



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

**1.0 to 60 HP**

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

Water-Cooled

**SCROLL**

Packaged  
Chillers

**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.

Chiller Model:

PZWT7S



Chiller Model:  
Custom - PZW15M - 208V



Chiller Model:  
PZW9S15



Chiller Model:

PZW35M  
(with custom  
chiller barrel)



Chiller Model:  
PZW3S



Visit us at: [www.jmchillers.com](http://www.jmchillers.com)

**With  
Advanced  
Controls for  
Today's Critical  
Process Chiller  
Applications!**



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**J&M Fluidics, Inc.**  
851 Tech Drive  
Telford, PA 18969

*Due to J&M Fluidics policy of continuous product improvement, J&M reserves the right to make changes without notice. Concept drawings in this booklet are representations of the equipment shown. Contact the factory for specific unit drawings.*

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*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!***

## TYPICAL J&M CHILLER APPLICATIONS

### 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

### 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

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



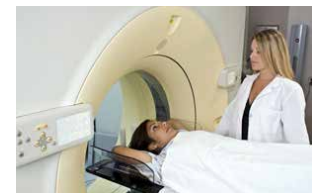
Dairy Cooling / Beverage Cooling



Winery & Brewery Process Cooling



Lab Cooling



M.R.I. Imager Cooling



Aquariums



Laser Cooling



Ice Skating Rinks



# COMPANY MISSION AND CAPABILITIES

## 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.



*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.*

### 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

Air-Cooled  
Scroll Packaged Chillers



Custom Chillers



Water-Cooled  
Semi-Hermetic Chillers



Air-Cooled  
Semi-Hermetic Chillers

PZA22DF5  
Air-Cooled Chiller



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.

J&M Fluidics  
1100 Gallon  
(Polyethylene) Dual  
Process Pump Package  
with VFD Controllers



J&M Fluidics offers **Remote Access...** Complete Touchscreen Control of the Chiller from anywhere in Your Facility.

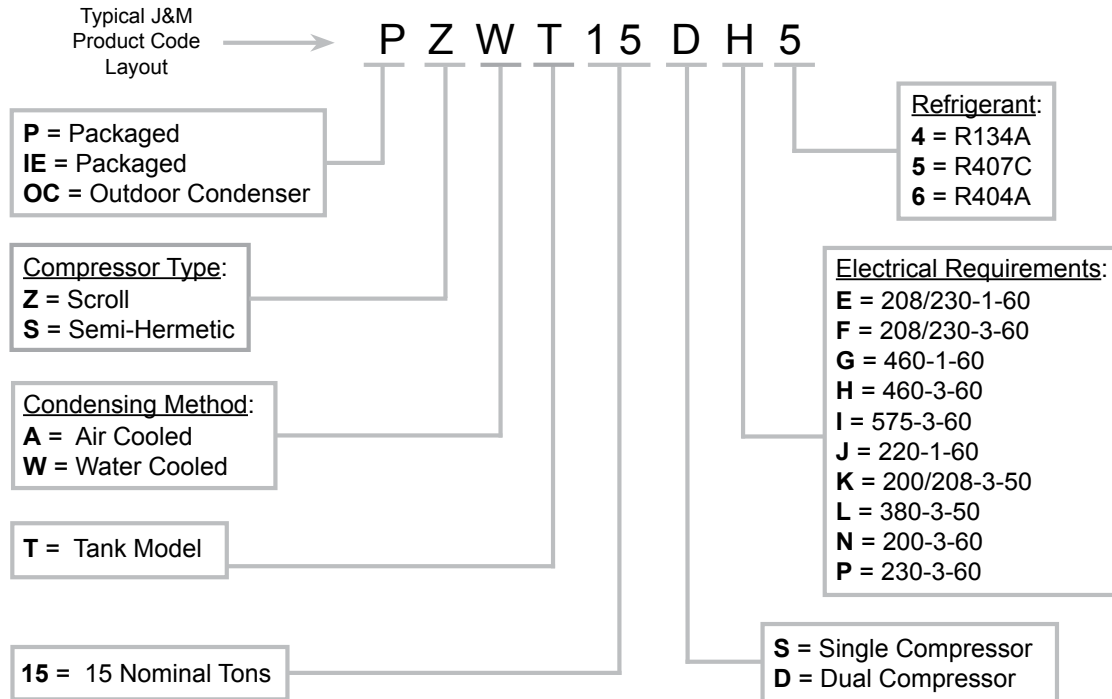
**City Water Change-Over Panels** for Extra Cooling Protection for Your Process.



We also offer **Custom Color and Private Label Chillers**



## NOMENCLATURE



### HOW TO PROPERLY SELECT AN AIR-COOLED PACKAGED CHILLER...

#### Caution



Low ambient, or lower leaving water temperatures, can require the recirculation of glycol solutions or other fluid blends.

**These solutions can effect unit capacities.**

Please consult the factory on these or other special applications for proper chiller and component sizing.

**To properly select an Air-Cooled Packaged Chiller, the following information must be known:**

1. The required cooling capacity, BTUH.
2. Delta T of entering and leaving fluid temperatures.
3. Fluid factor (ex. water = 500).
4. GPM of process fluid to be circulated.
5. Design ambient air temperature.

If you know any three of the above items 1 through 4 above, you can calculate the fourth by using the formulas below.

**For 100% water:**

- Cooling capacity (in BTUH) = GPM x Delta T x 500
- GPM = Capacity (in BTUH) / Delta T x 500
- Delta T = Capacity (in BTUH) / GPM x 500

**Sample selection:**

Select a water-cooled, packaged chiller to cool 15 GPM of 100% water from 54°F to 44°F. Design condensing temperature 105°F. **Find:** Water-cooled chiller model.

