High Performance Low-Temperature Return Eutectic Cast Iron Boilers

Low Return Water Capability Maximizes Energy Savings

The GT 530A/AE Series is an eutectic cast iron 4-pass, high efficiency, large net output, low operating temperature, designed boiler. These boilers are specifically designed for oil/gas/propane firing.

The GT 530A/AE is equipped with a service friendly control panel with built-in ON/OFF limit, high limit, manual reset limit and a temperature gauge.

The GT 530A/AE is a Four Pass Design with a generous combustion chamber and horizontal flue passes with fins. The heat transfer is enhanced by the fins and eutectic cast iron baffles. This body design assures:

- Efficiency up to 87.8%
- Low water pressure drops
- Low noise level
- High thermal efficiency and heat transfer

Low Water Outlet Temperature down to 105°F with indoor/outdoor reset achieves significant energy savings by reducing stand-by fuel consumption. In addition, it's not necessary to maintain boiler temperature between the two heating cycles, which further reduces fuel consumption and achieves excellent overall efficiency. Studies show substantial savings over retrofit boilers and over new competitive models.

Easy Cleaning with Hinged Door for burner and flue access. Doors can be hinged right or left based on your access needs. Boiler is easily cleaned and vacuumed, resulting in lower maintenance costs.

Eutectic Cast Iron boiler body provides exceptional resistance to temperature variations and thermal stress. De Dietrich's eutectic cast iron is 30% more flexible than any competitive cast iron allowing safe low temperature operation.

Four Inch Insulation featuring reinforced fiberglass wool. De Dietrich Boilers feature double insulation of the boiler front which minimizes heat loss and allows reduced stand-by consumption and improved thermal efficiency.

Control Panel. The control panel supplied is designed for heating applications. The panel is equipped with a boiler thermometer, ON/OFF limit, high limit and manual reset limit. The large size permits it to be integrated easily with third party energy management systems.

Standard Equipment

- Eutectic Cast Iron Nipples
- Built-in High Limit with Manual Reset
- Thermocord Combustion Seal
- CSA/CSD-1 Compliant Controls and accessories
- Low NO_x Burners (optional)
- Factory Assembly (optional)
- BACnet (optional)

Consult your local De Dietrich representative for a list of available burners. Thermocord & Groove system eliminates gaskets - the number one cause of boiler maintenance



De Dietrich's eutectic" cast iron delivers 30% more flexibility, providing the industry's best thermal shock resistance



Flexible eutectic cast iron allows 105°F supply water capability. This low temperature operations yields significant fuel savings



TH!NK BOILERS... TH!NK



DDR Americas Inc.

1-519-650-0420











GT53 007 v1.0 01/20:

EUTECTIC CAST IRON BOILERS

COMMERCIAL AND INSTITUTIONAL

GT 530A/AE







A Symbol of Quality Engineering For Over Three Centuries



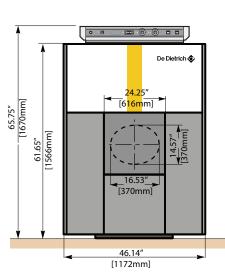
- CSA certified up to 85.2% Efficiency on Natural Gas and 87.8% on #2 Fuel Oil
- Near Condensing Eutectic Cast Iron Boiler
- Up to 89°F differential temperatures with no Thermal Shock
- Firing rates of 3,700 to 8,190 MBH
- Maximum Working Pressure 90 p.s.i.

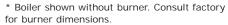
www.dedietrichboilers.com

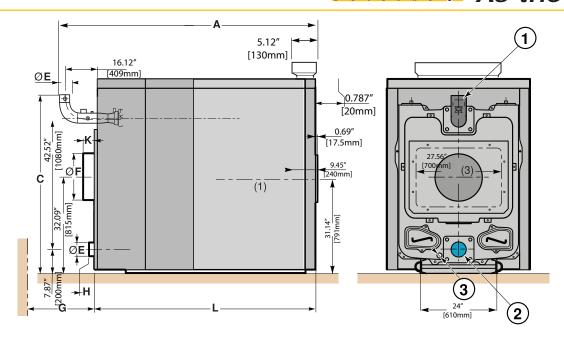


GT 530A/AE

De Dietrich As the Boiler Should Be!!!



