

# Irrigation FACTSHEET



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COLUMBIA

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## IRRIGATION EQUIPMENT COSTS - 2003 -

### Introduction

This publication is intended to be used as a guide only in determining the approximate cost of an irrigation system. Prices shown are average values and will vary depending on dealer location, equipment manufacturer and quantity purchased. Where a range of prices is shown the product may be available in more than one material (ie plastic or brass) or price fluctuations are too great to provide an accurate single price.

### Average System Cost and Labour Requirements

The cost of an irrigation system on a per acre basis can vary due to:

- Field size, shape and layout.
- Climatic region. Irrigation systems in the Central Interior or Okanagan Valley must apply much more water than similar systems in the Fraser Valley.
- Soil type. Irrigation design parameters for sandy, gravelly soils are different than loamy, clay soils.
- Distance from the water source to the field to be irrigated.
- The pump and motor size required to overcome friction and elevation differences.

**Table 1 Irrigation System Costs**

Types of System	Estimated Cost \$/Acre	Range of Costs \$/Acre	Labour Cost Hrs./Acre/Irrigation
Portable Handmove	\$ 500	\$ 400 - 650	1.2
Wheelmove	650	550 - 900	0.5
Stationary Gun	480	350 - 700	1.2
Travelling Gun	900	700 - 1100	0.3
Solid Set	1600	1200 - 2000	0.15
Centre Pivot	980	700 - 1260	0.05
Trickle	1800	1400 - 2250	0.05

**Table 2 Mainline and Supplyline Prices - \$/100 ft.**

Nominal Size in Inches	Plain Aluminum c/w Couplings	Aluminum with Valves at 120 ft.	PVC Class 200	PVC Class 160	PVC Class 125	Steel 12 Gauge
3	\$ 223	\$ 275	\$ 145	\$ 125	\$ 100	\$ 520
4	300	345	233	190	152	650
5	405	450	----	290	----	750
6	535	580	502	411	332	1040
8	850	900	834	676	561	1300
10	1175	1125	1285	1052	873	1560

## Lateral Prices

Wheelmove prices are unassembled and complete with couplings, sprinklers and mover units. Handmoves are complete with couplings, sprinklers and risers.

**Table 3 Lateral Prices**

Size	Cost
Aluminum Wheelmove	
18 GA. 4" - 5' Wheels	\$ 13,600
18 GA. 4" - 6' Wheels	13,900
18 GA. 5" - 5' Wheels	15,300
Aluminum Handmove	
2" (100 ft. lengths)	\$ 248
3" (100 ft. lengths)	280
4" (100 ft. lengths)	352

**Table 4 Solid Set System Prices**

Nominal Size in Inches	Class 200	Class 160	Class 125
½ (100 ft. lengths)	\$ 13	-	-
¾	14	-	-
1	19	-	\$ NA
1¼	32	\$ 25	22
1½	40	32	25
2	58	47	38
2½	85	70	55
3	125	102	82
4	205	167	135

**Table 5 Sprinkler Prices**

Item	Cost	
Risers (1" x 3/4")		
. 12" High		\$6.50
. 18" High		8.00
. 24" High		9.50
Undertree Sprinkler (1½ - 3 gpm)		13.00
Overtree Sprinkler (5 - 10 gpm)		19.50
Large Sprinkler (30 - 90 gpm)		135.00
Giant Gun c/w Nozzle (130 - 500 gpm)	Full Circle	\$7.70      14.50
	Part Circle	12.50      19.00

**Table 6 Trickle Irrigation Equipment Prices**

Item	Cost	
Line Source - Linear Tape (per 1000 feet) based on 12" spacing	\$	45 - 85
Point Source Emitters		
. In-line (1 gph)	\$	0.20 - 0.30
. Barb (1 gph)		0.19 - 0.30
. Pressure Compensating (1 gph)		0.35 - 0.60
Microjet (complete unit)	\$	0.45 - 0.70
Micro Sprinklers (complete unit)	\$	1.60 - 2.25
Trickle Poly Tubing		
. ½" (per 1000 feet)	\$	60
. ¾" (per 1000 feet)		105
. 1" (per 1000 feet)		135
Automation Equipment		
. ¾" Solenoid Valve	\$	27.50
. 1" Solenoid Valve		27.50 - 55
. 1½" Solenoid Valve		75 - 100
. 1" Pressure Reducing Solenoid Valve		75 - 120
. 1½" Pressure Reducing Solenoid Valve		125 - 175
. 4 Station Time Clock		100 - 150
. 6 Station Time Clock		130 - 250
. 8 Station Time Clock		350 - 400
. 12 Station Time Clock		400 - 600
Trickle Filters		
. 150 Mesh Screen (50 gpm)	\$	250 - 390
. 50 - 100 gpm Sand Filter Complete System		3200 - 4000
		Auto flush add \$1000.00

**Table 7 Centre Pivot and Travelling Gun Prices**

Item	Cost
Electric Drive Centre Pivot - 1200' (including installation)	\$ 68,000 (\$57/ft)
Travelling Guns	
. Soft Hose 50 - 100 gpm	\$ 5,000 - 10,000
. Soft Hose 100 - 250 gpm	8,000 - 14,000
. Soft Hose 300 + gpm	12,000 - 17,000
. 850 - 1000' Reel Irrigator 3" hose	18,000 - 23,000
. 1000 - 1300' Reel Irrigator 4" hose	28,000 - 34,000
. 1000' Reel Irrigator 5" hose	30,000 - 45,000

**Table 8 Pump and Motor Prices**

Motor H.P.	Single Phase	Three Phase	Phase Converter		Single Phase Soft Start (Complete System)
			Add a Phase	Roto Phase	
5	\$ 1800	\$ 1500	\$ 1480	\$ 1580	-
7½	2100	1800	1920	2280	\$ 4530
10	2300	2000	2550	2660	4900
15	-	2200	3050	3520	6320
20	-	2500	4000	4200	6650
25	-	2700	4600	5570	7150
30	-	3300	5600	6160	8490
40	-	4000	7500	8160	11,000
50	-	4600	8800	9460	13,800
60	-	5900	12,300	11,500	15,000
75	-	6600	15,300	14,600	17,600

**FOR FURTHER INFORMATION CONTACT**

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