

## Turndown vs. Valve Position

Unit	Low Fire	High Fire	Turndown
BMK 750	50,000	750,000	15:1
BMK 1000	50,000	1,000,000	20:1
BMK 1500	75,000	1,500,000	20:1
BMK 2000	100,000	2,000,000	20:1
BMK 2500	166,667	2,500,000	15:1
BMK 3000	200,000	3,000,000	15:1
BMK 6000	400,000	6,000,000	15:1
INN 600	42,857	600,000	14:1
INN 800	44,444	800,000	18:1
INN 1060	44,167	1,060,000	24:1
INN 1350	45,000	1,350,000	30:1

BMK 750 Boiler - 15:1 Turndown		
Fire Rate (Valve Position)	BTU/H Input	% of Unit's Full Capacity
18% open	50,000	6.7%
20% open	52,000	6.9%
30% open	108,000	14%
40% open	246,000	33%
50% open	369,000	49%
60% open	465,000	62%
70% open	554,000	74%
80% open	637,000	85%
90% open	733,000	98%
100% open	750,000	100%

BMK 1000 Boiler - 20:1 Turndown		
Fire Rate (Valve Position)	BTU/H Input	% of Unit's Full Capacity
18% open	50,000	5%
20% open	54,000	5.4%
30% open	140,000	14%
40% open	297,000	30%
50% open	443,000	44%
60% open	564,000	56%
70% open	660,000	66%
80% open	789,000	79%
90% open	933,000	93%
100% open	1,000,000	100%

BMK 1500 Boiler - 20:1 Turndown		
Fire Rate (Valve Position)	BTU/H Input	% of Unit's Full Capacity
16% open	76,000	5%
20% open	127,000	8.5%
30% open	366,000	24.4%
40% open	629,000	41.9%
50% open	822,000	54.7%
60% open	977,000	65%
70% open	1,119,000	74.5%
80% open	1,255,000	83.5%
90% open	1,396,000	92.9%
100% open	1,502,000	100%

BMK 2000 Boiler - 20:1 Turndown		
Fire Rate (Valve Position)	BTU/H Input	% of Unit's Full Capacity
16% open	100,000	6.7%
20% open	143,000	11%
30% open	388,000	23%
40% open	759,000	37%
50% open	1,069,000	51%
60% open	1,283,000	61%
70% open	1,476,000	74%
80% open	1,675,000	83%
90% open	1,833,000	93%
100% open	2,000,000	100%

BMK 2500 Boiler - 15:1 Turndown		
Fire Rate (Valve Position)	BTU/H Input	% of Unit's Full Capacity
16% open	167,000	5%
30% open	430,000	17%
40% open	770,000	32%
50% open	1,070,000	45%
60% open	1,440,000	58%
70% open	1,815,000	71%
80% open	2,030,000	81%
90% open	2,300,000	92%
100% open	2,500,000	100%

BMK 3000 Boiler - 15:1 Turndown		
Fire Rate (Valve Position)	BTU/H Input	% of Unit's Full Capacity
14% open	200,000	6.7%
20% open	320,000	11%
30% open	690,000	23%
40% open	1,110,000	37%
50% open	1,530,000	51%
60% open	1,820,000	61%
70% open	2,210,000	74%
80% open	2,490,000	83%
90% open	2,780,000	93%
100% open	3,000,000	100%

BMK 6000 Boiler - 15:1 Turndown		
Fire Rate (Valve Position)	BTU/H Input	% of Unit's Full Capacity
18% open	385,000	6.7%
20% open	400,000	11%
30% open	540,000	23%
40% open	770,000	37%
50% open	1,160,000	51%
60% open	1,650,000	61%
70% open	2,386,000	74%
80% open	3,515,000	83%
90% open	4,650,000	93%
100% open	6,000,000	100%

INN 600 Boiler - 14:1 Turndown		
Fire Rate (Valve Position)	BTU/H Input	% of Unit's Full Capacity
16% open	45,000	6%
20% open	97,000	12%
30% open	192,000	24%
40% open	330,000	41%
50% open	424,000	53%
60% open	486,000	61%
80% open	615,000	77%
100% open	800,000	100%

INN 800 Boiler - 18:1 Turndown		
Fire Rate (Valve Position)	BTU/H Input	% of Unit's Full Capacity
16% open	45,000	6%
20% open	97,000	12%
30% open	192,000	24%
40% open	330,000	41%
50% open	424,000	53%
60% open	486,000	61%
80% open	615,000	77%
100% open	800,000	100%

INN 1060 Boiler - 24:1 Turndown		
Fire Rate (Valve Position)	BTU/H Input	% of Unit's Full Capacity
16% open	45,000	4%
20% open	97,000	9%
30% open	222,000	21%
40% open	416,000	39%
50% open	520,000	49%
60% open	715,000	67%
80% open	845,000	80%
100% open	1,060,000	100%

INN 1350 Boiler - 30:1 Turndown		
Fire Rate (Valve Position)	BTU/H Input	% of Unit's Full Capacity
16% open	45,000	3%
20% open	181,000	13%
30% open	370,000	27%
40% open	665,000	49%
50% open	870,000	64%
60% open	1,001,000	74%
80% open	1,203,000	89%
100% open	1,350,000	100%