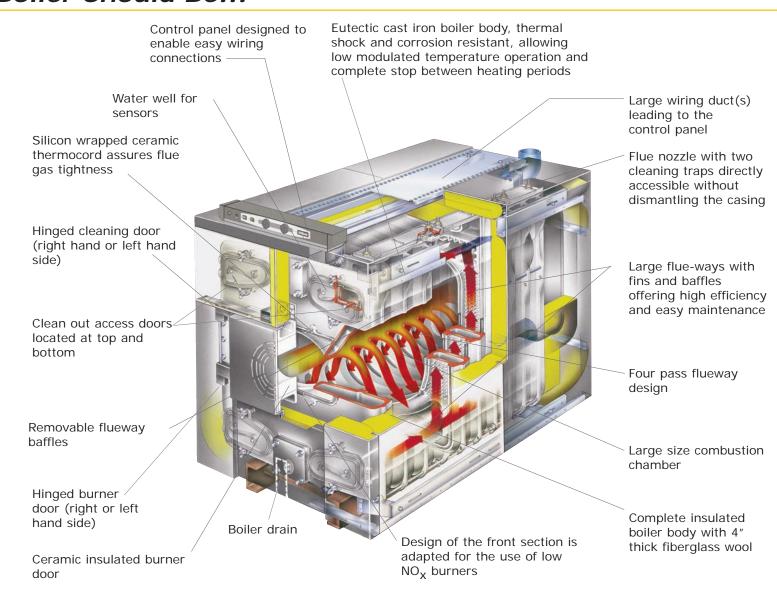




GT 530AE GT 530A -18 -19 -20 -25 -26 -27 -29 -30 -31 -32 -22 -23 -24 112.68/ 117.05/ 2,862 2,973 122.99/ 127.36/ 3,124 3,235 131.73/ 3,346 140.47/ 144.84/ 3,568 3,679 164.4/ 164.9/ 4,177 4,189 169.3/ 4,300 178.1/ 4,523 136.1/ 3,457 173.7/ 4,411 182.4/ 186.9/ 4,634 4,746 58.58/ 58.58/ 58.58/ 1,488 1,488 1,488 59.2/ 1,504 65.0/ 1,650 59.2/ 1,504 59.2/ 1,504 59.2/ 1,504 59.2/ 1,504 59.2/ 1,504 59.2/ 1,504 59.2/ 1,504 65.0/ 1,650 65.0/ 1,650 65.0/ 1,650 65.0/ 1,650 65.0/ 1,650 65.0/ 1,650 5.5/ 6.26/ 159 6.26/ 159 6.26/ 159 6.26/ 159 6.26/ 159 6.26/ 159 6.26/ 159 6.26/ 159 5.5/ 5.5/ 139.7 5.5/ 5.5/ 5.5/ 5.5/ 139.7 15.75/ 400 15.75/ 400 15.75/ 400 15.75/ 400 15.75/ 400 18/ 450 18/ 450 18/ 450 18/ 450 18/ 450 20.0 500 20.0 500 20.0 500 20.0 500 20.0 500 20.0 500 14.57/ 370 14.57/ 14.57/ 370 25.59/ 25.59/ 650 650 25.59/ 650 38.58/ 38.58/ 38.58/ 980 41.6/ 41.6/ 1,056 41.6/ 1,056 41.6/ 1,056 41.6/ 41.6/ 1,056 150 370 980 1,056 1,056 1,056 980 -0.315/ 0.512/ -8 13 -1.417/ -1.378/ -36 -35 -0.551/ -14 -0.512/ 0.315/ -13 8 -0.354/ -9 0.354/ 9 8.7/ 221 4.3/ 110 0.4 10 1.3/ 33 0.827/ 21 0.827/ 0.827/ 21 21 0.827/ 0.827/ 21 21 0.827/ 21 -0.748/ -0.709/ 0.118/ 0.157/ 0.984/ -0.945/ -0.905/ -0.0787/ -0.0394/ 0.787/ 0.827/ 0.827/ 25 -24 -23 -2 20 21 21 124.21/ 127.76/ 132.09/ 138.8/ 142.3/ 3,155 3,245 3,355 3,525 3,614 88.39/ 92.72/ 96.26/ 100.59/ 104.13/ 112.01/ 116.34/ 119.88/ 2,245 2,355 2,445 2,555 2,645 2,845 2,955 3,045 146.6/ 150.2/ 3,724 3,814 154.5/ 3,924 158.0/ 162.4/ 4,014 4,124

Boiler supply, 5" ANSI 150# welded neck flange Boiler return, 5" ANSI 150# welded neck flange Drain, 3/4" NPT

F*- Nominal length. Consult vent supplier for correct sizing. G*- Length required for clearing the water distributing tube. K*- Dimension representing the end of the 4"/100mm long chimney connection