**Solution:**

1. Chilled fluid Delta T = 54°F - 44°F = 10°F
2. Capacity (in BTUH) = 15 GPM x 10°F Delta T x 500 = 75,000 BTUH
3. From the PZW chiller capacity tables, it can be determined that the PZW7S or PZW7D has the capacity to meet the requirements.

***Need Help... Just Give Us a Call... We are Here to Help!***

## 1S - 52D Water-Cooled Chillers

Model	Compressor	LWT °F	105°F Condensing		
			TONS	KW	EER
1S	ZR16K5E	42.0	1.05	1.10	11.9
		44.0	1.10	1.10	12.5
		45.0	1.13	1.10	12.8
		50.0	1.26	1.10	14.4
1.5S	ZS15KAE	42.0	1.77	1.73	12.7
		44.0	1.84	1.72	13.3
		45.0	1.88	1.72	13.5
		50.0	2.07	1.69	15.2
2S	ZS19KAE	42.0	1.99	1.94	12.7
		44.0	2.08	1.94	13.3
		45.0	2.12	1.93	13.6
		50.0	2.33	1.90	15.2
2.5S	ZS26KAE	42.0	2.98	2.56	14.4
		44.0	3.09	2.55	15.0
		45.0	3.16	2.55	15.3
		50.0	3.48	2.51	17.2
3S	ZS29KAE	42.0	3.33	2.85	14.5
		44.0	3.47	2.84	15.1
		45.0	3.53	2.84	15.4
		50.0	4.02	2.79	17.3
4S	ZB38KCE	42.0	4.25	3.88	13.5
		44.0	4.46	3.89	14.1
		45.0	4.54	3.90	14.4
		50.0	5.17	3.93	15.8
4.5S	ZB42KCE	42.0	4.46	4.64	12.0
		44.0	4.63	4.63	12.4
		45.0	4.71	4.40	11.6
		50.0	5.17	4.61	13.9
5S	ZB45KCE	42.0	5.19	4.54	14.2
		44.0	5.42	4.55	14.8
		45.0	5.53	4.56	15.0
		50.0	6.12	4.58	16.5
7S	ZB58KCE	42.0	6.75	5.98	14.0
		44.0	7.06	5.99	14.6
		45.0	7.21	5.99	14.9
		50.0	7.99	6.00	16.5
8S	ZB66KCE	42.0	7.66	6.70	14.2
		44.0	7.99	6.72	14.7
		45.0	8.17	6.73	15.0
		50.0	9.08	6.78	16.6
9S	ZB76KCE	42.0	9.00	8.02	13.9
		44.0	9.42	8.04	14.5
		45.0	9.58	8.05	14.8
		50.0	10.67	8.09	16.3
11S	ZB95KCE	42.0	11.04	9.82	13.9
		44.0	11.54	9.85	14.5
		45.0	11.79	9.87	14.8
		50.0	13.17	9.98	16.3

Model	Compressors	LWT °F	105°F Condensing		
			TONS	KW	EER
7D	ZS29KAE	42.0	6.7	5.7	14.5
		44.0	6.9	5.7	15.1
		45.0	7.1	5.7	15.4
		50.0	8.0	5.6	17.3
9D	ZB38KCE	42.0	8.5	7.8	13.5
		44.0	8.9	7.8	14.1
		45.0	9.1	7.8	14.4
		50.0	10.3	7.9	15.8
9.5D	ZB42KCE	42.0	8.9	9.3	12.0
		44.0	9.3	9.3	12.4
		45.0	9.4	8.8	11.6
		50.0	10.3	9.2	13.9
10D	ZB45KCE	42.0	10.4	9.1	14.2
		44.0	10.8	9.1	14.8
		45.0	11.1	9.1	15.0
		50.0	12.2	9.2	16.5
13D	ZB58KCE	42.0	13.5	12.0	14.0
		44.0	14.1	12.0	14.6
		45.0	14.4	12.0	14.9
		50.0	16.0	12.0	16.5
15D	ZB66KCE	42.0	15.3	13.4	14.2
		44.0	16.0	13.4	14.7
		45.0	16.3	13.5	15.0
		50.0	18.2	13.6	16.6
18D	ZB76KCE	42.0	18.0	16.0	13.9
		44.0	18.8	16.1	14.5
		45.0	19.2	16.1	14.8
		50.0	21.3	16.2	16.3
22D	ZB95KCE	42.0	21.8	20.2	13.3
		44.0	22.8	20.3	13.8
		45.0	23.3	20.3	14.1
		50.0	25.9	20.6	15.5
25D	ZB114KCE	42.0	25.5	24.9	12.7
		44.0	26.7	25.0	11.2
		45.0	27.3	25.1	13.4
		50.0	30.3	25.4	14.7
35D	ZR250KCE	42.0	34.5	31.8	13.4
		44.0	36.0	32.0	13.9
		45.0	36.8	32.0	14.3
		50.0	41.0	32.2	15.7
43D	ZR300KCE	42.0	41.7	38.4	13.4
		44.0	43.5	38.6	13.9
		45.0	44.5	38.6	14.3
		50.0	49.5	39.0	15.7
52D	ZR380KCE	42.0	52.7	49.0	13.3
		44.0	55.0	49.2	13.9
		45.0	56.2	49.4	14.1
		50.0	62.3	49.8	15.5



Model: PZW3S



Model: PZW9DF6



Model: PZW7S



Model: PZW9S15

1. Capacities on this chart are based on refrigerant R407C. Lower leaving water or low ambient can require the use of a glycol solution or other fluid blends. These solutions affect unit capacities. Please consult the factory on these or other special fluids.
2. KW input is for compressor(s) only.
3. EER = Energy Efficiency Ratio (BTU/watt-hour). Power inputs include compressor (s), condenser fan motor (s) and control power.

