



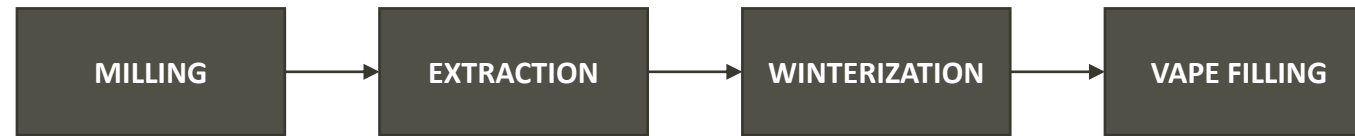
Measuring the Process

CannaV Inc.



CannaV Inc.

CannaV Inc is a CBD and THC vape manufacturing company. The process has 4 key process steps:



The CBD Vapes process is:

Milling: Received 25kg – 1 tech – Ran for 8hr and got 22 kg of milled cannabis

Extraction: Received the 22kg from milling and 2 techs processed during 8 hrs – Output was 3 kg

Winterization: Received the 3kg and 1 Tech ran for 5 hr and got 2.3 kg of extracted oil

Vapes production: 5 people filled 4,343 vapes cartages, broke 325 units and finished in 7.5 hrs

Calculate:

KPI	Milling	Extraction	Winterization	Vapes Production
Productivity				
Labour Productivity				
Waste				
Yield				
Throughput Yield (all operations)				
Cycle time (min)				
Total Lead time	min			

KPI	Milling	Extraction	Winterization	Vapes Production
Input	25 kg	22 kg		2.3 kg
Output	22 kg	3 kg	2.3 kg	4,343 vapes
Waste (defects)				325 vapes
Crew	1	2	1	5
Production time	8 hr	8 hr	5 hr	7.5 hr



KPI	Milling	Extraction	Winterization	Vapes Production
Productivity	$25/8 = 3.1\text{kg/hr}$	$22/8 = 2.75\text{kg/hr}$	$3/1 = 3\text{ kg/hr}$	579 vapes/hr
Labour Productivity	$3.1/1 = 3.1\text{kg/man-hr}$	1.38 kg/man-hr	$3/1 = 3\text{ kg/man-hr}$	116 vapes/man-hr
Waste	3 kg (12%)	19 kg (86%)	0.7 kg (700g) (23%)	325 vapes (7.5%)
Yield	$1-(3/25)*100 = 88\%$	$1-(19/22)*100 = 14\%$	$1-(0.7/3)*100 = 77\%$	$1-(325/4343)*100 = 92.5\%$
Throughput Yield (all operations)	8.75%			
Cycle time	19 min	22 min	20 min	207 min
Total Lead Time	268 min			

579 vaps * 0.5g = 290 g
1/0.290 kg = 3.45 hr per kg

207 min