

Accounting Notes

Asset Classification, Depreciation, Sale/Exchange of Assets

Types (classifications) of Assets:

- 1) Current Assets - short lived assets used in the operations of a business
- 2) Plant Assets - long lived tangible assets used in the operations of a business
- 3) Long Term Investment - long lived tangible assets held for investment purposes
- 4) Intangible Assets - assets with no physical form but the special rights they have give them value

Cost of a Plant Assets:

Costs assigned to a plant asset equal the sum of all costs incurred to bring the asset to its intended purpose minus all discounts received.

Land Costs include

- | | | |
|-------------------------|---|--------------------------------------|
| Original purchase price | - | Back property taxes |
| Commissions | - | grading and clearing the land |
| Survey fees | - | demolishing or removing of buildings |
| Legal fees | | |

Land Improvements costs include

- | | | |
|-------------------|---|----------|
| Fencing costs | - | Lighting |
| Paving driveways | - | Signs |
| Sprinkler systems | | |

Buildings cost include

- | | | |
|-------------------------|---|--------------------------------|
| Original purchase price | - | Building permits |
| Commissions | - | Contractor's charges |
| Sales and other taxes | - | Materials, labor, and overhead |
| Repairs and renovations | - | Capitalized interest |
| Architectural fees | | |

Machinery and Equipment cost include

- | | | |
|----------------------------|---|--|
| Original purchase price | - | Commissions |
| Transportation charges | - | Installation charges |
| Insurance while in transit | - | Testing costs (before placed in service) |
| Sales and other taxes | - | Repairs (before placed in service) |

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Assets and their related expense account:

Asset	Related Expense Account
Plant Assets	
Land	None
Buildings, Machinery, Equipment	
Furniture, Land Improvements	Depreciation Expense
Natural Resources	Depletion Expense
Intangible Assets	Amortization Expense

Construction in Progress:

Construction in progress is an asset that the company is constructing for its own use in the business.

Capitalizing Interest:

Interest expenses in connection with the construction of an asset is to be capitalized as part of the cost of that asset.

(1) Interest based on the Average Accumulated
Construction expenditures
Or
(2) Actual interest cost on borrowed money "during
the construction period ,

Interest to be capitalized = the lessor of

Incurring construction costs:

Building (or Construction in Progress)	\$xxxxx	
Cash (or Notes Payable)		\$xxxxxx

Accrued Interest:

Building (or Construction in Progress)	Capitalized Interest
Interest Expense	Difference (if any)
Interest Payable	Total accrued interest

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Lump sum purchase of assets:

Costs is divided among the assets according to their relative sales (market) values, if the costs have not already been divided in the sales agreement.

Allocated			Total		Percentage		Total	
Asset	Market Value		Market Value	=	of MV		Purchase Price	Cost
Asset 1	\$xxxx	÷	Total MV	=	xx%	*	Total price	= \$xxxx
Asset 2	\$xxxx	÷	Total MV	=	xx%	*	Total price	= \$xxxx
Asset 3	\$xxxx	÷	Total MV	=	xx%	*	Total price	= \$xxxx
	<u>Total MV</u>						<u>Total cost</u>	

Capital vs Revenue Expenditures:

Capital Expenditures - increases the capacity or efficiency of an asset or extends its useful life
Expenditures are debited to the asset's account

Revenue Expenditures - merely maintain an asset or restores the asset to working order
Expenditures are debited to an expense account

Examples of the difference between Capital and Revenue Expenditures for a delivery truck:

Capital	Revenue
Major engine overhaul	Repair of transmission or other mechanism
Modification of body for new use of truck	Oil change, lube, etc
Additions to storage capacity of the truck	Replacement tires, windshield Paint job

Depreciation:

Useful life - length of service that a business expects to get from an asset
may be expressed in terms of years, units, miles or any other measurement

Residual value - expected cash value of an asset at the end of its expected useful life

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Depreciation Methods:

Straight line method:

$$\text{Depreciation per year} = \frac{\text{Cost} - \text{Residual Value}}{\text{Useful life in years}}$$

Units of production method:

$$\text{Depreciation per unit} = \frac{\text{Cost} - \text{Residual Value}}{\text{Useful life in units}}$$

of output

$$\text{Depreciation for the year} = \text{Depreciation per unit} * \text{Units produced}$$

Double declining balance method:

Step 1: Find Straight line (SL) rate = $1 / \text{Useful life}$

Step 2: Find Double declining balance (DDB) rate = $\text{SL rate} * 2$

Step 3: Find depreciation for the year = $\text{Beginning Book Value} * \text{DDB rate}$

Depreciation taken cannot bring the book value below the residual value in any given year.
Normally the depreciation will have to be limited in the assets last couple of years of service.

Disposal of Plant Assets:

When fully depreciated:

Accumulated Depreciation - Asset	Total Depr. taken	
Loss on disposal of asset	Residual Value	
Asset		Original cost

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Disposal of Plant Assets:

When not fully depreciated:

Accumulated Depreciation - Asset	Total Depr. taken
Loss on disposal of asset	Remaining Book Value
Asset	Original Cost

Sale of a Plant Asset:

(1) Calculate the depreciation for the year up to the time of sale

Depreciation Expense, Asset	Depr. for the year * (# months/12)
Accumulated Depreciation, Asset	Depr. for the year * (# months/12)

(2) Determine the Gain or Loss on the sale

Cash received		\$xxxxx	
Book value of asset			
Original cost	\$xxxxx		
Accum. Depr.	<u>(xxxxx)</u>	<u>(xxxxx)</u>	
Gain (Loss) on sale		<u><u>\$ xxxx</u></u>	

(3) Journal entry to record the sale

Cash	Sales Price	
Accumulated Depr, Asset	Total Depr. taken	
Asset	Original Cost	
Gain on sale of asset	Difference	

If there was a loss on the sale of the asset, then there would be a debit to Loss on sale of asset account rather than a credit to Gain on sale of asset.

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Exchanging of Plant Assets:

Asset	Cost of New asset	
Accumulated Depr, Asset	Total depr. taken on old asset	
Loss on exchange of asset	Difference	
Asset		Cost of Old asset
Cash		Cash paid

If there is a gain, the difference would be credited to "Gain on exchange of asset", rather than shown as a debit to "Loss on exchange of asset".

Depletion of Natural Resources:

Depletion is calculated using the units of production method.

$$\text{Depletion per unit} = \frac{\text{Cost} - \text{Residual Value}}{\text{Est. total units of natural resource}}$$

Journal entry:

Depletion Expense	Depletion per unit * Units	
Accumulated Depletion	Depletion per unit * Units	

Amortization of Intangible Assets:

- Amortization - is computed on a straight line basis
- is charged directly against the asset rather than to an accumulated amortization account
 - intangible assets include: patents, copyrights, trademarks, goodwill

Journal Entry

Amortization Expense - Intangible asset	Original cost / useful life
Intangible asset	Original cost / useful life