

**GUIDE TO TRACTOR AND IMPLEMENT COSTS**

**196 KW PTO (263 HP) AND 242 KW ENGINE (325 HP), powershift**

**Example tractor : JD 9230 (4WD) Case IH Magnum 305 Linkage**

New price:	\$256,840	Yearly work:	1000 hrs/yr
Trade-in price:	45% of new = \$115,578	Age at trade-in:	5000 hrs = 5.00 years
Interest rate:	10%	Average value:	\$186,210

Tractor Overhead Costs		per year cost	per hour cost
Depreciation = (\$256840-\$115578)/5 yrs =		\$28,252	\$28,252 /1000hrs/yr= \$28.25
Interest = ((\$256840+\$115578)/2)*10% =		\$18,621	\$18,621 /1000hrs/yr= \$18.62
Insurance = ((\$10/\$1000)*(\$256840+\$115578)/2) =		\$1,862	\$1,862 /1000hrs/yr= \$1.86
			Tractor Overhead Costs: \$48.74/hr
Tractor Variable Costs			
Item	No.	Cost	Use
Diesel fuel		\$0.96/L	48 L/hr
Engine oil		\$6.20/L	42L/250hrs
Transmission oil		\$6.00/L	122L/1200hrs
Air filter-inner	1	\$78/filter	1000 hrs/filter
Air filter-outer	1	\$121/filter	1000 hrs/filter
Fuel filter	1	\$77/filter	250 hrs/filter
Hydraulic oil filter	2	\$107/filter	250 hrs/filter
Oil filter	1	\$79/filter	250 hrs/filter
Cab filters	1	\$35/filter	1000 hrs/filter
Water filter	1	\$54/filter	250 hrs/filter
Tyres - 620 -70R42	8	\$3,300/tyre	3500 hrs/tyre
Tyres - small	0	\$0/tyre	3500 hrs/tyre
Batteries	1	\$312/battery	2000hrs/battery
Repairs		2% tractor price/yr	
			FUEL: \$46.06/hr
			OIL: \$1.64/hr
			FILTERS: \$1.93/hr
			TYRES: \$7.54/hr
			BATTERIES: \$0.16/hr
			REPAIRS: \$5.14/hr
			Tractor Variable Costs: \$62.47/hr
			TOTAL Tractor Costs per hour: \$111.20/hr
			(Based on 1000 hours work per year)

Example Implements:	(a)New price	(b)Trade-in	(c)Work hours/yr	(d)Trade-in age	Average value
Offset disc: 10.2m width: 8km/ha: 6.528ha/hr	\$50,000	\$17,500	250	9 years	\$33,750
Chisel plough: 11.3m width: 8km/ha: 7.232ha/h	\$79,000	\$27,650	200	9 years	\$53,330
Cultivator: 12.2m width: 10km/ha: 9.76ha/hr	\$67,500	\$23,625	400	9 years	\$45,560
Air seeder: 12.2m width: 10km/ha: 8.54ha/hr	\$152,000	\$53,200	200	4 years	\$102,600
Spray unit: 24m width: 15km/ha: 30.6ha/hr	\$50,000	\$17,500	250	9 years	\$33,750
					\$268,990

Implement	Overhead Costs		Variable costs (g)Repair \$/yr 5%	Variable cost/hour g/c	(h)Total cost/year e+f+g	Total cost/hour h/c
	(e)Depreciation (a-b)/d	(f) Interest ((a+b)/2)*10%				
Offset disc	\$3,611	\$3,375	\$2,500	\$10.00	\$9,486	\$37.94
Chisel plough	\$5,706	\$5,333	\$3,950	\$19.75	\$14,988	\$74.94
Cultivator	\$4,875	\$4,556	\$3,375	\$8.44	\$12,806	\$32.02
Air seeder	\$24,700	\$10,260	\$7,600	\$38.00	\$42,560	\$212.80
Spray unit	\$3,611	\$3,375	\$2,500	\$10.00	\$9,486	\$37.94

Tractor and Implement Combinations

Variable Costs used in budgets

(based on hours/yr work as above)

	\$/hr	Speed
Tractor + Offset disc:	\$72.47/hr	0.15 hrs/ha
Tractor + Chisel plough:	\$82.22/hr	0.14 hrs/ha
Tractor + Cultivator:	\$70.90/hr	0.10 hrs/ha
Tractor + Air seeder:	\$100.47/hr	0.12 hrs/ha
Tractor + Spray unit:	\$72.47/hr	0.03 hrs/ha

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Machine	Width (m)	Speed	Efficiency	ha/hrs	hrs/ha
Offset disc	10.2	8 km/hr	80%	6.53	0.15
Chisel plough	11.3	8 km/hr	80%	7.23	0.14
Cultivator	12.2	10 km/hr	80%	9.76	0.10
Air seeder	12.2	10 km/hr	70%	8.54	0.12
Spray unit	24	15 km/hr	85%	30.60	0.03

**PRODUCT TRADE NAMES**

The product trade names in this publication are supplied on the understanding that no preference between equivalent products is intended and that the inclusion of a product does not imply endorsement by Trade & Investment NSW over any other equivalent product from another manufacturer.