

Day F04 (Principles of Accounting):

Chapter # 10

1. (LO 2) DuPage Company purchases a factory machine at a cost of \$18,000 on January 1, 2020. DuPage expects the machine to have a salvage value of \$2,000 at the end of its 4-year useful life.

During its useful life, the machine is expected to be used 160,000 hours. Actual annual hourly use was 2020, 40,000; 2021, 60,000; 2022, 35,000; and 2023, 25,000.

Instructions

Prepare depreciation schedules for the following methods: (a) straight-line, (b) units-of-activity, and (c) declining-balance using double the straight-line rate.

a. Straight-line method

Year	Depreciable cost	Depreciation rate	Annual Depreciation Expense	Accumulated depreciation	Ending Book Value
2020	16,000	25%	4,000	4,000	14,000
2021	16,000	25%	4,000	8,000	10,000
2022	16,000	25%	4,000	12,000	6,000
2023	16,000	25%	4,000	16,000	2,000

b. Units -of-activity method

Year	Units of activity	Depreciable cost per unit	Annual Depreciation Expense	Accumulated depreciation	Ending Book Value
2020	40,000	0.10	4,000	4,000	14,000
2021	60,000	0.10	6,000	10,000	8,000
2022	35,000	0.10	3,500	13,500	4,500
2023	25,000	0.10	2,500	16,000	2,000

c. Declining -balance

Year	Beg. Book Value	Depreciation Rate	Annual Depreciation Expense	Accumulated depreciation	Ending Book Value
2020	18,000	50%	9,000	9,000	9,000
2021	9,000	50%	4,500	13,500	4,500
2022	4,500	50%	2,250	15,750	2,250
2023	2,250	50%	250	16,000	2,000

E10.5:

a. Depreciable cost per unit = Depreciable cost/Total miles =140,000/100,000=1.40

b. Units of activity method:

Year	Units of activity	Depreciable cost per unit	Annual Depreciation Expense	Accumulated depreciation	Ending Book Value
2020	26,000	1.40	36,400	36,400	111,600
2021	32,000	1.40	44,800	81,200	66,800
2022	25,000	1.40	35,000	116,200	31,800
2023	17,000	1.40	23,800	140,000	8,000

E10.6**a. Straight-line method**

Year	Depreciable cost	Depreciation rate	Annual Depreciation Expense	Accumulated depreciation	Ending Book Value
2020	138,000	20%	27,600	27,600	122,400

a. Units -of-activity method

Year	Units of activity	Depreciable cost per unit	Annual Depreciation Expense	Accumulated depreciation	Ending Book Value
2020	1,700	13.80	23,460	23,460	126,540

a. Declining –balance

Year	Beg. Book Value	Depreciation Rate	Annual Depreciation Expense	Accumulated depreciation	Ending Book Value
2020	150,000	40%	60,000	60,000	90,000
2021	90,000	40%	36,000	96,000	54,000