## Packaged Water-Cooled Chillers

### 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**
- Control circuit fusing
- Condenser(s): Coaxial up to PZW22D
- Condenser(s): Shell and Tube PZW26D through PZW52D
- Compressor motor contactor
- **Painted - Powder Coated (Most Models), galvanized sheet metal cabinet**
- 1/2" insulation on all water and 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



Shell & Tube

### Available Options *(All Models):*

- Remote Idec touchscreen control panel
- Industrial VPN Router
- 5 Port Ethernet Switch
- BacNet Gateway
- Process Pump VFD Controller
- 4 year extended compressor warranty
- Casters (factory mounted)
- Condenser water regulating valve
- 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
- Compressor Sound Cover
- **Factory installed evaporator heat tape freeze protection**
- Low flow by-pass valve
- Fused, **STAINLESS STEEL** process pump
- Dual system pump with manual changeover (some models)
- Dual system pump with auto changeover (some models)
- Pump suction isolation valve
- Water pressure gauge set
- Water Flow Meter
- 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

### Available Options

- Storage tank sight glass
- Tank low liquid level indicator with dry contacts



# J&M - Touch Screen User Interface



(Inside Mounted)  
Touchscreen  
Control Panel for  
Outside Chillers

(PLC)  
Pentra Logic  
Controller

(Outside Mounted)  
Touchscreen  
Control Panel for  
Indoor Chillers



## Touch Screen Key Chiller Control Features:

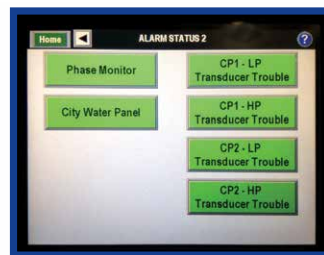
- USB update slot for IN-PLACE HMI and PLC software updates available from [jmchillers.com](http://jmchillers.com)
- Free Software Upgrades
- CE, UL Listed
- Monitor / Control your chiller from anywhere\*
- 4gb SD card in slot for data storage - Standard
- Ultra bright display screen with auto screen 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

\*Some network configuration required.

## Other Touchscreen User Interface Examples...



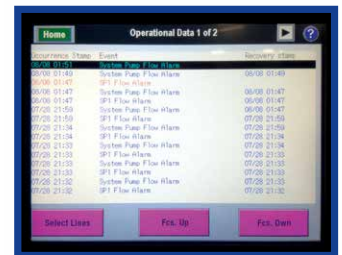
Alarm Status Screen 1



Alarm Status Screen 2



Compressor Operation Status and Pressures



Operational Data and Fault Log

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

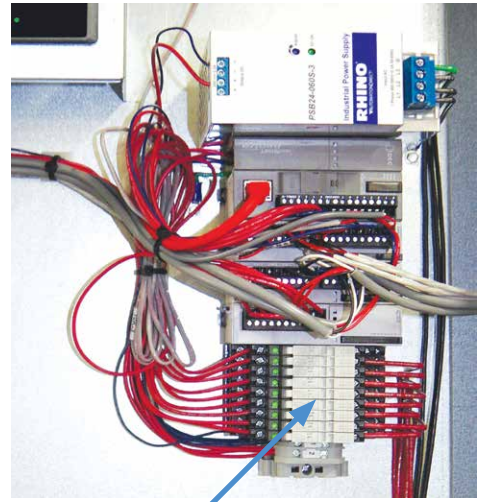
**Best-In-Class PLC available for ALL J&M production chiller models.**

