

會計學課堂作業

班級：四技財金四丙

學號：4A180911

姓名：邱瀚緯

會計習題 9-7

Example Exercise 9-7

On January 1, 2013, FairValue Inc purchases a machine for \$1 million. Its estimated useful life at that date was 10 years with no salvage value and the company uses straight-line depreciation method. On December 31, 2015, the company estimates that the market for the product declines for the coming years and the company estimates value in use for the equipment is \$600,000 and the fair value less the cost to sell is \$550,000. Assume that the market for the product recovers subsequently. On December 2017, the company estimated the recoverable value of the machines now reaches \$550,000.

- Make the journal entries for the impairment of PP&E
- show the resultant financial statement presentation for PP&E
- make the journal entries for ~~the~~ depreciation of 2016 and 2017
- make the journal entries for the reversal of impairment
- show the presentation of PP&E in the statement of financial position.

(a) The recoverable amount is the higher of value in use (\$600,000) and the fair value less cost to sell (\$550,000). That is, \$600,000. The carrying amount is acquisition cost (\$10 million) minus accumulated depreciation ($\$10 \text{ million} \times \frac{3}{10} = 0.3 \text{ million}$). That is, \$9,700,000. Therefore, impairment loss for the equipment is \$100,000. Thus, the company recognizes the impairment loss as follows below.

Dec. 31 2015 Impairment Loss	\$100,000	
	Accumulated Impairment Loss—Machine	\$100,000
	Recognize impairment loss.	

(b) The presentation of the statement of financial position for the machine is as follows:

Partial Statement of Financial Position December 31, 2015

	\$1,000,000	
Machine		
Less: Accumulated Depreciation	(300,000)	
Accumulated Impairment Loss	(100,000)	\$600,000

After the recognition of the impairment loss, the carrying value of the machine is restated to the recoverable value, \$600,000

(c) For the years coming, the company recognizes depreciation expense using the restated carrying value. Therefore, depreciation expense for the years 2016 and 2017 is \$ 85,714.29 $[(1,000,000 - 300,000 - 100,000) \div 2]$.

Dec 31 2016/2017 Depreciation \$ 85,714.29

Accumulated Depreciation - Machine \$ 85,714.29

Recognize depreciation for 2016 and 2017

(d) After the depreciation, the carrying value of the machine is \$ 428,811.42 $(\$ 600,000 - \$ 85,714.29 \times 2)$. On December 2017, the company estimated the recoverable value of the machines now reaches \$550,000 which is higher than the carrying amount. Previous impairment loss will be reversed up to the lower of the new recoverable value (\$550,000) and the carrying value is \$428,811.42, the reversal of impairment loss will be \$ 71,152.58 $(\$ 550,000 - \$ 428,811.42)$. The journal entries for the reversal of impairment loss are as follows:

Dec 31 2017 Accumulated Impairment Loss - Machine \$ 71,152.58

Reversal of Impairment Loss \$ 71,152.58

Reversal of Impairment Loss

(e) The presentation of the statement of financial position for the machine is as follows:

Partial Statement of Financial Position
December 31, 2017

Machine	\$ 1,000,000.00
Less: Accumulated Depreciation	(471,428.58)
Accumulated Impairment Loss	(28,811.42) 500,000

After the reversal of impairment loss, the annual depreciation will be \$100,000 for the remaining years. Alternatively, assume that on December 31, 2017, the recoverable value is \$450,000, then the impairment loss will be reversed up to the recoverable value of \$450,000, which is higher than the restated carrying but lower than the carrying value if impairment loss had not been recognized (\$500,000):

Dec 31 2017 Accumulated Impairment Loss - Machine \$ 21,152.58

Reversal of Impairment Loss \$ 21,152.58

Reversal of Impairment Loss of 21,152.58

The presentation of the statement of financial position for the machine is as follows:

Partial Statement of Financial Position
December 31, 2017

Machine	\$ 1,000,000.00
Less: Accumulated Depreciation	(471,428.58)
Accumulated Impairment Loss	(28,811.42) \$ 450,000

After the reversal of impairment loss, the annual depreciation for the remaining years will be \$100,000.