Decisions in a Single Varietal Wine

A Master Decision List for red wine

Purpose & Scope

This document establishes a count of the decisions that go into making one varietal Cabernet Sauvignon. It is meant to support two talking points: first, how many genuine choices sit behind a single bottle; and second, how a cellar-focused handbook and a professional, vineyard-to-blend workflow emphasise different parts of that decision set.

Two boundaries define the count. It includes only **per-vintage recurring** decisions (the ones made every harvest), so one-time vineyard establishment choices — site, variety, clone, rootstock, spacing, row orientation, training system — are excluded. And it excludes pure **product or packaging** selection: choosing among hundreds of yeast strains is one decision, not many; bottle shape and size are not decisions. Oak, by contrast, is deliberately broken into its sensory-defining axes — origin, toast, new-vs-used, size, format — because each independently changes the wine.

Counting Methodology

Each numbered item is a distinct planned lever the winemaker resolves while designing the wine toward a target. The following rules keep the count consistent:

- **One decision per axis.** A whether/which fork counts once; a conditional method or strain it triggers counts once; each distinct timing decision and each distinct target or setpoint (dose, temperature, duration, percentage) counts once.
- **Product picks collapse to one.** Selecting a yeast strain, an ML bacterium, or a fining agent is a single decision regardless of how many options exist. The choice of cooper is not counted.
- **Oak stays decomposed.** Origin, toast level, new vs. used, barrel size, delivery format (barrel vs. alternatives), and grain/seasoning are each counted separately.

The line between a decision and a reaction. Only **proactive design choices** are counted. Reactive remediation — something done only because a fault appeared — is documented in Appendix A but excluded from the total. The test:

> *"Would a winemaker making a flawless vintage still make this decision?" If yes, it is a planned lever and is counted. If it only happens when something breaks, it is a reaction and is not.*

Headline Numbers

The total depends entirely on how finely a "decision" is defined. Three honest framings, useful for different slides:

Framing	Count	What it counts
Coarse (major decisions only)	**~50**	Top-level strategic forks; closely-related micro-choices grouped

Framing	Count	What it counts
Planned per-vintage (this list)	**92**	Every distinct planned lever, oak decomposed, product picks = 1 each
Everything counted	**~400**	Industry rule-of-thumb incl. every micro-adjustment and product choice

The figure of record for this analysis is **92 planned per-vintage decisions**.

Master Decision List

1. Vineyard — growing season

#	Decision	Handbook	Notes
1	Pruning style (spur vs. cane)	No	Cellar handbook; assumes fruit is farmed or purchased
2	Bud load / yield target at pruning	No	Vineyard yield target not addressed
3	In-season crop / cluster thinning (y/n)	Yes	—
4	Thinning timing (pre- vs. post-veraison)	No	Thinning noted; timing not specified
5	Canopy management — shoot positioning / hedging	Yes	Brief 'if you grow your own' aside
6	Leaf removal (y/n)	Yes	'Plucking some leaves' to expose clusters
7	Fruit-zone exposure — side & degree	Partial	Touched within the canopy/leaf aside
8	Irrigate vs. dry-farm	No	Irrigation only noted as a cause of fruit splitting
9	Deficit-irrigation regime & timing	No	Not addressed
10	Pest / disease management program	No	Only 'avoid problematic fruit' at sorting

2. Harvest

#	Decision	Handbook	Notes
11	Ripeness metric that drives the pick (Brix vs. pH/TA vs. flavor)	Yes	Dedicated 'determine ripeness' section
12	Harvest date	Yes	'Determining when to harvest' section
13	Hand vs. machine harvest	Yes	—
14	Night vs. day pick	Yes	Early-morning / chilled-fruit guidance

3. Receiving & pre-fermentation

#	Decision	Handbook	Notes
15	Fruit temperature at receiving (chill or not)	Yes	—
16	Cluster sorting (y/n & level)	Yes	—
17	Berry sorting (y/n & level)	Yes	—

#	Decision	Handbook	Notes
18	Destem vs. whole-cluster	Yes	—
19	% whole-cluster	Yes	—
20	Degree of crush / whole-berry %	Yes	—
21	Processing intensity — gravity vs. pump handling	Partial	Gentle-handling noted, not a discrete lever
22	Cold soak (y/n)	Yes	—
23	Cold-soak duration	Yes	—
24	Cold-soak temperature	Yes	—
25	SO2 at crush (y/n)	Yes	Pre-fermentation sulfiting
26	SO2 dose at crush	Yes	Calculation formula provided
27	Acid adjustment (y/n)	Yes	Acidification / deacidification
28	Acid target / dose	Yes	Dosage rates & targets given
29	Brix adjustment — water-back / chaptalize / none	Yes	—
30	Brix target	Yes	—
31	Enzyme addition (y/n)	Yes	—
32	Fermentation-tannin addition (y/n)	Yes	—
33	Other pre-ferment additions (color / mouthfeel co-adjuncts)	Yes	—
34	Saignée / bleed (y/n)	Yes	Covered as method / rosé byproduct
35	Saignée amount	No	Amount not quantified as a decision

4. Primary (alcoholic) fermentation

#	Decision	Handbook	Notes
36	Fermentation vessel (tank / bin / concrete / open-top / barrel)	Yes	—
37	Lot segmentation (one large vs. many small ferments)	Partial	Ferment saignée/turbid lots separately noted
38	Native / spontaneous vs. inoculated	Yes	—
39	Yeast strain	Yes	—
40	Yeast rehydration & acclimation protocol	Yes	—
41	Nutrient additions (y/n)	Yes	—
42	Nutrient staging / timing	Yes	Staggered / 1/3-sugar-depletion program

