

Alternative #1 - Hand Deburring

				Costs \$ per year	Costs \$ per hour	Costs \$ per load	Costs \$ per Piece
Floor Space Costs							
Add all these costs per year for a department floor area in which the mass finishing machines are located							
	Rent	\$ _____					
	Heat	\$ _____					
	Light	\$ _____					
	Insurance	\$ _____					
	Gen Overhead	\$ _____					
	Supervision	\$ _____					
	Total (A)	\$25 X	(____ Sq Ft needed for plant) 4 (120 Sq Ft in Dept.)	\$3,000			
Depreciation and Maintenance							
	Total cost of machines and accessories						
	Divided by years of depreciation allowed			\$0.00			
	Maintenance cost per year			\$600			
			Total (B)	\$600		\$3,600	\$0.0100
Machine Hourly Cost Rate							
	Total (B) above \$ _____ 4 hours used per year				\$0.25		
	Power costs per hour (1-10 HP use \$0.13 per HP per hour)				\$0.20		\$0.0013
			Total (C)		\$0.45		
Cost per Load							
	Total (C) machine hourly rate \$ _____ x _____ hours per load					\$0.45	\$0.0208
	Direct labor rate (+ fringes) \$ _____ per hour x _____ hours per Load*					\$20.00	\$0.9346
	(for this calculation a load is calculated as 1 hour of work for 1 person)						
			Total (D)			\$20.45	
Cost per Piece	# parts total =	360,000					
	# parts/hr=	21					
	Manual direct labor cost						
			Total (D) \$ _____ 4 _____ pieces per Load = \$ _____ per piece				\$0.9554

Vibratory Finishing Cost Calculator

				Costs \$ per year	Costs \$ per hour	Costs \$ per load	Costs \$ per Piece
Floor Space Costs							
Add all these costs per year for a department floor area in which the mass finishing machines are located							
Rent	\$	_____					
Heat	\$	_____					
Light	\$	_____					
Insurance	\$	_____					
Gen Overht	\$	_____					
Supervision	\$	_____					
Total (A)	\$	_____ X					
Total (A)	\$25.00	x	30 sq ft.	\$750.00			
Depreciation and Maintenance							
Total cost of machines and accessories	=	\$14,200					
Divided by years of depreciation allowed		7		\$2,028.57			
Maintenance cost per year				\$4,600.00			
Total (B)				\$6,628.57			
Machine Hourly Cost Rate							
Total (B) above	\$	_____	hours used per year	(2400 hrs/yr)	\$2.76		
Total (C)							
Consumables							
Power costs per hour (1-10 HP use \$0.13 per HP per hour)					\$0.39		
Media cost per load					\$0.61		
170 lbs per load x \$1.20 per lb x .3%/hr							
Compound used per hour .05 lb. x \$9.00 x per pound					\$0.45		
Total (D)					\$1.45		
Cost per Load							
Overheads: Total (C) hourly rate	\$	_____	x	_____	hours per day/loads per day	\$7.37	
Direct labor rate (+ fringes)	\$	_____	per hour x	_____	hours per Load	\$5.00	
(Worker needed for only load/unload part of cycle time)							
Consumables: Total (D) x 2.5 hr run						\$3.63	
Total (E)						\$16.00	
Cost per Piece							
# parts/load				400			
# parts total =				360,000			
Total (E)	\$	_____	4	parts per Load =	\$	_____	per piece
						\$0.0400	

