- Hypothermia Pads and Blankets
- Pharmaceutical Process Cooling



Lab Cooling



M.R.I. Imager Cooling

**Have Questions...  
Give Us a Call,  
We are Here to Help!**

**J&M Fluidics has Built a Reputation for Quality, Reliability & Attention-to-Detail with their Products.**



PSA45D  
Air-Cooled Chiller

**Every Unit Produced by J&M Fluidics is put through an Extensive Performance Test Before it Leaves the Factory!**

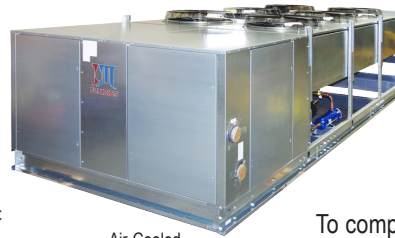
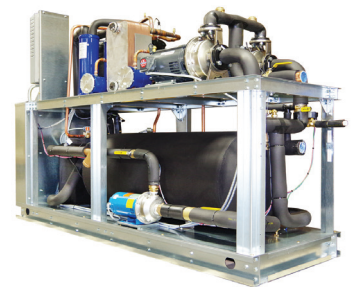


# Company Product Overview:

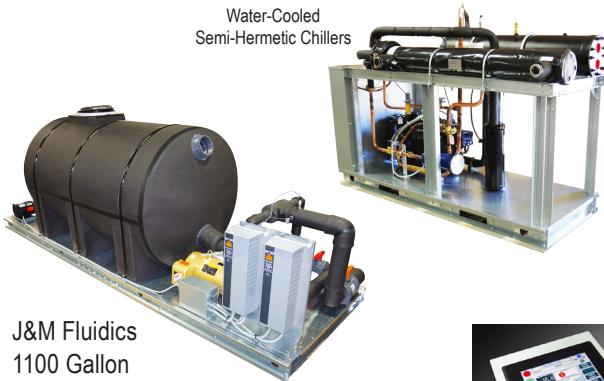
***Our Products are Built to Meet the Highest Standards in the Industry!***

**What We Build:**

- Air-Cooled Scroll Process Chillers
- Air-Cooled Digital Scroll Process Chillers
- Air-Cooled Semi-Hermetic Process Chillers
- Portable Air & Water-Cooled Process Chillers
- Water-Cooled Scroll Process Chillers
- Water-Cooled Semi-Hermetic Process Chillers
- Custom / OEM / Private Label Process Chillers
- Tank & Pump Packages
- City Water Change-Over Panels



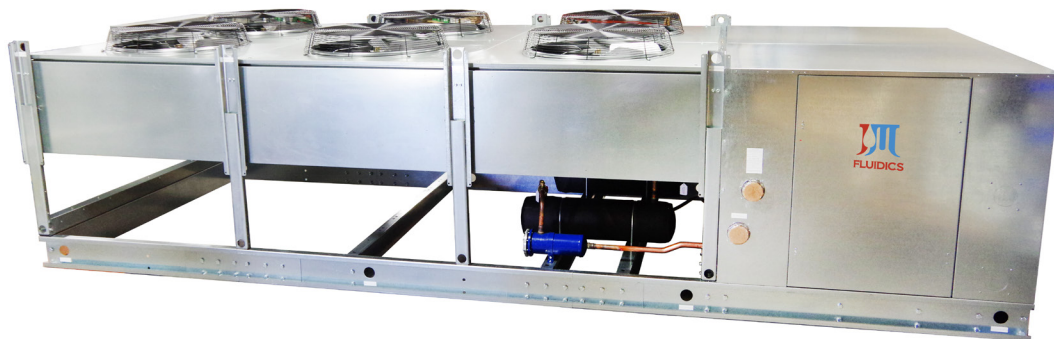
To compliment our complete line of standard products that J&M Fluidics Inc. offers, we also have the ability and resources to **custom design** and build equipment to a customers specific needs. **Please contact the factory or your J&M Fluidics representative for a special application.**



J&M Fluidics offers "E-Coated" Condenser Coils for Exceptional Protection Against Corrosive Environments.



City Water Change-Over Panels for Extra Cooling Protection for Your Process.

