

**INOV8 International Inc.**  
**Buderus System With INOV8 Model S200 Burner**

Buderus Boiler Specifications for INOV8 System:	B120	B175	B225	B275	B325	B400	B500	B650
<b>Buderus Boiler Model #</b>	G115-5	G215-4	G215-5	G215-6	G215-7	G315-5	G315-6	G315-7
Oil Input - MBH (based on 140,000/hour)	0.95	1.26	1.53	1.89	2.25	2.70	3.46	4.23
Gross Output (de-rated 10% from Buderus ratings)	122,400	153,900	186,300	230,400	264,600	315,000	408,600	503,100
Net IBR MBH (de-rated 10% from Buderus ratings)	107,100	134,100	162,000	200,700	230,400	273,600	355,500	437,400
Overall Boiler Length in inches	33 3/8	31	35 3/4	40 1/2	45 1/2	44 1/4	55 1/2	56 3/4
Boiler Block Length	30 1/2	26 3/4	31 1/2	36 1/4	41	38 1/4	44 1/12	50 3/4
Minimum Boiler Width	18	18	18	18	18	20	20	20
Boiler Width with Jacket & insulation	23 1/2	23 1/2	23 1/2	23 1/2	23 1/2	34 3/4	34 3/4	34 3/4
Fire Box Depth	33 1/2	21 1/2	26 1/4	31	35 3/4	31	37 1/2	43 3/4
Fire Box Diameter	25 3/4	13 1/4	13 1/4	13 1/4	13 1/4	15 3/4	15 3/4	15 3/4
Fire Box Volume (cu. Ft.)	11 1/4	1.73	2.1	2.48	2.86	5.19	6.39	7.59
Dry Weight (lbs)	2.21	500	600	700	800	1,197	1,391	1,585
Water Content (gal)	476	16.1	19.3	22.5	25.6	37.8	45.2	52.6
Operating Weight (lbs)	12.9	634	761	888	1014	1,512	1,768	2,024
Foundation Length	20 7/8	24 3/4	29 1/2	34	39	36	42 1/2	48 1/2
<b>Boiler &amp; water side connections:</b>								
Water connection -inches	1.25	1.5	1.5	1.5	1.5	3	3	3
Return water connection (NPT)	1	1.5	1.5	1.5	1.5	3	3	3
Drain connection size - inches	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Vent connection - inches	5	6	6	6	6	7	7	7
Chimney size- inches (minimum per Buderus)	6	8	8	8	10	10	10	10
Chimney height - feet (minimum per Buderus)	15	15	15	15	15	15	15	15
<b>Clearances (in inches)</b>								
Side wall	15	15	15	15	15	15 3/4	15 3/4	15 3/4
Side wall - to accommodate burner door swing	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	43	43	43
Front of boiler	51 1/8	51 1/8	51 1/8	51 1/8	51 1/8	79	85	91
Behind (1/2 boiler length plus 20")	15 3/4	27 1/2	27 1/2	27 1/2	27 1/2	40	43	46
Top	12	12	12	12	12	12	12	12
Chimney connector side	18	18	18	18	18	18	18	18
<b>Boiler operating requirements</b>								
Max operating temperature - F	240							
Max operating pressure - PSIG	58							
Max supply temperature - F	248							
Min supply temperature - F	150							
Min required draft - inches of WC	-0.02							
Firebox Pressure (In. of W.C.)						.28 - .50	.54 - .71	.53 - .75
Draft Inducer, recommended Tjernlund Model:	D-3	D-3	D-3	D-3	I	I	I	I
Tjernlund connection size (inches)	8	8	8	8	8	8	8	8
<b>Standard features of Buderus Boiler System:</b>								
Factory assembled cast iron sections (can be ordered knocked-down)								
Full-size burner door hinged left or right (field selectable)								
Supply & return connections at rear of boiler								
Blue enamel jacket with 3 1/2" wrap-around thermal insulation (packaged separate from cast iron)								
Flexible GL-180M cast iron with silicon "barrier skin", precision casting eliminates need for manual grinding								
No refractory or target cup needed due to chamber geometry								
Precision machined steel push nipple sectional construction								
Tongue and groove flue side sealing for pressurized operation								
Boiler brushes & Installation Manual								

Note: boilers de-rated 10% to accommodate waste oil flame when used with atomizing air. Ratings are at clean conditions.