ACCESS ROSIN™

Innovative Solventless Solutions

QUICK REFERENCE GUIDE

KWÄD V5

Automatic E-Hydraulic Rosin Press Machine

FOR POSTING AT THE PRESS

Trained Operators only — refer to AR-SOP-KWAD-001 for the controlling procedure.

FLOW CONTROL TECHNOLOGY ACCESS ROSIN™

AR-QRG-KWAD-001 Rev 2.2 Effective April 30, 2026

U.S. Patent Nos. 11,040,510 & 11,511,465 | EU Patent No. 3938197 (App. 20719248.5)

Rosin Bag V3.6 / V3.7 — U.S. Patent Pending No. 63/875,878 | TM Reg. Nos. 7,051,799 & 6,203,574

BVA Hydraulics Pump — ZPE30S4L01A-XP (US 110 V) | ZPE30S4L01D-XP (EU 220 V)

Powered by Flow Control Technology™ (F.C.T.) V5.4.2

Before You Touch the Press

DANGER — HOT & PINCH

- Plates run > 220 °F. Heat gloves on.
- 100-ton ram. Never reach into the plate zone.
- Use loading tools — never fingers.
- Test E-Stop at start of every shift.

WARNING — HYDRAULIC

- System exceeds 7,500 PSI.
- Pinhole leak = injection injury (surgical emergency).
- Never inspect pressurized lines.
- Confirm cylinder retracted before service.

REQUIRED PPE

- Heat gloves rated ≥ 250 °F
- Safety glasses
- Closed-toe slip-resistant footwear
- Long-sleeve cotton/FR garment
- No jewelry or loose accessories

CART

PN WB988933 — 20" × 40" deck.

- Brakes ENGAGED at every cycle.
- Lift only when stationary.
- Never lift at full press extension.

Run a Press

Follow these eight steps in order, every cycle, every time. The Program Summary EDIT button must be GREEN before the cycle can advance. The cycle engages with the on-screen finger button held simultaneously with the toggle held UP — toggle DOWN does NOT engage.

1

Press START PRESS

From HOME, press START PRESS. The plates calibrate the desired plate gap for safe tolerance to fit the pouch.

2

Press RUN to enter Program Summary

This is where you create your recipe.

Verify NAME, MATERIAL, RECIPE #, BAG WEIGHT, BAG SIZE, BAG COUNT, MICRON SIZE, the six stage parameters (TIME / JOLT / PSI), and TEMPERATURE setpoints.

3

EDIT — Red vs. Green

When the EDIT button is RED you cannot move forward until it is pressed GREEN.

When RED you can change all parameters of the recipe (with Lead Operator authorization).

Press EDIT to GREEN to lock the recipe — only then will the cycle advance.

4

Press RUN to enter Temperature Check

This is where the press will wait at this page until temperature is reached, then move forward automatically.

No operator action required during the wait. Confirm both top and bottom plates reach setpoint.

5

Load Pouch page (two-hand operation)

Once temperature is reached you'll be at the Load Pouch page with two-hand operation pre-armed.

Confirm a parchment-lined collection tray or jar is positioned at the discharge nipple.

6 Insert pouches — flaps DOWNWARD, .500" deep, 4-of-4

Safely insert pouches PREFERABLY WITH THE FLAPS DOWNWARD — this leaves the resin lifted off the bottom plate until ready.

Insert .500" (½ in) into the plates, evenly squared on each side (4-of-4, balanced).

Use a tool — never bare or gloved fingers — to position pouches inside the plate zone.

7 Activate — finger ON SCREEN + toggle UP (NOT DOWN)

Press the finger on the screen WHILE the toggle switch is triggered UP (NOT down).

Hold both simultaneously until F.C.T. confirms the cycle has engaged.

Once engaged, release as your recipe is active and running.

8 Monitor — eyes on the streams, ears on the pump

Stay within line of sight of the F.C.T. screen for the entire cycle.

Streams advance together, pump pulses steadily — see Recipe Tuning card on the next page.

CRITICAL — TOGGLE DIRECTION

The cycle ENGAGES only when the toggle is held UP simultaneously with the on-screen finger button. Holding the toggle DOWN will NOT engage the cycle.

