

APQP Timeline

How-to guide: what the workbook does, how to use it and what every number means.

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APQP Timeline

Plan an APQP launch in five phases, track progress against plan and see when start of production is really forecast and what a slip would cost.

For: Program and launch managers, APQP leads, quality and manufacturing engineers at automotive, medical device and other suppliers launching new parts.

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Quick start

1. On Setup, type the program, the plan start, the customer's SOP date and the status date, then the delay-cost figures and your phase and owner lists.
2. On Plan, list every task or deliverable with phase, owner, start, duration, its predecessor and whether it is needed for SOP; copy the approved end dates into Baseline end.
3. Each week, update Complete (%) for each task and move the status date forward.
4. Read Status and Check: Overdue and Below target tasks need action; when Check says a task starts before its predecessor ends, re-plan its start.
5. Open the Dashboard for progress against plan, the phase and task Gantt charts and the forecast SOP slip.

What is in the workbook

Start Here	Read this first: what the workbook does and how to use it.
Setup	Program, plan start, SOP and status dates, progress tolerance, delay-cost figures, and the phase and owner lists.
Plan	One row per task or deliverable: dates, progress and predecessor. Forecast, slip and status are calculated.
Dashboard	Progress against plan, overdue and behind-plan tasks, the phase and task Gantt charts and the forecast SOP.
Method	How every number is calculated, with assumptions, limits and sources.
Verify	Self-check: the workbook's formulas recomputed on fixed inputs against an independent reference.

What each number means

Quantity	How it is calculated	Units
End	Start + duration - 1 (calendar days, the start day counts).	date
Offset	Start - plan start: the invisible part of each Gantt bar.	days
Planned days	MIN(duration, MAX(0, status date - start + 1)): days that should be done by the status date.	days

Quantity	How it is calculated	Units
Done, remaining	Done = duration x complete; remaining = duration - done.	days
Forecast end	Complete: the end. Started: the later of the end and status date + remaining days (rounded up). Not started: the later of the start and the day after the status date, + duration - 1.	date
Slip	Forecast end - baseline end (- end when no baseline is typed). Positive = later than promised.	days
Status	Complete; Overdue when the status date is after the end; Below target when done days < planned days - tolerance x duration; Due soon when the end is within the window; otherwise OK.	-
Predecessor check	Check reads 'Starts before its predecessor ends' when a task not started is planned to start on or before its predecessor's forecast end.	-
Work complete, plan	Sum of done days / sum of durations; plan = sum of planned days / sum of durations (duration-weighted).	%
SOP forecast slip	MAX(0, latest forecast end of tasks needed for SOP - SOP date) / 7.	weeks
Cost of the slip (est.)	Slip weeks x margin per week x unrecoverable share + expedite cost, when the slip is above zero (the Launch Delay Cost calculator's formula).	currency
Phase start, end, spans	Earliest task start and latest planned end in the phase (SUMPRODUCT with MIN/MAX); the Gantt splits the span by the phase's done share.	date, days

Assumptions, limitations, sources and the self-check (the Verify sheet, which recomputes the workbook's formulas on fixed test inputs) are in the workbook. The last page shows the Dashboard with the example data for Ardent Plastics, a fictional business.

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SH-40 sensor housing (example) for Northline Motors (example). SOP 14 Dec 2026; status date 9 Oct 2026; 28 tasks.

WORK COMPLETE	OVERDUE TASKS	SOP FORECAST SLIP (WEEKS)	COST OF THE SLIP (USD, EST.)
66.5%	2	1.0	24,600
Plan 70.9%	Limit 0	Limit 0.0	Weeks x margin x unrecoverable + expedite
Below target	Above target	Above target	

