

# **Modern** **Equipment Company**

## **Jet Melter Cost Analysis**

**Prepared for:** Actual Customer

**Melting Furnace:** AL-4000

<b>MELTING COSTS</b>	<b>UNITS</b>	<b>REVERB</b>	<b>JET MELTER</b>
Melt Loss	percent	3.0%	1.0%
Aluminum Cost	\$ per pound	\$1.20	\$1.20
Energy cost	\$ per therm	\$0.50	\$0.50
Energy usage	Btu's per pound melted	2,000	1,000
Aluminum Usage	Pounds Melted per Month*	1,833,333	1,833,333

COST TO MELT PER POUND	\$0.046	\$0.017
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ENERGY COST PER MONTH:	\$18,333	\$9,167
MELT LOSS COST PER MONTH	\$66,000	\$22,000
<b>TOTAL MELT COST PER MONTH:</b>	<b>\$84,333</b>	<b>\$31,167</b>

**MONTHLY MELT SAVINGS** **\$53,167**

<b>HOLDING COSTS</b>	<b>UNITS</b>	<b>REVERB</b>	<b>JET MELTER</b>
Energy Cost	\$ per therm	\$0.50	\$0.50
Energy Usage	Btu's per pound held (assumed)	60	60
Amount Held	Pounds Held	28,000	10000
Holding Period **	Hours held monthly	192	192

COST TO HOLD PER MONTH	\$1,612.80	\$576.00
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**MONTHLY HOLDING SAVINGS** **\$1,036.80**

**TOTAL MONTHLY SAVINGS** **\$54,203.46**

\*Aluminum Melt Rate Assumptions:4000#/hr, 22hrs/day, 250 days/year

\*\*Aluminum Holding Assumptions: (4) 48 hr/weekends.

Melting Costs @ 1250 Degrees F

Holding Costs @ 1350 Degrees F