Pouch & Bag Preparation

Pouch and bag preparation is the #1 operator-controlled determinant of yield, quality, and cycle safety. The Access Rosin V3.5 inner / V3.6 outer rosin bag (patent pending) and the Pyramid Parchment Pouch are co-engineered consumables. Build every assembly the same way, every time.

V3.5 INNER — Fill & Fold

- Trapezoid bag, 5.75 in tall × 7.25 in opening.
- Fill 30 – 80 g (NOT WITH HAND — funnel/scoop).
- Spread evenly across 19 in² surface.
- Fold at the printed Fold Line.
- Tuck folded flaps around body.
- MINIMAL material in fold (material in fold = slip).

V3.6 OUTER — Lock the Fold

- Octagonal bag, U.S. Patent Pending 63/875,878.
- Insert filled-and-folded V3.5 into V3.6.
- Align Side B (3 in) with V3.6 folded seam.
- Fold Side A to Stop Point — keep .500–.600 in gap.
- Mesh-on-mesh contact prevents slip.
- V3.5 + V3.6 = patent-pending double-bag system.

POUCH — Three-Fold Construction

FOLD LINE #1 — Fold upper-left & upper-right corners to bottom-center (diagonal folds).

FOLD EDGE #2 — Fold each side wing inward along a vertical fold line.

FINISH FOLDS #3 — Close the kite envelope.

- Inspect: no creases, no holes — discard any damage.

POUCH — Load & Push BACK

- Insert double-bagged V3.5/V3.6 assembly.
- MUST push bag to BACK of pouch.
- Pinch FRONT angled corners to seat the bag.
- Channel = consistent-width gap between bag outer edge and pouch inner fold.
- Bag forward = closed channel = blowout.

FLOW CHANNEL — The Engineering

- Consistent-width gap = controlled flow.
- 19 in² surface area = max liquid coverage.
- V3.5 wider Side B aligns with pouch flow port.
- Pulled release = directional flow toward exit.
- Allows warmer plates without losing terpenes.
- Validated yield: 75 – 95 % of resin recovered.

DON'T OVER-HANDLE

- Parchment behaves like construction paper.
- Sharp creases become future LEAKS.
- Pinholes from over-handling become LEAKS.
- Build the pouch once and load it.
- Discard any pouch with damage — do not press.

Leak vs. Slip vs. Blowout

Event	What it looks like	Why it happens
LEAK	Rosin escapes through the parchment wall.	Pouch flap not secured; sharp crease; pinhole from over-handling.

Event	What it looks like	Why it happens
SLIP	One stream pulls back ≥ 1 in behind neighbors.	Bag positioned forward in pouch; under-temperature; material in fold; double-bag not assembled.
BLOWOUT	Pouch fails catastrophically; rosin in plate zone.	Slip not corrected — closed flow channel + max PSI.

PLATE BALANCE

Always press an EVEN number of bags symmetrically (2-Count or 4-Count). Odd quantity? Use a spent dummy puck on the opposite side. Unbalanced loading reduces yield and accelerates plate wear.

Recipe Tuning — Listen & Look

To dial in a recipe, you'll listen to the pump regulating timing and watch the rosin streams at the discharge. Two signals. Authorize every change with the Lead Operator. Log every change on the Cycle Log.

ACOUSTIC — Pump Solenoid

DURING active flow (Stages 1-3 depending on resin):

- Solenoid pulses STEADILY = flow regulating.

DIAGNOSIS:

- A BREAK / GAP in the pulses = flow finished.

CORRECTION:

- Decrease that stage's TIME, OR
- Press SKIP in the running cycle to remove remaining time.

EFFECT: Recipe tuned to that resin's flow profile.

VISUAL — Stream Pull-Back

AT the discharge:

- All streams advance TOGETHER on a balanced load.

DIAGNOSIS:

- One stream PULLS BACK ≥ 1 in = SLIP.
- Cause: temp too low at stage prior to slip.