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 for easy diagnostics

PLC Controller

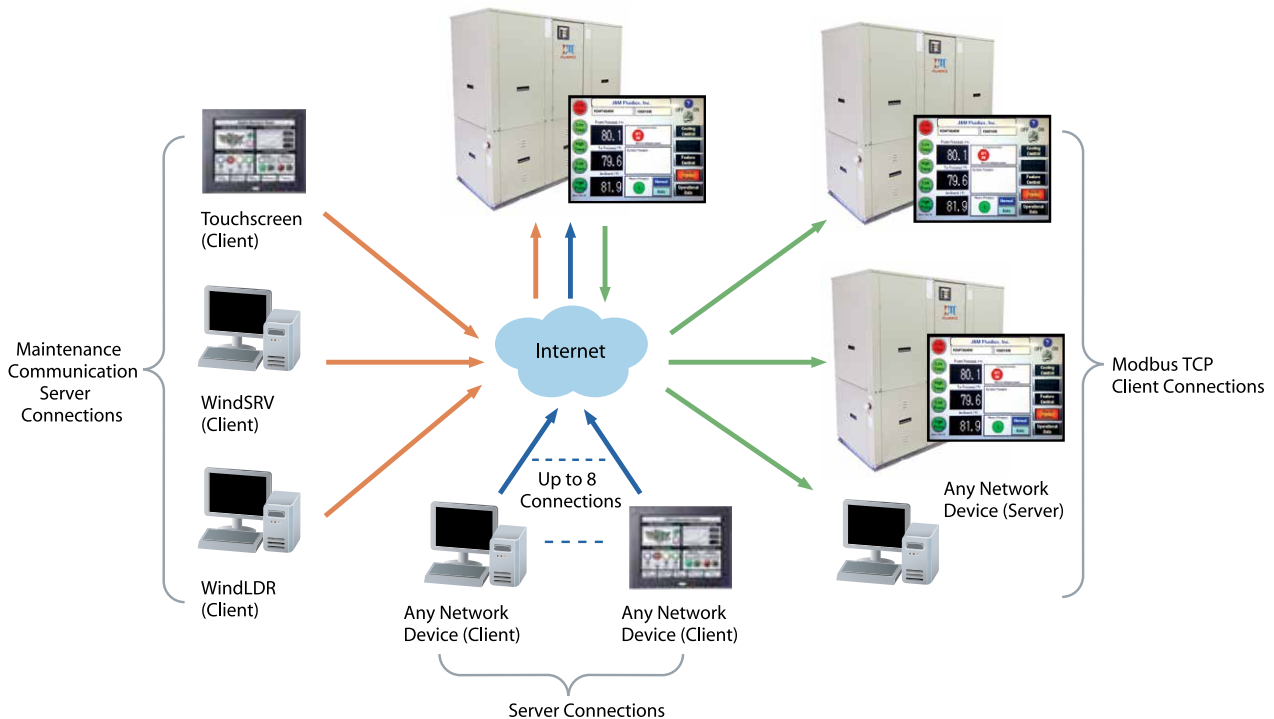


*“Plugin” Control Relays for quick easy replacement. No circuit board to replace. Less downtime and cost.*

## Offering Extended Connectivity Options...

### Up to 14 Simultaneous Connections!

Using Maintenance Communication Server connections, up to 3 Client devices, such as OI touchscreen, WindLDR software and SCADA OPC server such as WindSRV (KepServerEx), can simultaneously communicate with your MicroSmart Pentra PLC. Using Server Connections, an additional 8 connections can be established and each connection can be defined as Maintenance, User Communication or Modbus TCP server protocol. On top of that, another 3 connections can be configured as Modbus TCP client protocol, with a maximum of 255 requests. Each request can be for different slave devices with different IP addresses on the network.



**IMPORTANT CONSIDERATION:** J&M offers an optional Level 3 managed switch allowing MODBUS connectivity to the Pentra MicroSmart PLC controller. In most cases, end users firewall settings will need to be updated to allow remote WAN connectivity. J&M Fluidics can provide fee based network support for special Level 3 switch configuration.



# Single Circuit Packaged Water-Cooled Chillers



Model: PZW3S

Chiller Model	BTUH 105°F Cond. 45°F LWT	Length Inches	Width Inches	Height Inches	Compressor		RLA ea.	LRA ea.	MCA	M.O.P.	Chiller Fluid Conn.	Weight Pounds
					Qty.	HP						
PZW1SE5	13,500	36	34	36	1	1.3	8.3	40.3	15	15	1"FPT	210
PZW1.5SE5	22,500	36	34	36	1	2.0	13.5	68	20	30	1"FPT	215
PZW1.5SF5							8.0	58	15	15		
PZW1.5SH5							4.2	29	15	15		
PZW1.5SI5							3.1	24	15	15		
PZW2SE5	25,400	36	34	36	1	2.5	14.1	75	20	30	1"FPT	215
PZW2SF5							9.9	73	15	20		
PZW2SH5							5.1	38	15	15		
PZW2SI5							3.8	28	15	15		
PZW2.5SE5	37,900	36	34	36	1	3.5	19.9	104	25	40	1"FPT	245
PZW2.5SF5							12.8	93	20	25		
PZW2.5SH5							5.8	48	15	15		
PZW2.5SI5							4.7	38	15	15		
PZW3SE5	42,400	36	34	36	1	4	21.8	137	30	45	1"FPT	340
PZW3SF5							15.4	114	20	30		
PZW3SH5							7.1	58	15	15		
PZW3SI5							5.2	43	15	15		
PZW4SE5	54,500	46	34	36	1	5	27.1	175	35	60	1"FPT	400
PZW4SF5							18.6	128	25	40		
PZW4SH5							8.0	63	15	20		
PZW4SI5							6.3	50	15	15		
PZW4.5SE5	56,500	46	34	36	1	5	25.0	129	35	50	1"FPT	425
PZW5SF5	66,400	46	34	36	1	6	18.6	156	25	40	1"FPT	450
PZW5SH5							10.3	75	15	20		
PZW5SI5							7.1	54	15	15		
PZW7SF5	86,500	46	34	36	1	8	28.8	195	40	60	1.25"FPT	525
PZW7SH5							14.7	95	20	30		
PZW7SI5							10.8	80	15	20		
PZW8SF5	98,000	46	34	36	1	9	30.1	225	40	60	1.25"FPT	585
PZW8SH5							15.5	114	20	30		
PZW8SI5							12.1	80	20	25		
PZW9SF5	115,000	46	34	36	1	10	37.2	239	50	80	1.25"FPT	600
PZW9SH5							17.2	125	25	35		
PZW9SI5							12.4	80	20	25		
PZW11SF5	139,500	46	34	36	1	12	49.4	300	70	110	1.25"FPT	725
PZW11SH5							23.1	150	30	50		
PZW11SI5							19.2	109	25	40		

1) The calculations for the MCA and MOP are based on requirements of NFPA 70, the National Electrical Code (NEC) and CSA C22.1, the Canadian Electrical Code (CEC). The MCA is the minimum wire size needed to guarantee that the wiring will not overheat under any operating conditions. The MOP is the maximum allowable circuit breaker size that will properly disconnect power to the equipment under any anticipated fault condition.

2) Weights are based on models with standard features only. Weights will increase with each added option. Consult factory.



