

D'Alessandro CS Pellet Boiler Overview

Fuel: Wood Pellets

Applications: Small and large residential, garage, shop, central heating systems

Sizes: 102,000 – 341,000 Btu

Pellet Models (examples, estimates only)

Model	Size (Btu)	Heating Capacity*	Pellet Consumption**	Oil Replaced (estimated)***
CS 30	102,390	1062-1700 sq ft	5.2-7.4 tons	624-888 Gals.
CS 45	153,585	1920 - 3071 sq ft	7.9-11.2 tons	948-1344 Gals.
CS 60	204,780	4096-6826 sq ft	10.5-15 tons	1260-1800 Gals.
CS 80	273,040	5460-9101 sq ft	14-20 tons	1680-2400 Gals.
CS 100	341,300	6826-11377 sq ft	17.5-25 tons	2100-3000 Gals.

Features:

- Robust steel construction
- Automatic ignition
- Feed modulation
- Fire-tube design for easy access and simple cleaning
- Cast iron burner with primary and secondary combustion air system

Options:

- Bulk fuel storage
- Lambda O2 trim
- Induced Draft Fan
- Automatic ash removal

Installation Requirements:

- 230VAC Power
- Vent/Stack
- Water hookups
- Concrete pad (suggested)
- Suspended tank or other pressurized H2O, for fire safety



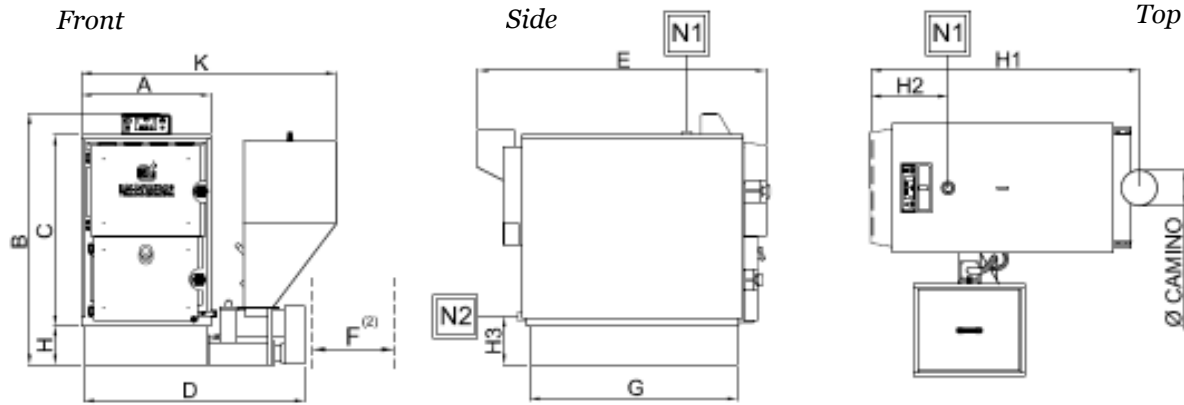
*Based on 50-80 Btu/sq ft, will vary with building use, design, and heat loss.

**Estimated consumption at full output, 850-1200 operating hrs/year for the model/size.

***All figures based on 16,500,000 Btu/ton wood pellets, 138,000 Btu/Gallon heating oil

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Technical Data Sheet - Models 30-100



MODELS		CS 30		CS 45		CS 60		CS 80		CS 100	
Firebox Output	(Btu/kW)	119,455	35	180,889	53	242,323	71	320,822	94	392,495	115
Nominal Output	(Btu/kW)	102,390	30	153,585	45	204,780	60	273,040	80	341,300	100
Fuel Consumption*	(Lb/Hr)	11.4		17.2		23.1		30.6		37.4	
Fuel Used		wood pellets									
Fuel Specifications**		<i>PFI Super Premium, PFI Premium, PFI Standard</i>									
Max Working Pressure	(psi/bar)	40 / 2.8									
Max Working Temperature	(f/C)	194 / 90									
DIMENSIONS											
A	(inches)	27.6		27.6		27.6		27.6		27.6	
B	(inches)	53.7		53.7		53.7		53.7		53.7	
C	(inches)	40.9		40.9		40.9		40.9		40.9	
D	(inches)	47.2		47.2		47.2		47.2		47.2	
E	(inches)	33.9		37.8		45.7		53.5		61.4	
F	(inches)	19.7		19.7		19.7		19.7		19.7	
G	(inches)	16.5		20.5		28.3		36.6		44.5	
K	(inches)	54.7		54.7		54.7		54.7		54.7	
H	(inches)	8.5		8.5		8.5		8.5		8.5	
H1	(inches)	29.9		33.9		41.7		49.6		57.5	
H2	(inches)	14.6		16.5		16.5		16.5		16.5	
H3	(inches)	10.2		10.2		10.2		10.2		10.2	
CONNECTIONS											
N1 (Supply)	(inches)	1.5									
N2 (Return)	(inches)	1.5									
Fuel Hopper Capacity	(Lbs)	127									
Boiler Water Capacity	(Gals.)	34		41		54		67		81	
Boiler Weight	(Lbs)	726		792		902		1012		1122	
Loss of head at 10k	(mbar)	8		12.5		16		31		49	
Loss of head at 20k	(mbar)	20		32		58		72		87	
Flue Diameter	(inches)	8.0									
Draft Required	("w.c.)	0.1									
Average stack temperature	(f/C)	338 / 170									

*Based on firing at 80% firebox output and 8400 Btu/lb fuel heat density

**Details on Pellet Fuels Institute Standards at: www.pelletheat.org