- All models are design certified & eligible to bear approval marking as shown
- CSA MBH output based on thermal efficiency ANSI Z21.13/CSA 4.9 latest standard
- All models comply and are certified in accordance to the latest Canadian & US standards
- Boiler limits sensing location measuring internal mixed boiler water temperature, actual boiler supply temperature will be less - approximately 18°F/10°C
- All conditions and specifications designed around 80°F/26.6°C return temperature - All models certified: #2 oil, Natural & Propane gases. Consult factory for available burners.
- CRN design registration for each Canadian province.
- Flow rates shown are nominal, flow shall range from 1/3 to 3 times nominal values - max delta $T = 89^{\circ}F/45^{\circ}C$

	Unit	GT 530A											GT 530AE						
		-15	-16	-17	-18	-19	-20	-21	-22	-23	-24	-25	-26	-27	-28	-29	-30	-31	-32
Gas Input (CSA)	MBH/kW	3,749/ 1,099	3,986/ 1,162	4,254/ 1,247	4,470/ 1,310	4,759/ 1,395	4,975/ 1,458	5,191/ 1,521	5,480/ 1,606	5,696/ 1,669	5,984/ 1,754	6,201/ 1,817	6,483/ 1,900	6,652/ 1,950	6,825/ 2,000	7,166/ 2,100	7,505/ 2,200	7,849/ 2,300	8,190/ 2,400
#2 Fuel Oil Input (CSA)	US GPH	26.00	27.50	29.50	31.00	33.00	34.50	36.00	38.00	39.50	41.50	43.00	43.80	45.80	47.70	49.70	51.60	53.60	55.50
CSA Output (Gas/Oil)	MBH/kW	3,194/ 936.2	3,379/ 990.2	3,624/ 1,062.2	3,809/ 1,116.2	4,054/ 1,188.3	4,239/ 1,242.3	4,423/ 1,296.3	4,669/ 1,368.3	4,853/ 1,422.3	5,099/ 1,494.3	5,283/ 1,548.3	5,524/ 1,618.8	5,668/ 1,661.1	5,815/ 1,704.2	6,105/ 1,789.4	6,394/ 1,874.1	6,687/ 1,959.9	6,978/ 2,045.1
Thermal Efficiency	%	Gas 85.2%/Oil 88.2%																	
Cast iron sections	#	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Water Resistance Delta T = (°F)	18°F Ft H ₂ O	3.28	1.09	1.28	1.45	1.75	2.0	2.21	2.48	2.70	3.01	3.27	3.48	3.67	3.86	4.26	4.67	5.1	5.56
	27°F Ft H₂O	1.46	0.48	0.57	0.64	0.78	0.89	0.98	1.10	1.20	1.34	1.45	1.55	1.63	1.72	1.9	2.07	2.27	2.5
	36°F Ft H₂O	0.82	0.27	0.32	0.36	0.44	0.50	0.55	0.62	0.68	0.75	0.82	0.87	0.92	0.97	1.06	1.17	1.28	1.39
ASME MAWP (Water)	PSIG	90 psig																	
Min. Safety Relief Capacity	PSIG	3,513	3,717	3,986	4,190	4,459	4,663	4,865	5,136	5,338	5,609	5,811	6,076	6,234	6,396	6,716	7,034	7,356	7,676
Electrical Connection	V/P/H	120/1/60 < 15A fuse																	
Max. Water Temperature Safety Limit (MR)	°F/°C	Fixed non-adjustable 248/120																	
Water operating temperature range	°F/°C		Boiler 104°F - 212°F/40°C - 100°C factory preset to stop at 185/85 (CM21 high temperature kit available)																
Gas-Vent Category	#							Cat	egory I, II, II	I, IV & Direct	Vent (sealed	combustion	air)						
Boiler Vent Connection	Inch	16	16	16	16	16	16	16	18	18	18	18	20	20	20	20	20	20	20
Weight (Dry)	lb kg	7,416 3,364	7,851 3,561	8,280 3,756	8,719/ 3,955	9,092/ 4,124	9,575/ 4,343	10,004/ 4,538	10,437/ 4,734	10,869/ 4,930	11,259/ 5,107	11,678/ 5,297	12,111/ 5,494	12,501/ 5,670	12,891/ 5,847	13,281/ 6,024	13,671/ 6,201	14,061/ 6,378	14,451/ 6,555



Setting the Benchmark for Low-Temperature Fully Condensing Eutectic Cast Iron Boilers