CORRECTIONS (one at a time):

1) Increase plate temp +5–10 °F.
2) Add +5–15 s to the prior stage.
3) Soften high-PSI stages (with #1 or #2).

ONE VARIABLE AT A TIME

Change one variable, run a confirmation batch, observe the result, then change the next. Changing time, temperature, and PSI all at once leaves you unable to attribute the result to any one variable. The Recipe Master Register requires the change AND the result.

Recipe Methods (Approved)

Method	Charge	Plate Temp	Time	Use Case
Slow & Low	120 g	180 °F	~7:30	Small batch / +Fresh Press / preserve terpenes
Quick & Warm	160 g	215 °F	~3:00	High volume / +Micro-Diamonds
Pace & Warm	200 g	205 °F	~5:30	Thick bag / jar-slab end product
Quick & Low — DO NOT USE	—	170 °F	—	Contraindicated — substitute Slow & Low or Quick & Warm

Stage Parameters — Slow & Low (Recipe 2)

Stage	L	1	2	3	4	5	6
Time (s)	45	45	60	60	60	120	60
Jolt	8	—	—	—	—	—	—
PSI	—	12	50	90	125	300	800

Stage Parameters — Quick & Warm (Recipe 1)

Stage	L	1	2	3	4	5	6
Time (s)	10	20	30	30	30	30	30
Jolt	5	—	—	—	—	—	—
PSI	—	12	70	140	350	700	1100

Stage Parameters — Pace & Warm (Recipe 3)

Stage	L	1	2	3	4	5	6
Time (s)	10	20	30	60	60	75	45
Jolt	5	—	—	—	—	—	—
PSI	—	12	40	80	125	400	900

DO NOT USE — Quick & Low

High pressure ramp at 170 °F is a non-conforming combination. Insufficient thermal mobilization at high

pressure leads to scorching and unstable yield. If observed in a recipe slot, tag it and notify the Lead Operator. Substitute Slow & Low (similar batch) or Quick & Warm (similar timing).

Reference Cards

Temperature Selection (Melt Zones)

Compound	°F	Zone
THC-A	110	First Melt
β-Caryophyllene	123	First Melt
β-Sitosterol	137	First Melt
Δ8-THC	175	Second Melt
d-Limonene	175	Second Melt
Apigenin	175	Second Melt
α-Terpineol	212	High-temp
THC-V	214	High-temp
Quercetin	241	High-temp

Reference points for recipe development. Not analytical; do not use as substitutes for COA data.

Approved Bag Geometries

Bag	Approx. Charge	Use
2 × 4 (6 in² sq.)	7–10 g	Sample / pre-press
3 × 6 (15 in² sq.)	14–18 g	Half-charge
3 × 9 (18 in² sq.)	20–24 g	Standard
Trapezoid (20 in² sq.)	28 g flower / 30 g hash	Preferred V5

Cylinder Position Quick Reference

Position	Plate Gap	When
Fully Retracted	~1.96 in	Idle / HOME
Partial Extension	Calibrated load gap	Load Pouch page
Touch Extension	≈ 0.46 in	Stage L
Fully Extended	≈ 0.05 in	Stages 5–6

Cleaning — ≥ 99 % IPA ONLY

APPROVED CLEANING AGENT

≥ 99 % isopropyl alcohol on a CLEAN, LINT-FREE CLOTH.

Apply IPA TO THE CLOTH — never spray onto the equipment.

DO NOT use water, water blends, citrus solvents, acetone, ammoniated cleaners, abrasive pads, or scouring powders.

BETWEEN-RUN

- Plates warm but safe with heat gloves.
- Wipe plates and discharge nipple with IPA-cloth.
- Carbonized residue: non-abrasive food-grade scraper.
- Reach UP from below for the nipple — never between plates.

END-OF-SHIFT

- Wipe plates, plate edges, discharge nipple.
- Wipe cart deck, scissor lift handle.
- Replace parchment in collection tray.
- V5: clean acrylic in single direction.
- V2 / V3: avoid IPA on external BOM.
- Log every cleaning event.

