



Summit Systems Ltd
Tame Park
Vanguard
Tamworth
B77 5DY

ENERGY CONSUMPTION COMPARISON

Material	pc	
Production Requested	250	Kg/h
Specific Air flow	1.5714	m3/Kg
Heat temperature	80	°C
Bulk density	0.7000	Kg/dmc
Processing time	3	hours
Hopper	1071	Litres
energy cost	£0.080	£/kW hr

Dew Point **-25°C to -40°C**

Dew Point **-40°C to -55°C**

Traditional Twin Tower Desiccant drier			SUMMIT ROTOR DRYER		
Process Heater	4.96	Kw/h	Process Heater	4.96	Kw/h
Regeneration Heater	6.95	Kw/h	Regeneration Heater	3.23	Kw/h
Production Airflow	392.9	m3/h	Production Airflow	392.9	m3/h
Regeneration Airflow	98.2	m3/h	Regeneration Airflow	81.6	m3/h
Total air flow	491.1	m3/h	Total air flow	474.4285714	m3/h
Cooling power	0.95	Kw/h			
Water chiller COP 3					
Blower performance (Side channel)	0.0055	Kw/Nm3	Blower performance (Brushless)	0.0033	Kw/Nm3
Process blower	2.16	Kw/h	Blower Power Required	1.30	Kw/h
Regeneration blower	0.54	Kw/h	Regeneration blower	0.101	Kw/h
Total Power Required	15.56	Kw/h	Total Power Required	9.59	Kw/h
Energy cost	£0.080	£/Kwh	Energy cost	£0.080	£/Kwh
Energy /kg	0.06	Kw/KG	Energy /kg	0.04	Kw/KG
Running costs			Running costs		
Drying costs	0.0050	£/Kg	Drying costs	0.0031	£/Kg
Cost Hour	£ 1.24	£/Kwh	Cost Hour	£ 0.77	£/Kwh
Daily Cost	£ 29.87	£/Kwh	Dally Cost	£ 18.42	£/Kwh
Year Cost	£ 10,581	£/Kwh	Year Cost	£ 6,524	£/Kwh

Dryer type	Annual energy cost	Extra cost
Summit Rotor Dryer	£ 6,524	-
Traditonal Twin Bed desiccant dryer	£ 10,581	62%

Annual Saving **£4,056** **-38%**

Other savings: **No Compressed Air**
No Chilled water
No Dessiccant Beads