#	Decision	Handbook	Notes
43	Fermentation temperature program	Yes	—
44	Maximum (peak) temperature cap	Yes	85–90°F warnings
45	Cap-management technique (punch-down / pump-over / délestage)	Yes	—
46	Cap frequency & intensity	Yes	Gentle vs. vigorous punch-downs
47	Must aeration / oxygenation during ferment (y/n)	Yes	'Aerating fermenting red must' section
48	Fermentation duration / rate management	Yes	—
49	Fermentation endpoint (dryness target)	Yes	—

5. Post-fermentation & pressing

#	Decision	Handbook	Notes
50	Post-ferment maceration — remain on skins (y/n)	Yes	—
51	Extended maceration — deliberately extended (y/n)	Yes	—
52	Extended-maceration duration	Yes	—
53	Pressing timing (at dryness / before / after ext. mac.)	Yes	—
54	Pressing method & intensity (hardness)	Yes	Basket vs. bladder; yield/quality
55	Press-fraction handling & press-wine blend-back	Yes	Free-run vs. light/heavy fractions

6. Malolactic fermentation (MLF)

#	Decision	Handbook	Notes
56	Spontaneous vs. inoculated	Yes	—
57	ML bacteria strain	Yes	—
58	Co-inoculation vs. sequential	Partial	Co-ferment cultures + post-ferment start implied
59	Inoculation timing / target	Yes	Timing 'critical'; Brix / post-racking cues
60	Vessel & conditions (tank vs. barrel; temperature)	Yes	—

7. Élevage / aging & cellar

#	Decision	Handbook	Notes
61	Aging vessel fork (oak / steel / concrete / amphora)	Yes	—
62	Oak use / % of wine seeing oak	Yes	—

#	Decision	Handbook	Notes
63	Oak delivery format — barrel vs. alternatives (chips / cubes / staves / inserts)	Yes	Oak alternatives discussed
64	Oak origin (American / French / Hungarian)	No	Origins not distinguished
65	Toast level	Partial	Toast flavors described; level not a stated choice
66	New vs. used (& age / fill mix)	Yes	—
67	Barrel size (barrique / puncheon / large format)	No	Format not addressed
68	Grain & seasoning spec (tight/loose grain; air-dried months)	No	Not addressed
69	Aging duration	Yes	'Optimal aging time' section
70	Lees regime (gross vs. fine; sur-lie)	Yes	—
71	Bâtonnage (lees stirring) — y/n & frequency	Yes	—
72	Racking schedule / frequency	Yes	—
73	Racking method (oxidative vs. inert / closed)	Yes	Inert-gas handling; air-exposure control
74	Topping frequency (headspace management)	Yes	—
75	Oxygen management / micro-oxygenation (y/n)	Yes	—
76	SO2 maintenance target during aging	Yes	Molecular/free-SO2 targets
77	Storage environment (cellar temp / humidity)	Yes	—

8. Blending

#	Decision	Handbook	Notes
78	Blend vs. bottle as 100% varietal	No	Single-batch scope; varietal blending absent
79	Blend components (which lots / varieties)	No	Varietal blending absent
80	Blend proportions (%)	No	Varietal blending absent
81	Lot / barrel selection & declassification	No	Multi-lot selection program absent

9. Stabilization, finishing & bottling

#	Decision	Handbook	Notes
82	Fining (y/n)	Yes	—
83	Fining agent / method	Yes	Expanded agent list
84	Cold / protein stabilization (y/n)	Yes	—
85	Stabilization method (cold-stab vs. CMC / metatartaric / mannoprotein)	Yes	—

#	Decision	Handbook	Notes
86	Filtration (y/n)	Yes	—
87	Filtration level (coarse / polish / sterile)	Yes	—
88	Pre-bottling conditioning (final tannin / gum / SO2 trim)	Yes	—
89	Bottling timing	Yes	—
90	Final SO2 target at bottling	Yes	—
91	Closure type (cork / technical / screwcap)	Partial	Cork assumed; cork-vs-screwcap not posed as a choice
92	Line / dissolved-O2 & sterile-fill handling	Yes	—

Appendix A — Reactive / Troubleshooting Items (Documented, Not Counted)

These appear in the handbook and are legitimate cellar work, but they are excluded from the decision count because they are responses to faults rather than choices made while designing the wine.

Troubleshooting item	Why it is not counted as a design decision
Reduction / H2S remediation (copper, aeration)	Reactive — undertaken only in response to an off-odor fault, not chosen while designing the wine.
Casse / persistent-haze removal	Reactive — corrects a stability failure after it appears.
Stuck / sluggish fermentation restart	Reactive — a recovery process, not a planned lever.
Carbon / color correction (activated carbon, carbon black)	Reactive — strips an already-faulted color or aroma; overlaps fining if ever used.
Volatile acidity (VA) minimization	Not a distinct lever — prevention delivered through decisions already counted (SO2, temperature, cap work, sanitation), plus a reactive tail.
Ascorbic-acid antioxidant addition	Proactive but a white/rosé tool; reds carry their own phenolic antioxidants, and it overlaps the SO2 decisions already counted.

Appendix B — Categories Excluded by Scope

One-time vineyard establishment (not per-vintage): site selection, variety, clone, rootstock, vine spacing, row orientation, training system. Adding these back would push the total toward ~100 — a useful "and this is before the vineyard was even planted" framing.

Pure product / packaging selection (one decision or none): the specific yeast, bacteria, or fining product within an already-chosen dimension (counted as one); and bottle shape and size (not counted).

Master list derived from general enology references and cross-checked against the GENCO Winemaker's Handbook (2026). Counts reflect the methodology on page 1 and are intended as a defensible working baseline, not an official industry figure.