

Evaporator Specification

		Ordinary Skim milk	Instant Skim milk	Ordinary Whole milk	Instant Whole milk	Premium Instant Whole milk
Feed Rate	Kg/hr	47,560	47,560	44,200	44,200	42,450
Feed Concentration	% TS	8.8	8.8	12	12	12
Feed Temperature	°C	10	10	10	10	10
Water Evaporation	Kg/hr	38,840	38,840	33,150	33,150	31,835
Concentrate Rate	Kg/hr	8,720	8,720	11,050	11,050	10,615
Concentrate Solids	% TS	48	48	48	48	48
Concentrate Temperature	°C	52	52	52	52	52
Product Heating	°C	120	95	120	95	95
Product Holding Time	Min [0.5m, 1.0, 2.0, 3.0] Total 3 minutes					
Consumption Data						
Steam	Kg/hr	3,750	2,970	3,240	2,630	2,410
Steam Pressure	kPa (g)	1,000	1,000	1,000	1,000	1,000
Condensate MVR kg/hr @	17°C	42,562	41,800	36,375	35,775	34,865
Electric power						
Pump Motors Installed	kW	177.5	177.5	177.5	177.5	177.5
Consumed		133	133	130	130	128
MVR Fans						
Installed	kW	1x 500	1x 500	1x 500	1x 500	1x 500
Consumed	kWh	440	440	400	400	390
Cooling Water	m³/hr	128	91	104	76	71
Temperature In/Out	°C	30/47	30/48	30/48	30/50	30/49
Maximum Cooling Water during CIP	m³/hr	150				
	°C	65				
Service Water	m³/hr 60 [for start-up, CIP & pump seals]					

Spray Dryer Specification

	Capacity Tonne/Hour @ %ts in/out							
	Skim Milk				Wholemilk			
	Low	Medium	High	Instant	Low	Medium	High	Instant
Dryer/Evap	Heat	Heat	Heat		Heat	Heat	Heat	Agglom
Plant 1: Niro MSD 800 dryer	4.335/48	4.335/48	4.12/46	4.335/48	5.44/48	5.44/48	5.17/46	5.225/48
Plant 1: Niro 1MVR / 2TVR evap	47.5-9/48	47.5-9/48	44.2-9/46	47.5-9/48	44.212/48	44.212/48	42-12/46	56.6-12/48
Plant 2: Niro MSD 800 dryer	4.335/48	4.335/48	4.12/46	4.335/48	5.44/48	5.44/48	5.17/46	5.225/48
Plant 2: Niro 1MVR / 2TVR evap	47.5-9/48	47.5-9/48	44.2-9/46	47.5-9/48	44.212/48	44.212/48	42-12/46	56.6-12/48