

## AMERICA'S BOILER COMPANY

80% efficiency		84% efficiency
1,000	lbs/hr steam	1,000
<u>x 33,475</u>		<u>x 33,475</u>
33,475,000	btu/hr output	33,475,000
0.80	efficiency	0.84
41,843,750	btu/hr input	39,851,190
1,000	btu/cu ft natural gas	1,000
41,844	cu ft/ hr gas used	39,851
0.0100000	dollars/cu ft gas cost	<u>0.0100000</u>
\$418.44	gas cost for 1,000 lbs/hr steam	\$398.51
\$4,184.38	gas cost for 10,000 lbs/hr steam	\$3,985.12
81% efficiency		85% efficiency
1 000	lbs/br steam	1 000
x 33 475		x 33 475
33 475 000	htu/hr output	33 475 000
0.81	efficiency	0.85
41 327 160	btu/br input	39 382 353
1 000	htu/cu ft natural das	1 000
41 327	cu ft/ br gas used	39 382
0.0100000	dollars/cu ft das cost	0.0100000
\$413.27	gas cost for 1 000 lbs/hr steam	\$393.82
\$4,132.72	gas cost for 10,000 lbs/hr steam	\$3,938.24
000/		000/
82% efficiency		86% efficiency
82% efficiency 1,000	lbs/hr steam	86% efficiency 1,000
82% efficiency 1,000 <u>x 33,475</u> 22 475 000	lbs/hr steam	86% efficiency 1,000 <u>x 33,475</u> 22,475 000
82% efficiency 1,000 <u>x 33,475</u> 33,475,000	lbs/hr steam btu/hr output	86% efficiency 1,000 <u>x 33,475</u> 33,475,000
82% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.82</u> 40,000 474	lbs/hr steam btu/hr output efficiency	86% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.86</u> 20 204,440
82% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.82</u> 40,823,171 1,000	Ibs/hr steam btu/hr output efficiency btu/hr input	86% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.86</u> 38,924,419
82% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.82</u> 40,823,171 <u>1,000</u> 40,922	Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas	86% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.86</u> 38,924,419 <u>1,000</u> 20.024
82% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.82</u> 40,823,171 <u>1,000</u> 40,823 0.0100000	Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used	<b>86% efficiency</b> 1,000 <u>x 33,475</u> 33,475,000 <u>0.86</u> 38,924,419 <u>1,000</u> 38,924 0,0100000
82% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.82</u> 40,823,171 <u>1,000</u> 40,823 <u>0.0100000</u> (*408.23	Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used dollars/cu ft gas cost	<b>86% efficiency</b> 1,000 <u>x 33,475</u> 33,475,000 <u>0.86</u> 38,924,419 <u>1,000</u> 38,924 <u>0.0100000</u> \$290,24
82% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.82</u> 40,823,171 <u>1,000</u> 40,823 <u>0.0100000</u> \$408.23 \$408.23	Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used dollars/cu ft gas cost gas cost for 1,000 lbs/hr steam	<b>86% efficiency</b> 1,000 <u>x 33,475</u> 33,475,000 <u>0.86</u> 38,924,419 <u>1,000</u> 38,924 <u>0.0100000</u> \$389.24 \$2,802,44
82% efficiency 1,000 $\times 33,475$ 33,475,000 0.82 40,823,171 <u>1,000</u> 40,823 <u>0.0100000</u> \$408.23 \$4,082.32	Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used dollars/cu ft gas cost gas cost for 1,000 lbs/hr steam gas cost for 10,000 lbs/hr steam	<b>86% efficiency</b> 1,000 <u>x 33,475</u> 33,475,000 <u>0.86</u> 38,924,419 <u>1,000</u> 38,924 <u>0.0100000</u> \$389.24 \$3,892.44
82% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.82</u> 40,823,171 <u>1,000</u> 40,823 <u>0.0100000</u> \$408.23 \$4,082.32 83% efficiency	Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used dollars/cu ft gas cost gas cost for 1,000 lbs/hr steam gas cost for 10,000 lbs/hr steam	<b>86% efficiency</b> 1,000 <u>x 33,475</u> 33,475,000 <u>0.86</u> 38,924,419 <u>1,000</u> 38,924 <u>0.0100000</u> \$389.24 \$3,892.44 <b>87% efficiency</b>
82% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.82</u> 40,823,171 <u>1,000</u> 40,823 <u>0.0100000</u> \$408.23 \$4,082.32 83% efficiency 1,000	Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used dollars/cu ft gas cost gas cost for 1,000 lbs/hr steam gas cost for 10,000 lbs/hr steam	<b>86% efficiency</b> 1,000 <u>x 33,475</u> 33,475,000 <u>0.86</u> 38,924,419 <u>1,000</u> 38,924 <u>0.0100000</u> \$389.24 \$3,892.44 <b>87% efficiency</b> 1,000
82% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.82</u> 40,823,171 <u>1,000</u> 40,823 <u>0.0100000</u> \$408.23 \$4,082.32 83% efficiency 1,000 <u>x 33,475</u>	Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used dollars/cu ft gas cost gas cost for 1,000 lbs/hr steam gas cost for 10,000 lbs/hr steam	<b>86% efficiency</b> 1,000 <u>x 33,475</u> 33,475,000 <u>0.86</u> 38,924,419 <u>1,000</u> 38,924 <u>0.0100000</u> \$389.24 \$3,892.44 <b>87% efficiency</b> 1,000 <u>x 33,475</u>
82% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.82</u> 40,823,171 <u>1,000</u> 40,823 <u>0.0100000</u> \$408.23 \$4,082.32 83% efficiency 1,000 <u>x 33,475</u> 33,475,000	Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used dollars/cu ft gas cost gas cost for 1,000 lbs/hr steam gas cost for 10,000 lbs/hr steam lbs/hr steam btu/hr output	<b>86% efficiency</b> 1,000 <u>x 33,475</u> 33,475,000 <u>0.86</u> 38,924,419 <u>1,000</u> 38,924 <u>0.0100000</u> \$389.24 \$3,892.44 <b>87% efficiency</b> 1,000 <u>x 33,475</u> 33,475,000
82% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.82</u> 40,823,171 <u>1,000</u> 40,823 <u>0.0100000</u> \$408.23 \$4,082.32 83% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.83</u>	Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used dollars/cu ft gas cost gas cost for 1,000 lbs/hr steam gas cost for 10,000 lbs/hr steam Ibs/hr steam btu/hr output efficiency	86% efficiency 1,000 x 33,475 33,475,000 0.86 38,924,419 1,000 38,924 0.0100000 \$389.24 \$3,892.44 87% efficiency 1,000 x 33,475 33,475,000 0.87
82% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.82</u> 40,823,171 <u>1,000</u> 40,823 <u>0.0100000</u> \$408.23 \$4,082.32 83% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.83</u> 40,331,325	Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used dollars/cu ft gas cost gas cost for 1,000 lbs/hr steam gas cost for 10,000 lbs/hr steam lbs/hr steam btu/hr output efficiency btu/hr input	86% efficiency 1,000 <u>x 33,475</u> 33,475,000 <u>0.86</u> 38,924,419 <u>1,000</u> 38,924 <u>0.0100000</u> \$389.24 \$3,892.44 <b>87% efficiency</b> 1,000 <u>x 33,475</u> 33,475,000 <u>0.87</u> 38,477,011
82% efficiency 1,000 $\times 33,475$ 33,475,000 0.82 40,823,171 1,000 40,823 0.0100000 \$408.23 \$4,082.32 83% efficiency 1,000 $\times 33,475$ 33,475,000 0.83 40,331,325 1,000	Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used dollars/cu ft gas cost gas cost for 1,000 lbs/hr steam gas cost for 10,000 lbs/hr steam Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas	86% efficiency 1,000 $\times 33,475$ 33,475,000 0.86 38,924,419 1,000 38,924 0.0100000 \$389.24 \$3,892.44 87% efficiency 1,000 $\times 33,475$ 33,475,000 0.87 38,477,011 1,000
82% efficiency 1,000 $\times 33,475$ 33,475,000 0.82 40,823,171 1,000 40,823 0.0100000 \$408.23 \$4,082.32 83% efficiency 1,000 $\times 33,475$ 33,475,000 0.83 40,331,325 1,000 40,331	Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used dollars/cu ft gas cost gas cost for 1,000 lbs/hr steam gas cost for 10,000 lbs/hr steam Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used	86% efficiency 1,000 x 33,475 33,475,000 0.86 38,924,419 1,000 38,924 0.0100000 \$389.24 \$3,892.44 87% efficiency 1,000 x 33,475 33,475,000 0.87 38,477,011 1,000 38,477
82% efficiency 1,000 $\times 33,475$ 33,475,000 0.82 40,823,171 1,000 40,823 0.0100000 \$408.23 \$4,082.32 83% efficiency 1,000 $\times 33,475$ 33,475,000 0.83 40,331,325 1,000 40,331 0.0100000	Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used dollars/cu ft gas cost gas cost for 1,000 lbs/hr steam gas cost for 10,000 lbs/hr steam Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used dollars/cu ft gas cost	86% efficiency 1,000 $\times 33,475$ 33,475,000 0.86 38,924,419 <u>1,000</u> 38,924 0.0100000 \$389.24 \$3,892.44 87% efficiency 1,000 $\times 33,475$ 33,475,000 0.87 38,477,011 <u>1,000</u> 38,477 0.0100000
82% efficiency 1,000 x 33,475 33,475,000 0.82 40,823,171 1,000 40,823 0.0100000 \$408.23 \$4,082.32 83% efficiency 1,000 x 33,475 33,475,000 0.83 40,331,325 1,000 40,331 0.0100000 \$403.31	Ibs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used dollars/cu ft gas cost gas cost for 1,000 lbs/hr steam gas cost for 10,000 lbs/hr steam btu/hr output efficiency btu/hr input btu/cu ft natural gas cu ft/ hr gas used dollars/cu ft gas cost gas cost for 1,000 lbs/hr steam	86% efficiency 1,000 $\times 33,475$ 33,475,000 0.86 38,924,419 1,000 38,924 0.0100000 \$389.24 \$3,892.44 87% efficiency 1,000 $\times 33,475$ 33,475,000 0.87 38,477,011 1,000 38,477 0.0100000 \$384.77