Powermax1650 Operating Cost Example

PLASMA

Part is 3 foot square = 12 linear feet per part

Cut 228 feet in one hour ÷12 feet per part = 19 parts per hour

Multiply by 8 hours/day = 152 parts per day

Multiply by 5 days/week = 760 parts per week

Multiply by 52 weeks/year = **39,520** parts per year

OXYFUEL

Part is 3 foot square = 12 linear feet per part

Cut 100 feet in one hour ÷12 feet per part = 8.33 parts per hour

Multiply by 8 hours/day = 66.66 parts per day

Multiply by 5 days/week = 333.33 per week

Multiply by 52 weeks/year = **17,333** parts per year

More than twice as many parts cut per year with plasma

Assume part is a 3 foot square, 1/2" thick. We are just trying to get a sense of how many parts are cut.

Lower Operating Cost per Hour

Operating cost = **Cost of cutting** ÷ (**linear feet cut**)

	Plasma	Oxyfuel
Cost of cutting		
% electrode & nozzle for 1 hour	$4.36	$0.06
Power	$1.56	$0.00
Gas	$0	$10.49
Labor & OH	$30.00	$30.00
Cost of cutting per hour	**$35.92**	**$40.55**
Divide by linear feet cut		
Linear feet cut =	228	100
Operating cost per foot	**$0.16**	**$0.41**

Less than ½ the operating cost per hour of oxyfuel

$4.36 = 1/2.75 cost of electrode & nozzle x 80% duty cycle. This is based on testing that indicates average Powermax1650 consumable life to be 2.75 arc hours. Our example is based on 1 hour with 80% arc on time. Power cost is based on US average of $0.11 per kilowatt hour. Gas cost is based on average cylinder sizes and prices.

Operating Cost