

MARSH INSTRUMENT COMPANY

Division of Colorado Oil and Gas Corporation
3501 Howard St., Skokie, Ill.

Branch Factories: 1121 Rothwell St., Sect. 15, Houston, Texas; 10372 58 Avenue, Edmonton, Alberta Canada.

Warehouses and Sales Offices: 1209 Anderson Avenue, Fort Lee, New Jersey; 15145 Loraine Avenue, Cleveland, Ohio; 35 Stoffel Drive, Rexdale Ontario, Canada.

Sales Offices in principal cities

Marsh products include: Pressure, Vacuum and Compound Gages; Dial Thermometers; Steam Traps; Vents; Packless Radiator Valves and Radiator Traps; Refrigeration Water Regulators; Refrigeration Testing Instruments; Solenoid Valves; Needle Throttling Valves.

Radiator Traps—Equipped with the famous Marsh phosphor bronze diaphragm charged with volatile fluid. Extremely rugged, but so sensitive it closes tight on steam and opens instantly to pass condensate and air at only a few degrees below closing temperature. Highly efficient on pressures from below atmospheric up to 25 psi. Other traps available for pressures up to 125 psi.



Radiator Trap and Packless Valve available in full range of sizes and patterns. Adjustable orifice valves are available.

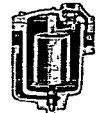
Packless Radiator Valves—for hot water or steam, maximum water pressure 125 psi. Mechanical seal eliminates packing of any kind. New R-105 series enables you to adjust orifice with twist of screwdriver to balance either steam or hot water system.

Floater and Thermostatic Traps—Designed for complete removal of air and condensate from steam mains, branches and risers. Condensate discharged through float operated valve at bottom; air through vent in top. Wide range of pressure and capacity ratings. One of the many float and thermostatic traps is illustrated. Line also includes float traps.



Marsh Floater and Thermostatic Trap.

Inverted Bucket Traps—Marsh quality and performance in a trap for applications where the inverted bucket type is indicated.



Marsh Inverted Bucket Trap.

Air Vents—Automatically remove air and gasses from tanks, coils or piping, liquid pump systems, and other similar applications. Float holds valve tightly closed when system is filled. Opens only when air accumulates. Has vacuum check which prevents return of air. Type illustrated is for working pressures up to 125 psi. Other types, including float and thermostatic types, for low pressure.



Marsh No. 50 Air Vent

Solenoid Valves—in the "Master-mite" line may be had as either direct-acting conduit or grommet type. There are two port sizes: 1/4" and 1/2" NPT. Wide range of voltages: 12, 24, 115, 208, 230 and 460 V, a-c. Pressures from vacuum to 540 psi. Orifice sizes vary. Type 16 offers four: 3/64" through 3/32". Type 26 has ten: 3/64" through 1/4". Type 36 has eight body orifices, 3/64" through 5/32" and four top orifices, 3/64" through 3/32". Many are Underwriters' approved as safety valve. Other Marsh solenoids, both direct-acting and pilot-operated, cover wide range of needs.



"Master-mite" Solenoid Valve Conduit type

Pressure Gauges and Dial Thermometers—The respected Marsh line covers every requirement for pressure, compound, altitude gauges, thermometers and dial thermometers. Marsh instruments are the product of nearly a century of experience. Sizes, ranges and case styles for all needs.

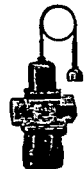


Marsh Ther-Altimeter (Square and Round types)



Marsh Ounce-Graduated Retard Gauge

Refrigeration Valves—Type 56 pressure-actuated regulating valves shown here are adjustable for both Refrigerant 12 and 22—from 60 to 270 psi. Though compact, they have ample capacity for wide range of applications. Other Marsh water regulating valves are both temperature and pressure-actuated.



