



## Full Metrics

Overall Metrics	breakdowns	Units
Litres of finished wine per tonne crushed	red and white	L/t
Energy Consumption per tonne crushed	vintage and non-vintage	MJ/t
Water used per litre of finished wine	vintage and non-vintage	L/L
Recycled water per litre of finished wine		L/L
Rainwater usage per litre of finished wine		L/L
Person hours per tonne crushed	vintage and non-vintage	hr/t
Analysis person-hours per tonne crushed		hr/t
Wastewater COD	vintage and non-vintage	kg/t
Wastewater BOD	vintage and non-vintage	kg/t
Products per tonne crushed	red and white	per tonne
Efficiency of bulk wine transfers		no of transfers
Cost of Maintenance per fixed asset cost		hr/\$,000
<b>Crushing Metrics</b>		
Person-hours per tonne crushed		hr/t
Water used per tonne crushed		L/t
Percent downtime of scheduled use		%
Unplanned maintenance downtime		%
Grapes yield	red and white	%
Average crushing throughput		t/hr
<b>Fermentation Metrics</b>		
Person-hours per tonne fermented	red, white, premium, commercial	hr/t
Water used per tonne fermented	red and white	L/t
Average Ferment duration	red, white, premium, commercial	day
Average number of ferments per vessel	red, white, premium, commercial	no. of ferments
Average Fermentation throughput	red, white, premium, commercial	t/d
Malolactic fermentation losses	red, white, premium, commercial	%
Malolactic Fermentation duration	red, white, premium, commercial	day
<b>Pressing Metrics</b>		
Person-hours per tonne pressed	red, white, premium, commercial	hr/t
Water used per tonne pressed	red and white	L/t
Pressing overall capacity	red and white	t/t
Pressing cycle duration	red, white, premium, commercial	hr
Average pressing throughput	red, white, premium, commercial	t/hr
Press yield	red, white, premium, commercial	L/t
Marc produced per tonne crushed	red and white	kg/t
<b>Clarification Metrics</b>		
Juice Clarification water use	centrifuge, RDV, earth, plate & frame, crossflow, membrane, cartridge, flotation and overall	L/L
Juice Clarification process efficiencies	centrifuge, RDV, earth, plate & frame, crossflow, membrane, cartridge, flotation and overall	%
Wine clarification water use	centrifuge, RDV, earth, plate & frame, crossflow, membrane, cartridge, flotation and overall	L/L
Wine clarification process efficiencies	centrifuge, RDV, earth, plate & frame, crossflow, membrane, cartridge, flotation and overall for red and white	%
Lees disposal	Lees disposed per tonne crushed	kg/t

<b>Stabilisation Metrics</b>		
Protein stabilisation recovery	white	% recovered
Cold stabilisation	batch duration and % recovered, red and white	hr
De-alcoholising water use		L/kL
De-alcoholising throughput		L/hr
<b>Maturation Metrics</b>		
Person hours	red, white, premium, commercial	hr/kL
Water used in cleaning	tanks, barrels	L/kL
Rackings	red and white	rackings/yr
Evaporation losses	red, white, premium, commercial	%
<b>Bottling Metrics</b>		
Person-hours	375ml, 750mL, 1.5L, casks, other small, other large	hr/kL
Water consumption per L filled	375ml, 750mL, 1.5L, casks, other small, other large	L/L
Losses	contract and own	L/kL
Volume filled per volume scheduled		%
Volume filled per volume capacity		%
Dry goods wastage	bottles, closures and labels	%
Average duration of changeovers		hr
Changeover time as a percentage of runtime		%
Percentage unplanned maintenance downtime		%
Bottling maintenance person-hours per kL filled		hr/kL
<b>Warehousing Metrics</b>		
Pallets processed		per hr
Months of stock held		mth
Percentage of warehouse utilised		%
<b>Utilities Metrics</b>		
Refrigeration plant energy consumption	vintage and non-vintage	kWhr/t
Annual energy consumption		kWhr/t
Utilities maintenance man-hours		hr/t
<b>Misc. Metrics</b>		
All cleaning chemicals per tonne crushed		kg/t
Citric acid per tonne crushed		kg/t
Tartaric acid per tonne crushed		kg/t
Cream of tartar per tonne crushed		kg/t
Nitrogen per tonne crushed		kg/t
CO <sub>2</sub> per tonne crushed		kg/t
DAP per tonne crushed		kg/t
Yeast per tonne crushed		kg/t
Enzymes per tonne crushed		L/t
Perlite per tonne crushed		kg/t
Diatomaceous earth per tonne crushed		kg/t
PMS (metabisulphite) per tonne crushed		kg/t
Tannin per tonne crushed		kg/t
Legal water addition per tonne crushed		L/t
MLF bacteria per tonne crushed		kg/t