

# 1) Building

- buying price
- labour, direct materials, construction
- interest costs to fund construction
- ↑ while asset still not ready for use

# Equipment

- buying price, tax, shipping, assembly, installation

2)

year	depr cost	annual depr. amount	accumulated depreciation	book value
2015	550 K	55 K	55 K	545 K
2016	↓	↓	110 K	490 K
2017			165 K	435 K
2018	↓	↓	220 K	380 K

$$\text{depreciation expense} = \frac{600K - 50K}{10} = 55K$$

$$BV = 600K - \text{accumulated depreciation}$$

3)

year	units activity	annual depr. amount	accumulated depreciation	book value
2015	5K	$(5K \times 3.6) = 18K$	18K	182 K
2016	7K	$(7K \times 3.6) = 25.2K$	43.2K	156.8 K

$$\text{depreciable cost per unit} = \frac{200K - 20K}{50,000} = 3.6$$

4/  $BV = \$400K$   
 $2/\text{useful life} = 0.2$

year	begin BV	2/useful life	depreciation exp	accumulated depreciation	end BV
2015	400K	0.2	$0.2(400K) = 80K$	80K	320K
2016	320K	0.2	$0.2(320K) = 64K$	144K	256K
2017	256K	0.2	$0.2(256K) = 51.2K$	195.2	204.8K

5/  $BV \text{ after } 3 \text{ years} = \$300K - (3 \times \$12.5K) = \$262.5K$

old depreciation expense =  $\$300K - \$50K / 20 = \$12.5K$

remaining useful life =  $25 - 3 = 22 \text{ years}$

new depreciation expense =  $\frac{\$262.5K - \$40K}{22} = \$10.11K$

6/ depreciation expense =  $\frac{90K - 10K}{10} = 8K$

BV at time of sale =  $90K - (3 \times 8K) = 66K$

if sold for \$66K

Dr Cash 66K  
 Dr Accum Depreciation 24K  
 Cr Machine 90K

if sold for \$60K

Dr Cash 60K  
 Dr Accum Depreciation 24K  
 Dr Loss on Sale 6K  
 Cr Machine 90K

if sold for \$70K

Dr Cash 70K  
 Dr Accum Depreciation 24K  
 Cr Machine 90K  
 Cr Gain on Sale 4K

$$7/ \frac{\$120K}{12} = \$10/\text{year amortization}$$

Dr Amortization Exp 10K  
Cr Patent 10K

$$8/ \text{asset turnover} = \frac{\text{net sales}}{\text{avg assets}} = \frac{3.2M}{(5.4 + 4.8)/2} = 0.63$$

9) Dr Cash 200K  
Cr Notes Payable 200K at grant

Dr Interest Expense 2.5K  $(200K \times 0.15 \times \frac{1}{12})$   
Cr Interest Payable 2.5K 1 month interest

Dr Notes Payable 200K

Dr Interest Payable 2.5K

Dr Interest Expense 10K  $(200K \times 0.15 \times \frac{4}{12})$   
Cr Cash 212.5K

10) Dr Cash 4K (at the start)  
Cr Unearned rent revenue 4K

Dr Unearned rent revenue 333.33  $(4K \times \frac{1}{12})$   
Cr Rent revenue 333.33 every month



11) First, Dr Warranty Expense 15K  
 Cr provisions for Warranties 15K

later Dr Provisions for Warranties 10K  
 Cr Cash 10K

$$12) PV = 50K(1.1)^{-3} + 5K\left(\frac{1-(1.1)^{-3}}{0.1}\right) = 50K$$

on issuing the bond Dr Cash 50K  
 Cr Bonds payable 50K

interest payments

Dr Interest Expense 5K  
 Cr Interest Payable 5K

maturity date

Dr Bonds Payable 50K  
 Cr Cash 50K

$$13) PV = 50K(1.11)^{-3} + 5K\left(\frac{1-(1.11)^{-3}}{0.11}\right) = 48,778$$

on issuing the bond Dr Cash 48,778  
 Dr Discounts on bonds payable 1222  
 Cr Bonds payable 50K

interest payments Dr Interest Expense  $(48,778) \times 0.11 = 5366$   
 Cr Discount on Bonds Payable <sup>(+XL)</sup> 366  
 Cr Interest Payable 5K  
 ✓  $50K - 1222 = 48,778$

next interest payment

Dr Interest Expense  $0.11(50k - 1222 + 366) = 5406$   
Cr Discount on Bonds Payable 406  
Cr Interest Payable 5K

$$14) PV = 50k(1.09)^{-3} + 5k\left(\frac{1-1.09^{-3}}{0.09}\right) = 51,266$$

on issuing the bond

Dr Cash 51,266

Cr Bonds Payable 50K

Cr Premium on Bonds Payable 1,266  
(14)

interest payment

Dr Interest expense  $0.09(50k + 1266) = 4614$

Dr Premium on Bonds payable 386

Cr Interest payable 5K

next interest payment

Dr Interest expense  $0.09(50k + 1266 - 386) = 4579$

Dr Premium on bonds payable 421

Cr Interest payable 5K

15) Dr Equipment \$30K  
Cr Common shares \$30K

Dr Consulting expense 20K  
Cr Common shares 20K

16) Dr Common shares  $(12K \times 2.4) = 28,800$   
Cr Cash 28,800

$$\text{avg. issuance price} = \frac{300k}{125k} = 2.4$$

$$17) \text{ avg. issuance price} = \frac{400k}{100k} = \$4$$

Dr Common Shares 48k (4 x 12k)  
 Cr Cash 28.8k (2.4 x 12k)  
 Cr Contributed Surplus 19.2k (1.6 x 12k)

$$18) \text{ avg. issuance price} = \frac{250k}{140k} = 1.79$$

Dr Common Shares (1.79 x 12k) 21,429  
 Dr Contributed Surplus (0.61 x 12k) 7,371  $\Rightarrow$  rounding  
 Cr Cash 28.8k (2.4 x 12k) 28.8k

$$19) \text{ total amount of cash dividends paid out} \\ 1.45 \times 2,400,000 = \$3,480,000$$

Feb 1

Dr Dividends Declared 3.48M  
 Cr Dividends Payable 3.48M

Feb 24

Dr Dividends Payable 3.48M  
 Cr Cash 3.48M

$$20) 0.15 (2,100,000) = 315,000 \text{ shares issued}$$

Sept 3

Dr Stock Dividends Declared 107.1M (34 x 315k)  
 Cr Common stock dividends distributable 107.1M

Sept 29

Dr Common stock dividends distributable 107.1M  
 Cr Common Shares 107.1M