ACCESS ROSIN · TECHNICAL NOTE

The Closed Collection Path

The science of post-press degradation and closed-collection design in solventless rosin production.

WHY THE POST-PRESS WINDOW MATTERS

Solventless rosin leaves the press in its most fragile state: hot, fully liquefied, and terpene-saturated. At the moment of collection the extract is at or near pressing temperature — so its light aromatics are at their most volatile — it is tacky enough to trap airborne particulates, and its terpene double bonds are primed to react with oxygen. What happens in the seconds between the plate and the container has an outsized effect on aroma, color, texture stability, and cleanliness. It is physics, and equipment architecture decides how much of it the product is exposed to.

FOUR WAYS QUALITY IS LOST AFTER THE PRESS

Volatilization

Terpenes are light and volatile; the hotter the extract and the more it is spread into a thin film, the faster those aromatics evaporate.

Photolysis

UV and even ordinary room light break terpene bonds. Lab studies have measured up to ~99% terpene loss in open, lit conditions over 24 hours, versus the majority retained in closed, dark storage.

Oxidation

Oxygen starts radical chain reactions in unsaturated terpenes. Early air exposure seeds oxidation that continues in storage.

Contamination

Warm, tacky extract on an open surface is a particulate magnet, and every scrape, tool transfer, and jarring step adds a contact opportunity.

TWO ARCHITECTURES, TWO OUTCOMES

Every press makes an implicit choice at the collection step. An open flat-plate press spreads the extract as a thin film on parchment, in open room air, then relies on manual scraping to move it. A cone-plate press with a central drain lets gravity pull the extract off the heat the instant it mobilizes, down into a seated collection cylinder.

AT COLLECTION	OPEN FLAT-PLATE PRESS	CONE-PLATE + FRONT COLLECTION CYLINDER
Time on the hot surface	Film keeps cooking until flow stops.	Gravity pulls it off the heat through a central drain the moment it flows.
Exposed surface area	Thin film across parchment — maximum surface-to-volume.	A stream into a pooled mass — minimum surface-to-volume.
Environmental exposure	Fully open to room air, light, and the operator.	A single point-discharge into a seated cylinder.
Handling steps	Scrape, tool, transfer — several open-air steps.	None between the plate and the primary container.
Collection temperature	Continues absorbing platen heat on parchment.	Discharges into a zone that can be actively cooled.

HOW ACCESS ROSIN PRESSES COLLECT

The Access Rosin architecture is built around mating cone-shaped heated plates, a central drain at the base of the cone, cone-formed parchment and truncated-cone **Flow Control** mesh bags, an O-ring flow seal, and a front-mount collection cylinder seated against the bottom plate. Together they turn collection into a short, downward, single-point path: off the heat the moment it flows, into a seated cylinder that can be actively cooled, with the drain opening as the only exposure point along the way. The geometry is protected by U.S. Patents 11,040,510 and 11,511,465 and European Patent EP 3938197.

Read against the degradation science above, the collection geometry is designed to limit post-press exposure to air, light, and handling at once:

- **Less time on the heat** — gravity removes the extract from the hot plate as it mobilizes.
- **Less exposed surface** — a stream into a pooled mass presents far less surface than a thin film.

- **Fewer open steps** — first human contact can happen after the extract is already in its container.
- **A cooler landing** — the collection zone can be actively cooled, and captured vapors have the earliest chance to re-condense.

> **An honest boundary.** "Functionally closed" is not sealed, sterile, or hermetic — the drain path is still open to room air; the honest comparison is against the fully exposed film of an open flat-plate press. The quality benefits described here are emergent from the collection geometry — they are engineering design intent, not medical, therapeutic, or certification claims, and not a substitute for your own process controls and testing.