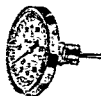
Type 56 Water Regulator

Piping and Duct Thermometers—For piping, air ducts, vessels, kilns, ovens, etc. Unbreakable with greater reading accuracy than glass tube thermometers. Line of 4 types, 7 ranges, 72 combinations. Big, legible 3 1/4" and 4 1/4" dials easily tilted or turned to best reading angle. Specify direct mount or distant reading. Separable sockets for easy installation. Extension necks for insulated piping or ducts. Long stems in duct types put temperature-sensitive section where it must be for accurate indication.



Marsh Piping Thermometer

Bimetal Thermometers—Marsh Master Therm Bimetals are accurate to 1% of range. Available with *Conoweld, Read-Easy* dial and *Recalibrator*. Back or bottom connection. Seamless steel stems 2 1/4", 4", 6", 9", 12", 15", 18" and 24". Dial sizes 2", 3", 5" or 6 1/2". Adjustable Master Therm with 5/4" or 6 1/4" dials only. Ranges from 0-250° F. to 200°-1000° F.



Master Therm Bimetal Thermometer, Back Connection

FOR FURTHER INFORMATION, WRITE FOR MARSH CATALOG C-100



HYDROTHERM



DEPT. AG-21, NORTHVALE, NEW JERSEY

PACKAGED AUTOMATIC GAS HEATING PLANTS

Providing Space or Volume Water Heating for Residential, Commercial and Industrial Uses

65,000 BTU/hr to 3,600,000 BTU/hr INPUT RATINGS



Model R-105 with Hammered finish jacket: 48" Dia., 21" x 31" x 30 1/2"

HYDROTHERM

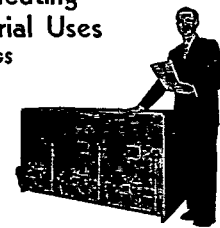
HYDROTHERM boilers are of all cast iron construction and are exclusively designed for gas. The patented absorption unit, composed of deep-rib horizontal sections connected in zigzag, permits maximum heat transfer in minimum space with small water content. This "true" gas design results in low fuel consumption, quick heat response, uniform heat transfer, self cleaning flue passages, and small installation space. HYDROTHERM boilers are A.G.A.-approved for all gases and are factory assembled and wired with the finest safety and gas controls, ready for quick installation. Boiler and controls are enclosed in an attractively finished insulated steel jacket.

All boilers are tested at 250# hydrostatic pressure and carry a 100# ASME rating which permits direct connection of boilers to city water lines as required for volume water heating applications.

MULTI-TEMP

MULTI-TEMP, a new concept in heavy duty gas-fired hot water heating, provides any desired capacity with a multiple of HYDROTHERM units, each equipped with its own controls. True input modulation is accomplished by having the separate boiler units fired or cut out in response to a special Minneapolis Honeywell electronic step-control. This control receives its signal from indoor-outdoor resistance bulbs. If the temperature in the supply header exceeds the desired setting, it simply steps back until the signals received from outside and inside are in balance. In less critical installations, boiler units can be controlled by aquastats with different settings in the return manifold.

MULTI-TEMP, being composed of multiple units, offers extra protection against service interruption. Each boiler unit is shipped completely assembled to simplify field installation.



Multi-Temp Model R-200: 1800 Dia., 60" x 52" x 52"