Both Views Shown:  
Model PZW9DF6

## Dual Circuit Packaged Water-Cooled Chillers

Chiller Model	BTUH 105°F Cond 45°F	Length Inches	Width Inches	Height Inches	Compressor		RLA ea.	LRA ea.	MCA	M.O.P.	Chiller Fluid Conn.	Weight Pounds
					Qty.	HP						
PZW7DE5	84,800	65	34	37	2	4	21.8	137	60	80	1.25"FPT	725
PZW7DF5							15.4	114	35	45		
PZW7DH5							7.1	58	20	20		
PZW7DI5							5.2	43	15	15		
PZW9DE5	109,000	65	34	37	2	5	27.1	175	70	90	1.25"FPT	750
PZW9DF5							18.6	128	50	60		
PZW9DH5							8.0	63	20	25		
PZW9DI5							6.3	50	20	20		
PZW9.5DE5	113,000	65	34	37	2	5	25.0	129	70	90	1.25"FPT	775
PZW10DF5	132,800	65	34	37	2	6	18.6	156	50	60	1.25"FPT	800
PZW10DH5							10.3	75	30	35		
PZW10DI5							7.1	54	20	25		
PZW13DF5	173,000	75	34	37	2	8	28.8	195	80	100	1.25"FPT	900
PZW13DH5							14.7	95	40	50		
PZW13DI5							10.8	80	30	35		
PZW15DF5	196,000	75	34	37	2	9	30.1	225	80	100	1.25"FPT	965
PZW15DH5							15.5	114	40	50		
PZW15DI5							12.1	80	35	40		
PZW18DF5	230,000	75	34	37	2	10	37.2	239	100	125	1.5"FPT	975
PZW18DH5							17.2	125	50	60		
PZW18DI5							12.4	80	35	45		
PZW22DF5	279,000	75	34	37	2	12	49.4	300	125	150	1.5"FPT	1000
PZW22DH5							23.1	150	60	70		
PZW22DI5							19.2	109	45	60		
PZW26DF5	327,000	85	34	59	2	15	60.0	340	135	195	2"MPT	1950
PZW26DH5							31.4	173	80	100		
PZW26DI5							25.0	132	60	80		
PZW35DF5	442,000	85	34	59	2	20	81.4	505	200	250	2"MPT	2200
PZW35DH5							37.9	225	90	110		
PZW35DI5							32.1	180	80	100		
PZW43DF5	534,000	100	34	59	2	25	100.0	500	225	300	2"MPT	2350
PZW43DH5							48.6	250	110	150		
PZW43DI5							36.4	198	90	110		
PZW52DF5	674,000	100	34	59	2	30	121.4	599	300	350	2.5"MPT	2500
PZW52DH5							59.3	310	150	175		
PZW52DI5							47.1	239	110	150		

1) The calculations for the MCA and MOP are based on requirements of NFPA 70, the National Electrical Code (NEC) and CSA C22.1, the Canadian Electrical Code (CEC). The MCA is the minimum wire size needed to guarantee that the wiring will not overheat under any operating conditions. The MOP is the maximum allowable circuit breaker size that will properly disconnect power to the equipment under any anticipated fault condition.

2) Weights are based on models with standard features only. Weights will increase with each added option. Consult factory.

Model PZW35M  
(with custom chiller barrel)



# Packaged, Air-Cooled Chillers with Stainless Steel Tank

Chiller Model	Nominal BTUH	Length Inches	Width Inches	Height Inches	Compressor		RLA		LRA	Recirculation Pump FLA	MCA	M.O.P.	Reservoir Gal.	Chiller Fluid Conn	Weight Pounds
					Qty.	HP	Ea.	Ea.							
PZWT1SE5	14,000	36	34	64.5	1	1.3	8.3	40.3		4.2	15	20	20	1"FPT	450
PZWT1.5SE5	18,000	36	34	64.5	1	2	13.5	68		4.2	25	30	20	1"FPT	500
PZWT1.5SF5							8.0	58		4.2	15	20			
PZWT1.5SH5							4.2	29		0.9	15	15			
PZWT1.5SI5							3.1	24		0.72	15	15			
PZWT2SE5	22,000	36	34	64.5	1	2.5	14.1	75		4.2	25	35	20	1"FPT	550
PZWT2SF5							9.9	73		4.2	20	25			
PZWT2SH5							5.1	38		0.9	15	15			
PZWT2SI5							3.8	28		0.72	15	15			
PZWT2.5SE5	28,800	36	34	64.5	1	3.5	19.9	104		4.2	30	45	20	1"FPT	600
PZWT2.5SF5							12.8	93		4.2	25	30			
PZWT2.5SH5							5.8	48		0.9	15	15			
PZWT2.5SI5							4.7	38		0.72	15	15			
PZWT3SE5	36,000	36	34	64.5	1	4	21.8	137		4.2	35	50	20	1"FPT	650
PZWT3SF5							15.4	114		4.2	25	35			
PZWT3SH5							7.1	58		0.9	15	20			
PZWT3SI5							5.2	43		0.72	15	15			
PZWT4SE5	49,200	46	34	68.5	1	5	27.1	175		4.2	40	60	50	1"FPT	700
PZWT4SF5							18.6	128		4.2	30	45			
PZWT4SH5							8.0	63		0.9	15	15			
PZWT4SI5							6.3	50		0.72	15	15			
PZWT4.5SE5	51,600	46	34	68.5	1	5	25.0	129		4.2	40	60	50	1"FPT	725
PZWT5SF5	55,200	46	34	68.5	1	6	18.6	156		4.2	30	45	50	1"FPT	775
PZWT5SH5							10.3	75		0.9	15	20			
PZWT5SI5							7.1	54		0.72	15	15			
PZWT7SF5							28.8	195		5.4	45	70			
PZWT7SH5	75,600	46	34	68.5	1	8	14.7	95		1.4	20	30	50	1"FPT	850
PZWT7SI5							10.8	80		1	15	25			
PZWT8SF5							30.1	225		6.6	45	70			
PZWT8SH5	84,000	75	34	70	1	9	15.5	114		1.7	25	35	80	1.25"FPT	1000
PZWT8SI5							12.1	80		1.5	20	25			
PZWT9SF5	98,400	75	34	70	1	10	37.2	239		7.9	60	90	80	1.25"FPT	1050
PZWT9SH5							17.2	125		2.5	25	40			
PZWT9SI5							19.2	80		1.8	20	25			
PZWT11SF5	122,400	75	34	70	1	12	49.4	300		7.9	70	110	80	1.25"FPT	1200
PZWT11SH5							23.1	150		2.5	35	50			
PZWT11SI5							20.7	109		1.8	30	45			
PZWT7DE5	73,200	75	34	70	2	4	25	132		6.7	70	90	50	1.25"FPT	1000
PZWT7DF5							14.6	115		6.7	40	50			
PZWT7DH5							6.9	48		1.7	20	20			
PZWT7DI5							5.9	40		1	15	20			
PZWT9DE5	96,000	75	34	70	2	5	30.1	175		10	80	100	80	1.25"FPT	1100
PZWT9DF5							20.7	128		10	60	70			
PZWT9DH5							8.9	63		2.8	25	30			
PZWT9DI5							7.1	50		1.8	20	25			
PZWT9.5DE5	102,000	75	34	70	2	5	27.9	129		10	80	100	80	1.25"FPT	1200
PZWT10DF5	108,000	75	34	70	2	6	20.7	156		10	60	70	80	1.25"FPT	1250
PZWT10DH5							11.5	75		2.8	30	40			
PZWT10DI5							7.9	54		1.8	20	25			
PZWT13DF5	147,000	75	34	70	2	8	32.1	195		10.5	90	110	80	1.5"FPT	1300
PZWT13DH5							16.4	95		3.2	40	50			
PZWT13DI5							12	80		2.3	30	40			
PZWT15DF5	167,000	85	34	70	2	9	33.6	225		7.9	90	110	120	1.5"FPT	1400
PZWT15DH5							17.3	114		2	45	50			
PZWT15DI5							13.5	80		1.5	35	45			
PZWT18DF5	190,800	85	34	70	2	10	41.4	239		5.6	100	125	120	1.5"FPT	1450
PZWT18DH5							19.2	125		2.8	50	60			
PZWT18DI5							13.8	80		1.8	35	45			
PZWT22DF5	240,200	85	34	70	2	12	53.6	300		5.6	150	175	120	2"FPT	1600
PZWT22DH5							24.3	150		2.8	60	80			
PZWT22DI5							20.7	109		1.8	50	60			