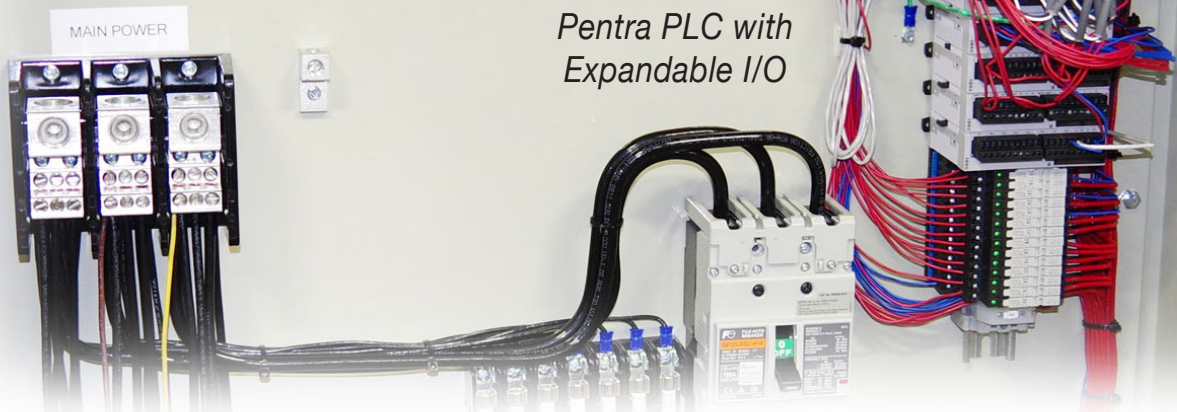


## J&M Fluidics - Process Chiller Controls

J&M Fluidics -  
HMI  
Touch Screen



J&M Fluidics -  
Pentra PLC with  
Expandable I/O



### J&M - Pentra Microsmart, Programmable Logic Controller (PLC)

**Best-In-Class PLC available for ALL J&M production chiller models.** Factory installed and programmed into your next J&M Process Chiller. The **Pentra PLC** will seamlessly interface with our HMI touch screen.

#### Pentra Key features include:

- CE, UL Listed
- Highly accurate and fast performance
- Embedded Ethernet Port
- Modbus (Slave) TCP, RTU and ASCII for integration with most Building Automation Systems (BAS)
- Optional BacNet and LONWORKS communication protocols via third party gateway hardware
- Expandable I/O, ideal for custom chiller control projects
- I/O status indicators on Pentra and I/O modules for easy diagnostics



## J&M Fluidics - Idec HMI Touchscreen Control Panel



(Inside Mounted)  
HMI Touchscreen  
Control Panel for  
Outside Chillers



(Outside Mounted)  
Touchscreen  
Control Panel for  
Indoor Chillers

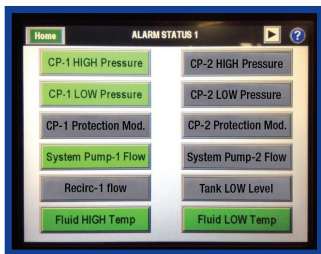


\*Some network configuration required.

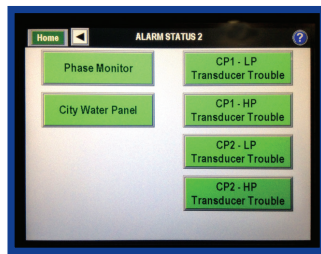
### Touch Screen Key Chiller Control Features:

- **USB update slot for IN-PLACE HMI and PLC software updates available from [jmchillers.com](http://jmchillers.com)**
- **Free Software Upgrades**
- **CE, UL Listed**
- **Monitor / Control your chiller from anywhere\***
- **4gb SD card in slot for data storage - Standard**
- **Ultra bright display screen with auto screen saver**
- **Real-time Pressure and Temperature readings**
- **Automatic COMPRESSOR Lag/Lead with FIVE operational modes**
- **Automatic SYSTEM PUMP Lag/Lead with FIVE operational modes**
- **Factory configured for ALL J&M's chiller options**

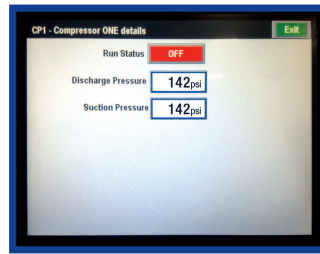
### Other Touchscreen User Interface Examples...



Alarm Status Screen 1



Alarm Status Screen 2



Compressor Operation Status and Pressures



Operational Data and Fault Log

**Have more questions?**

Call or Email: [info@jmchillers.com](mailto:info@jmchillers.com)

## Standard Features (All Models):

- ETL listed to UL1995 & CAN/CSA C22.2 No. 236-11, 4th edition, 10/14/2011
- Single point power connection
- Idec microprocessor controller with easy to use touch screen display
- **STAINLESS STEEL**, brazed plate evaporator
- Scroll compressor with crankcase heater
- Suction accumulator
- Water flow switch
- Hot gas by-pass capacity control
- 24V control transformer
- Direct drive condenser fan motor
- Rust resistant, high CFM, aluminum condenser fan blade
- Condenser(s): copper tube/aluminum fin
- Compressor motor contactor
- Condenser motor and control circuit fusing
- Painted (Powder Coated), galvanized sheet metal cabinet
- 1/2" insulation on all water and Low pressure refrigerant lines
- Liquid line drier, sight glass, solenoid, TXV
- Complete refrigerant charge from factory