CAPACITY RANGE OF HYDROTHERM BOILERS

Model No.		SPACE HEATING A.G.A. RATINGS								VOLUME WATER HEATING GALLONS PER HOUR FOR TEMP. RISE SHOWN A.G.A. Approved as Central Heating Boilers							
		Natural, Mixed and Manufactured Gas				L. P. Gas (Propane)				Natural, Mixed and Manufactured Gas				L. P. Gas (Propane)			
		Input 1000 BTU/hr.	Output 1000 BTU/hr.	Net L.B.R. Rating 1000 BTU/hr.	EDR Sq. Ft. Inst. Red.	Input 1000 BTU/hr.	Output 1000 BTU/hr.	Net L.B.R. Rating 1000 BTU/hr.	EDR Sq. Ft. Inst. Red.	80°	120°	140°	80°	120°	140°		
Single Units	HC-45	65	52	39	240	60	48	36	240	80	63	52	44	74	57	48	40
	HC-85	85	68	51	340	77	62	46	306	102	81	68	58	94	75	61	52
	HC-100	100	80	60	400	100	80	60	400	120	96	80	69	120	96	80	69
	HC-125	125	100	75	500	125	100	75	500	150	120	100	86	150	120	100	86
	HC-145	145	116	87	580	145	116	87	580	174	139	116	100	174	139	116	100
Single Units Jacketed	R-125	125	100	75	500	120	96	72	480	120	100	86	144	115	96	82	68
	R-135	135	124	93	620	155	124	93	620	186	149	124	106	186	149	124	106
	R-180	180	144	108	720	180	144	108	720	216	173	145	124	216	173	145	124
	R-210	210	168	126	840	210	168	126	840	252	202	169	145	252	202	169	145
	R-250	250	200	150	1,000	250	200	150	1,980	300	240	200	173	300	240	200	173
Multi-Temp Units Jacketed	R-300	300	240	180	1,200	290	232	174	1,160	360	288	240	206	348	278	232	191
	R-360	360	288	216	1,440	360	288	216	1,440	430	350	290	230	430	350	290	230
	R-420	420	336	252	1,680	420	336	252	1,680	510	410	340	270	510	410	340	270
	R-500	500	400	300	2,000	500	400	300	2,000	600	480	400	340	600	480	400	340
	R-600	600	480	360	2,400	580	464	348	2,320	720	580	480	410	720	580	480	410
Multi-Temp Units Jacketed	R-750	750	600	450	3,000	730	600	450	3,000	900	720	600	520	910	720	600	520
	R-900	900	720	540	3,600	870	696	522	3,480	1080	870	720	620	1090	870	720	620
	R-1000	1,000	800	600	4,000	1,000	800	600	4,000	1,210	960	800	690	1,200	960	800	690
	R-1200	1,200	960	720	4,800	1,160	928	696	4,640	1,410	1,160	960	830	1,400	1,120	930	800
	R-1500	1,500	1,200	900	6,000	1,450	1,160	870	5,800	1,810	1,450	1,210	1,030	1,750	1,400	1,160	1,000
	R-1800	1,800	1,440	1,080	7,200	1,750	1,392	1,054	7,020	2,170	1,740	1,450	1,240	2,100	1,680	1,400	1,200
	R-2100	2,100	1,680	1,260	8,400	2,050	1,624	1,248	7,920	2,530	2,020	1,650	1,450	2,450	1,960	1,630	1,400
	R-2400	2,400	1,920	1,440	9,600	2,350	1,856	1,418	9,000	2,890	2,310	1,930	1,650	2,800	2,240	1,860	1,600
	R-2700	2,700	2,160	1,620	10,800	2,650	2,088	1,621	10,080	3,250	2,600	2,170	1,860	3,140	2,520	2,100	1,800
	R-3000	3,000	2,400	1,800	12,000	2,950	2,320	1,801	12,010	3,610	2,890	2,410	2,070	3,490	2,800	2,330	2,000
	R-3300	3,300	2,640	2,040	13,200	3,250	2,552	1,981	13,210	3,970	3,180	2,630	2,270	3,860	3,070	2,560	2,200
	R-3600	3,600	2,880	2,236	14,400	3,550	2,784	2,161	14,410	4,330	3,470	2,890	2,480	4,190	3,350	2,800	2,400

These ratings are based on piping and pickup factors established by "The Institute of Boiler Manufacturers." When piping losses are negligible, output may be increased 12%, as in panel and baseboard heating, etc.

OTHER FAMOUS HYDROTHERM PRODUCTS