1) The calculations for the MCA and MOP are based on requirements of NFPA 70, the National Electrical Code (NEC) and CSA C22.1, the Canadian Electrical Code (CEC). The MCA is the minimum wire size needed to guarantee that the wiring will not overheat under any operating conditions. The MOP is the maximum allowable circuit breaker size that will properly disconnect power to the equipment under any anticipated fault condition.

2) Weights are based on models with standard features only. Weights will increase with each added option. Consult factory.



## Dimensional Specifications, Features and Options

### Polyethylene Tank & Pump

TANK MODEL	LENGTH IN.	WIDTH IN.	HEIGHT IN.	WATER CONN.	TANK CAPACITY	RECIRCULATION PUMP	FLA 230/3Ø	FLA 460/3Ø	WEIGHT LBS.
RRT200	88	56	60	2" FPT	200 GALLONS	3HP	9.4	4.5	445
RRT300	88			2.5" FPT	300 GALLONS	3HP	9.4	4.5	465
RRT500	120			3" FPT	500 GALLONS	5HP	13.7	6.5	595
RRT600	120			4" FPT	600 GALLONS	5HP	13.7	6.5	625

### Stainless Steel Tank & Pump

TANK MODEL	LENGTH IN.	WIDTH IN.	HEIGHT IN.	WATER CONN.	TANK CAPACITY	RECIRCULATION PUMP	FLA 230/3Ø	FLA 460/3Ø	WEIGHT LBS.
RRT20-SS	36	34	36	1" FPT	20 GALLONS	1/2HP	2.6	1.3	475
RRT50-SS	46			1" FPT	50 GALLONS	1/2HP	2.6	1.3	525
RRT80-SS	75			1 1/4" FPT	80 GALLONS	3/4HP	3.5	1.7	600
RRT120-SS	85			1 1/2" FPT	120 GALLONS	1 1/2HP	5.6	2.8	675

#### (Stainless Steel Tank) Standard Features:

- **STAINLESS STEEL** storage tank
- 20, 50, 80, & 120 gallon tank sizes
- 1/2" tank and fluid piping insulator
- Copper fluid piping
- Tank vent and drain connections
- Tank pressure relief valve
- Fused evaporator fluid re-circulating **STAINLESS STEEL** pump
- Fluid pump discharge ball valve and cleanable "Y" strainer
- Control box with pump terminal block
- Painted (Powder Coated), galvanized sheet metal cabinet



(Stainless Steel Inside Tank)  
Model: RST120H

#### Available Options:

- Fused, **STAINLESS STEEL** process pump
- Dual process pump with manual changeover
- Dual process pump with auto changeover
- Pump suction isolation valve
- **Process Pump VFD Controller**
- **Tank fluid sight glass**
- Tank liquid level indicator with dry contacts
- Low flow by-pass valve
- **Water flow meter**
- Auto city water make up solenoid
- Stainless steel, SCH80 PVC or Polypropylene piping for de-ionized and reverse osmosis water systems
- 1" tank and piping insulation in lieu of 1/2"
- Seal-tight electrical conduit and connections



Shown Below:  
Model: RST120H,  
with Stainless Steel  
Piping inside

#### (Polyethylene Tank) Standard Features:

- Open Vented **Polyethylene tank**
- **200, 300, 500, & 600 gallon open-vented tank sizes**
- 1/2" tank and fluid piping insulation
- SCH80 PVC and Polypropylene piping
- Fused evaporator fluid re-circulating **STAINLESS STEEL** pump
- Chiller evaporator pump discharge ball valve and cleanable "Y" strainer
- Control box with pump terminal block
- Galvanized steel sheet metal cabinet
- Hinged removable access panels



