

IAS 16: Property, Plant and Equipment

– Bird's Eye View

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In most of the companies material item in the financial position is Property, Plant and Equipment which dealt under IAS 16. This article summarizes and illustrates application of IAS 16. IAS 16 can be categorized in four in term of its application:

- o initial recognition (covered in this article)
- o depreciation (covered in this article)
- o revaluation (not covered in this article)
- o disposals. (covered in this article)

Initial recognition

Initially all the assets under scope of IAS 16 is measured at cost. Cost factor should capitalize and include all costs to bring an asset to its present location and condition for its intended use.

Followings are part of cost in normal scenario:

- o purchase price of an asset (less any trade discount)
- o directly attributable costs such as:
 - cost of site preparation
 - initial delivery and handling costs
 - installation and testing costs
 - professional fees
- o the initial estimate of dismantling and removing the asset and restoring the site on which it is located, to its original condition (i.e. to the extent that it is recognized as a provision per IAS 37, Provisions, Contingent Assets and Liabilities)
- o borrowing costs in accordance with IAS 23, Borrowing Costs.
- o non-refundable taxes and duties at the time of purchase

Example:

On 1 April 2012 ABC Ltd construct a machine on land under the following terms:

Description	Amount (Rs.)
Freehold land	100,000
Architect fees	1,500
Site preparation	5,000
Machine	6,000
Direct labor costs	7,000
Legal fees	15,000
General overheads	10,000

The machine was completed on 1 January 2013 and

brought into use following its operation on the 1 April 2013. ABC Ltd issued a Rs 25m unsecured loan on 1 April 2012 to facilitate construction of the new machine (which meets the definition of a qualifying asset per IAS 23). The loan carried an interest rate of 8% per annum and is repayable on 1 April 2015.

This is an example of a self-constructed asset. All costs to get the machine to its present location and condition for its intended use should be capitalized. All of the expenditure described above, with the exception of general overheads would qualify for capitalization. The interest on the loan should also be capitalized from 1 April 2012 as in accordance with IAS 23 it meets the definition of a qualifying asset. The recognition criteria for capitalization appears to be met i.e. activities to prepare the asset for its intended use are in progress, expenditure for the asset is being incurred and borrowing costs are being incurred. Capitalization of the interest on the loan must cease when the asset is ready for use, i.e. 1 January 2013.

Value of Machine:

Description	Amount (Rs. '000')
Freehold land	100,000
Architect fees	1,500
Site preparation	5,000
Materials	6,000
Direct labor costs	7,000
Legal fees	15,000
Borrowing costs (25 Million X 8%) X 9 / 12	1,500
Cost of machine constructed	136,000

Depreciation

Depreciation is defined in IAS 16 as being the systematic allocation of the depreciable amount of an asset over its useful economic life. In other words, depreciation applies the accruals concept to the capitalized cost of a non-current asset and matches this cost to the period that it relates to.

Depreciation Methods

There are many methods of depreciating a non-current asset with the most common being:

- o Straight line
% on cost or
Cost residual value / Useful economic life
- o Reducing balance
% on carrying value

Useful economic lives and residual values

IAS 16 requires that these estimates be reviewed at the end of each reporting period. If either changes significantly, the change should be accounted for over the useful economic life remaining

Example:



A machine was purchased on 1 June 2011 for Rs.120,000. It was estimated that the asset had a residual value of Rs.20,000 and a useful economic life of 10 years at this date. On 1 June 2013 (two years later) the residual value was reassessed as being only Rs. 15,000 and the useful economic life remaining was considered to be only

five years. How should the asset be accounted for in the years ending 30 June 2012/2013/2014?

30 June 2012

At the date of acquisition the cost of the asset of Rs.120,000 would be capitalized. The asset should then be depreciated for the years to 30 June 2012-2013 as:

$$\begin{aligned} \text{Cost residual value} &= 120,000 - 20,000 \\ &= \text{Rs.}10,000 \text{ per annum} \end{aligned}$$

Useful economic life 10 years

Income statement For the Year 30 June 2012

Depreciation Rs. 10,000

Statement of financial position as of 30 June 2012

Machine (120,000 - 10,000) Rs. 110,000

30 June 2013

Income statement For the Year 30 June 2013

Depreciation Rs. 10,000

Statement of financial position as of 30 June 2013

Machine (120,000 - 20,000) Rs.100,000

30 June 2014

As the residual value and useful economic life estimates have changed during the year ended 2014, the depreciation charge will need to be recalculated. The carrying value will now be spread according to the revised estimates.

Depreciation charge:

$$100,000 - 15,000 = 85,000 \text{ per annum}$$

Remaining economic life 5 years

Income statement extract for the Year 30 June 2013

Depreciation Rs. 17,000

Statement of financial position as of 30 June 2013

Machine (100,000 - 17,000) Rs. 83,000

Component depreciation

If an asset comprises two or more major components with different economic lives, then each component should be accounted for separately for depreciation purposes and depreciated over its own useful economic life. For example Building and Lifts.

Disposal

Property, plant and equipment should be derecognized when it is no longer expected to generate future economic benefit or when it is disposed of. When property, plant and equipment is to be derecognized, a gain or loss on disposal is to be calculated. This can be found by comparing the difference between:

Carrying value	XXX
Disposal proceeds	(XXX)
(Profit) or loss on disposal	(XXX)/XXX

Example

An asset that originally cost Rs.16,000 in the year 2011. It has useful life of 4 years. Company has policy to charge depreciation on straight line basis with full depreciation in the year of purchase and no depreciation in the year of sale. Asset was disposed of during the year 2013 for Rs. 5,000 cash.

The asset and its associated depreciation should be deducted from the statement of financial position and a profit or loss on disposal should be recorded in the income statement.

The loss on disposal is:

Carrying value at disposal date (16,000 - 8,000*)	8,000
Disposal proceeds	(5,000)
Loss on disposal	3,000

Depreciation: $16,000 / 4 = 4,000$ per annum

*Accumulated depreciation for two year i.e. 2011-12 and 2012-13 = $4,000 \times 2 = 8,000$

Conclusion:

This is article for the beginners to understand and develop practical approach for Property, Plant and Equipment, its recognition, subsequent measurement including depreciation calculation and disposal treatment. More technical areas for example: depreciation of different components and revaluation of assets and its measurement are not considered at this point of time.