

Economic Analysis

Economic Analysis		Notes
Production labour	\$19,200	Fixed cost
Materials	244.37	variable cost
Rent, equipment	\$ 2,097.99	Fixed cost
Variable cost PER UNIT	\$ 244.37	
Fixed cost PER UNIT	\$ 21,297.99	
Desired return on capital	\$ 50,000.00	
Sales	\$ 173,202.11	
Selling price per unit	\$ 415.35	
Less: Variable cost	244.37	58.80%
Contribution Margin	170.98	41%
Break Even	125.00 units to break even	
Actual Profit	\$ 50,001.83	

Assumptions:

Manufacturing takes place in the US
 Production Labor estimates from Bureau of Labor Statistics

Engineering Salary	\$55,000
Manufacturing Wages	\$ 15.00
Rent, Equipment	\$ 5,389.99
Interest	7
n period- years (ROI)	7
Bank Loan	200,000
Average # of units produced per month	417

* entry level Production engineer/manufacturing salary at oticon/phonak
 \$19,200 AMOUNT PER WEEK PAID TO 32 WORKERS, 16 PER SHIFT (4 PER WORKSTATION)
 INCLUDES 10,000 SQUARE FEET LOCATION IN ROCHESTER, BY RENT

Schedule

Manufacturing Process	5000 units Lead times
Research and Development	-
Design/Engineering Drawings	-
Rapid Prototyping	2
PCB Schematics	2
PCB Manufacturing	2
PCB testing	3
Assembly of electronic hardware (microphones, batteries, etc.)	2
Sealing and Finishing	2
Testing/Quality Checks	2
Total Lead time	15