(Polyethylene Tank)  
600 Gallon Tank & Pump  
Package with  
Dual Process Pumps

#### Available Options:

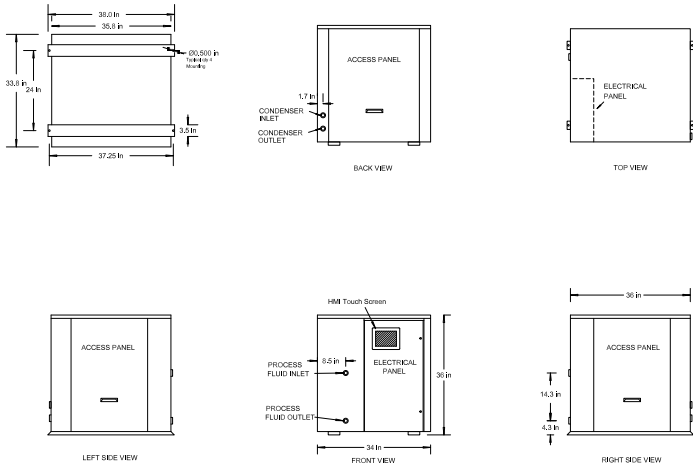
- Fused, **STAINLESS STEEL** process pump
- Dual process pump with manual changeover
- Dual process pump with auto changeover
- Pump suction isolation valve
- **Process Pump VFD Controller**
- **Tank fluid sight glass**
- Tank liquid level indicator with dry contacts
- Low flow by-pass valve
- **Water flow meter**
- Auto city water make up solenoid
- 1" tank and piping insulation in lieu of 1/2"
- Seal-tight electrical conduit and connections



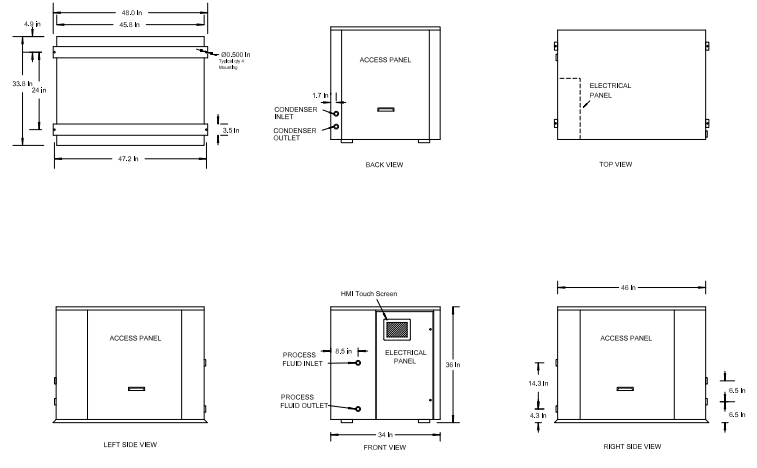
Inside View:  
Model: RRT600H,  
Dual Vertical 10 HP  
Process Pumps

