Activity-Based Costing (ABC) Master Reference Sheet

Cost Pools, Activity Drivers, Cost Hierarchy & Cross-Subsidization Correction | Managerial Accounting

1. THE 4-LEVEL MANUFACTURING COST HIERARCHY

Hierarchy Level	Definition & Characteristics	Typical Cost Drivers & Examples
1. Unit-Level	Activities performed every single time one unit is produced. Costs increase strictly proportional to volume.	Machine hours, direct labor hours, machine electricity, inspection per piece.
2. Batch-Level	Activities performed each time a production batch or lot is processed, regardless of batch unit count.	Machine setups, purchase orders, forklift moves, batch quality sampling.
3. Product-Level	Activities supporting an entire product line regardless of units or batches run.	Product design, engineering change orders, patent maintenance, prototype testing.
4. Facility-Level	Activities sustaining factory operations as a whole. Cannot be traced to specific products without arbitrary allocation.	Plant heating/cooling, factory manager salary, building insurance, depreciation.

2. TRADITIONAL PLANTWIDE OVERHEAD VS. ABC COSTING DISTORTION

System Dimension	Traditional Plantwide Costing	Activity-Based Costing (ABC)
Cost Pools & Drivers	One or two plantwide/departmental pools based solely on volume (DL hours or machine hours).	Multiple homogenous cost pools linked to causal cost drivers (setups, inspections, orders).
Product Cost Distortions	**Over-costs** high-volume, simple products and **under-costs** low-volume, complex customized products.	Eliminates cross-subsidization. Accurately reflects high consumption of setups and design by complex products.
Activity Rate Formula	Predetermined Rate = Total Est. MOH / Total Est. Allocation Base	**Activity Cost Pool Rate = Total Activity Cost Pool / Total Activity Driver Volume**