

Haul Road Mass Estimates - Annual Consumables (4000 tpd plant)

(Preliminary numbers only - annual consumables - not initial construction)

Item	Description	Unit Mass		Qty.	Total Mass (tons or kl)	Mass per truck (tons or kl)	Trucks	
1	Crusher liners	2700	kg/set	6	16.2	30	1	
2	Secondary cone	1700	kg/set	6	10.2	30	1	
3	Tertiary cone	1700	kg/set	6	10.2	30	1	
4	Ball mill liners	25000	kg/set	2	50.0	30	2	Polymet (Rubber is 15ton)
5	VTM liners	15000	kg/set	2	22.5	30	1	
6	Steel media (ball mills)	1	kg/ton	1,440,000	1,440.0	30	48	
7	Steel media (VTM)	0.7	kg/ton	288,000	201.6	30	7	
8.								
9	Potassium Amyl Xanthate	0.125	kg/ton	1,440,000	180	30	6	
10	Aero 208	0.070	kg/ton	1,440,000	100.8	30	4	
11	MIBC - Direct from Drum	0.030	kg/ton	1,440,000	43.2	30	2	
12	Cyanide	0.500	kg/ton	1,440,000	720.0	30	24	
13	Caustic Soda	0.070	kg/ton	1,440,000	100.8	30	4	
14	Flocculant	0.020	kg/ton	1,440,000	28.8	30	1	
15	CN Destruct (Sodium metabisulfite)	0.150	kg/ton	1,440,000	219.8	30	8	
16	CN Destruct (copper sulfate)	0.036	kg/ton	1,440,000	52.4	30	2	
17	Carbon							Can be added to other partial loads
18								
19	Diesel Fuel (Mill)	0.2648	L/kW.hr	51,840,000 kWhr/yr	13,727	30	458	
20	Diesel Fuel (Mining Fleet)				6,841	30	228	
21	Spares					30	10	
22								
23	Food	3	kg/day/person	13,505	40.5	30	1	
24								
25								
	Total per 12 months (assumes 1 kl = 1 ton)				23,805		809	days of road availability 90
	Average per day						9.0	
								Cost per load Yellowknife to site
	daily tonnage		4000					
	days/yr		360					Diesel Edmonton to site Alberta to site

Construction Phase

1	Maincamp	960,000	lbs.					Per Atco for 100 man (allow plus 20% to get from 100 man to 120 man)
2	process equipment incl. crushers and mills	1131	ton		1131			
3	Piping at 8% of equip	90.48	ton		90			
4	First fill media	277	ton		277			
5	Building	2000	ton		2000			
6	Civils	4,200	cubic yards	2.4	2880			2:2:3 mix? (sand and stone available on site)
7	wet / dry and maintenance	30%			600			percent of concentrator building weight
8	office and admin	30%			131			percent of mancamp
9								
10	Adders for everything else				0			
	Total				7545			