Idec Touchscreen



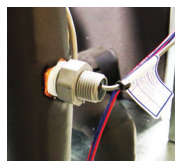
Brazed Plate Evaporator



Hot Gas By-Pass Capacity Control



Suction Accumulator



Water Flow Switch

## Tank Models Only:

- **STAINLESS STEEL** storage tank with 1/2" insulation
- Fused, **STAINLESS STEEL** re-circulation pump for tank operation with ball valve and cleanable strainer
- Tank pressure relief valve, vent and drain hose bibs

## Split System Models Only:

- Outdoor Condenser Section
- Discharge and Liquid Line ball valves on indoor and outdoor equipment

## Available Options (All Models):

- Remote Idec touchscreen control panel
- Industrial VPN Router
- 5 Port Ethernet Switch
- BacNet Gateway
- Pump VFD controller
- 4 year extended compressor warranty
- Casters (factory mounted)
- 115 volt (rain tight) service outlet
- Non Fused disconnect
- Phase monitor, line voltage monitor offering protection against phase loss/reversal, unbalance and hi/lo voltage
- Compressor fusing
- Fan cycle control (+40°F)
- Flooded condenser with receiver/head pressure control (0°F)
- Heated, flooded condenser with receiver/head pressure control (-20°F)
- Factory installed evaporator heat tape freeze protection
- Low flow by-pass valve
- Fused, **STAINLESS STEEL** process pump
- Dual system pump with manual changeover
- Dual system pump with auto changeover
- Pump suction isolation valve
- Water pressure gauge set
- Water flow meter
- Copper finned condenser coil (coastal protection)
- E-Coat condenser coil (coastal protection)
- Water flow meter
- Auto city water make up solenoid
- Auto city water changeover panel with filter
- Stainless steel, SCH80 PVC or Polypropylene piping for deionized and reverse osmosis water systems



Remote Idec Control Panel



5 Port Ethernet Switch



BacNet Gateway



VFD Controller



Industrial VPN Router



Disconnect Switch

## Tank Models Only:

- Storage Tank Sight Glass
- Tank low liquid level indicator



## Custom / OEM / Private Label Chillers

*Our Private Label Process Chillers can be “powder coated” to match your company’s brand color, plus add a label with your company logo.*



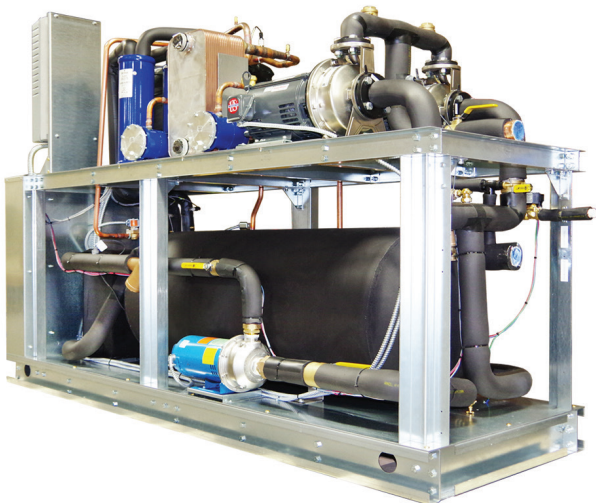
**Private Label Process Chillers:** For volume accounts, J&M Fluidics offers private label process chiller manufacturing agreements. If your company has been purchasing more than ten chillers per year, J&M Fluidics Private Label Program could double your current volume (and profit) in less than three years. This can include your current design, or a design by J&M to your specifications. Custom paint is available to match your company’s color scheme.

J&M Fluidics understands that not all process cooling requirements fit off the shelf systems designs. For this reason, J&M Fluidics provided a wide range of custom OEM design and manufacturing capabilities.

J&M Fluidics  
Custom-Water-Cooled Chiller  
Model: PZWT30DH6D



J&M Fluidics  
Custom-Water-Cooled Chiller  
Model: PZWT30DH6D



**Have more questions?**  
Call or Email: [info@jmchillers.com](mailto:info@jmchillers.com)



Precision Air-Cooled &  
Water-Cooled Process Chillers



Cooling Capacities:  
1 to 91 tons  
Nominal Tons

## *J&M Fluidics Mission...*

Our Mission is to Build the Best Equipment for Our Customers' Needs and Requirements. The J&M Fluidics Label on Our Chillers Stands for **Our Commitment to Excellence**. Our Business is Built on Outstanding After-the-Sale Technical Support and Friendly Customer Service. J&M Fluidics offers quality process fluid chillers built in the U.S. by Americans that are designed, manufactured, and delivered by quality people.



*It's All about Building a  
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Have Questions? Give Us a Call at: **888-539-1731**

Fax: 267-203-8786

Email: [info@jmchillers.com](mailto:info@jmchillers.com)

Website: [www.jmchillers.com](http://www.jmchillers.com)