# R407C Packaged, Water-Cooled Chillers

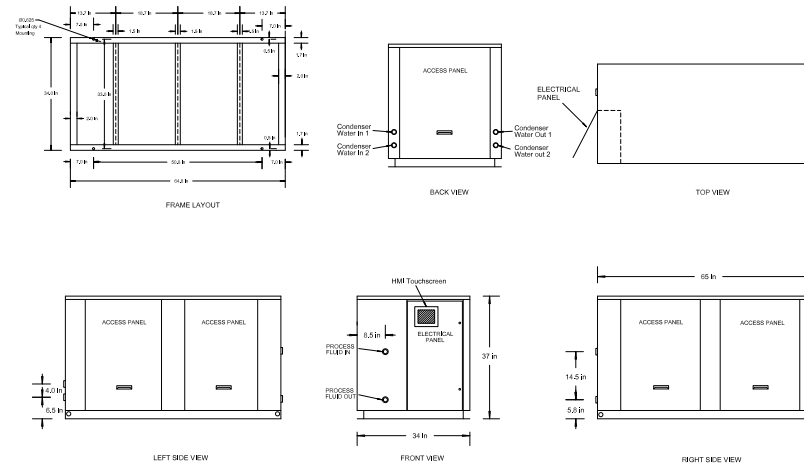
**PZW1S, 1.5S, 2S, 2.5S, 3S**



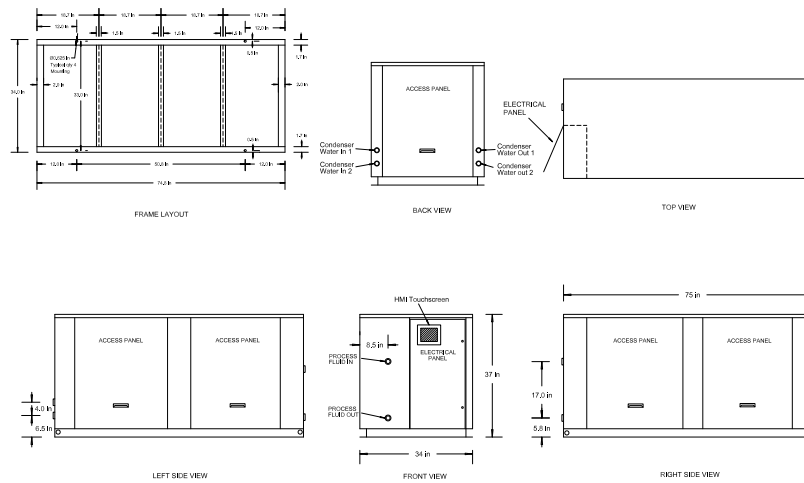
**PZW4S, 4.5S, 5S, 7S, 8S, 9S, 11S**



**PZW7D, 9D, 9.5D, 10D**

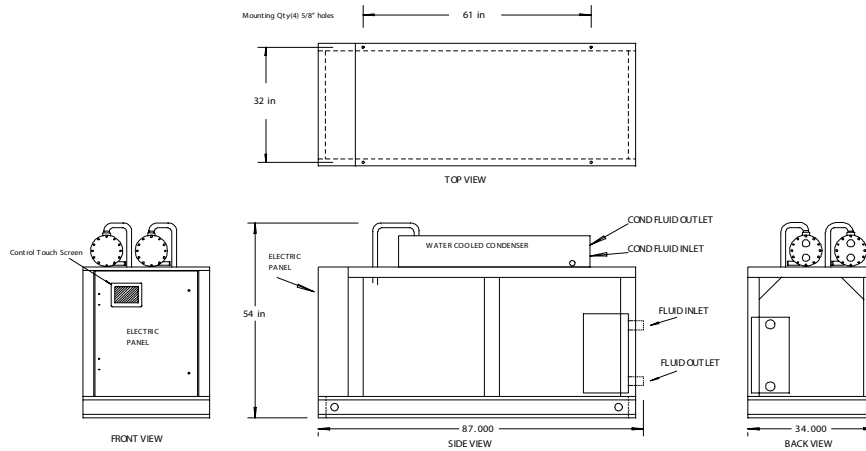


**PZAT13D, 15D, 18D**

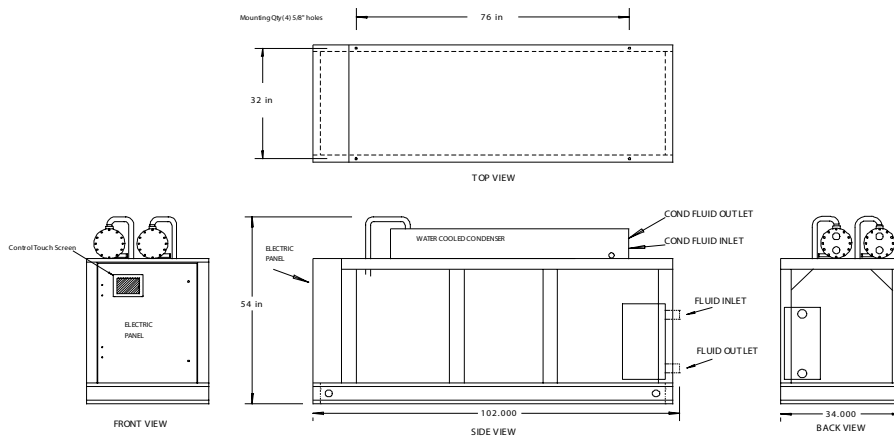


# R407C Packaged, Water-Cooled Chillers

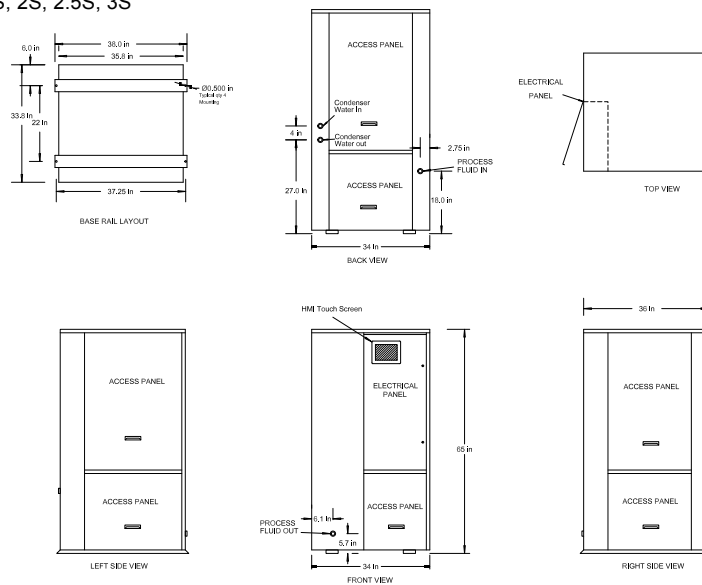
**PZW26D, 35D**



**PZW43D, 55D**



**PZWT1S, 1.5S, 2S, 2.5S, 3S**







PROPYLENE GLYCOL CAPACITY CORRECTION FACTOR TABLE							
PERCENT PROPYLENE GLYCOL BY WEIGHT	15%	20%	25%	30%	35%	40%	50%
FREEZING POINT IN °F	24	18	15	9	5	-5	-30
CAPACITY FACTOR MULTIPLIER*	0.992	0.986	0.972	0.960	0.950	0.928	0.878
PRESSURE DROP MULTIPLIER	1.04	1.08	1.13	1.21	1.26	1.47	2.79
ETHYLENE GLYCOL CAPACITY CORRECTION FACTOR TABLE							
PERCENT ETHYLENE GLYCOL BY WEIGHT	10%	15%	20%	25%	30%	35%	40%
FREEZING POINT IN °F	25	21	17	11	5	0	-10
CAPACITY FACTOR MULTIPLIER*	0.98	0.96	0.95	0.93	0.92	0.91	0.89
PRESSURE DROP MULTIPLIER	1.08	1.11	1.16	1.21	1.27	1.32	1.38

\* At standard ARI 590 conditions: 54°F entering fluid temperature, 44°F leaving fluid temperature, 95°F ambient temperature, 0.0005 fouling.



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

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