IPA & ELECTRICAL — DO NOT MIX

Never let IPA enter electrical enclosures, the HMI bezel, or the E-Stop / toggle assembly. Apply to the cloth, not the equipment. Allow surfaces to fully dry before re-energizing — IPA is flammable, and residual vapor near hot plates is a fire risk.

Troubleshooting — First Line

If the first-line action does not resolve the symptom, tag out the equipment and escalate to Maintenance. Document on the Deviation / NCR log.

Symptom	First-Line Action
Cycle won't engage	Check E-Stop reset; toggle held UP (not down) simultaneously with on-screen finger button.
EDIT button RED, no advance	Press EDIT to GREEN before pressing RUN.
F.C.T. dark / frozen	Power-cycle the press; verify 24 V control supply; check fuse.
No pressure rise	Verify pump powered; top off hydraulic fluid; inspect solenoid.
One plate not heating	Check cartridge heater continuity; replace defective cartridge.
Top vs. bottom > 5 °F	Recalibrate temperature per Manual §10.2; verify cartridge banks.
Stream pulls back ≥ 1 in	Slip — temp too low at prior stage. +5–10 °F or +5–15 s. Check pouch loading.
Pouch leak (rosin escaping wall)	E-Stop. Replace pouch. Inspect parchment QC. Tighten pouch handling discipline.
Bag blowout	E-Stop. Clean per IPA card. Re-train operator on pouch back-seating §7.
Acoustic break in Stage 1–3	Flow finished. SKIP or trim stage time per Tuning card.
Branch breaker trips on power-up	Verify each (press, pump) on its own dedicated 20 A circuit.
F.C.T. shows wrong version	Stop work. Notify Engineering. Approved version is V5.4.2.

Mandatory Stop Conditions — STRIKE E-STOP

- Visible smoke, scorching, or odor of burning organic material.
- Hydraulic fluid leak.
- Pressure deviation > ± 10 % from stage setpoint.
- Plate temperature deviation > ± 5 °F from setpoint for > 30 s.
- Top vs. bottom plate differential > 5 °F at steady state.
- Any unexpected plate motion outside the recipe sequence.
- Cart movement, tipping, or unexpected lift / drop while a cycle is in progress.
- Visible pouch leak or dramatic stream pull-back consistent with imminent blowout.

Required Records (per shift)

- Daily Press Log — pre-op checks (E-Stop test, two-hand interlock test, F.C.T. version).
- Cycle Log — one row per cycle (time, recipe, charge, tuning notes, slip / leak / blowout?, yield).
- Sanitation Log — every cleaning event (between-run AND end-of-shift).
- Deviation / NCR Log — every aborted cycle, mandatory stop, slip, leak, or blowout.

BVA E-Pump & Model Variants

Access Rosin proudly represents BVA Hydraulics for the KWÄD V5 hydraulic powertrain. The press ships in two voltage variants. Pressure-adjust valves on the pump valve block are reserved for Maintenance / Engineering only.

US (Standard) — 110 V

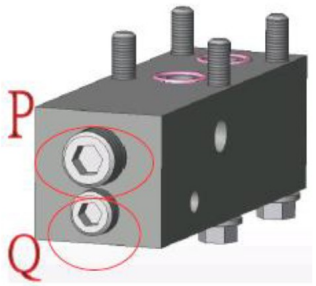
- Pump: BVA ZPE30S4L01A-XP
- Mains: 110–120 V / 60 Hz, 1-phase
- Heaters: 16 × 80 W @ 110 V (1,280 W total)
- Two dedicated 20 A circuits.
- Cylinder: 100-ton 2 in stroke (CE-marked).
- BVA cylinder optional BOM at order.

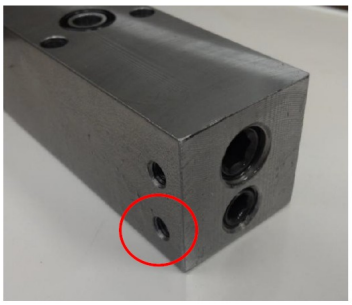
EU / International — 220 V

- Pump: BVA ZPE30S4L01D-XP
- Mains: 220–240 V / 50 Hz, 1-phase
- Heaters: 16 × 80 W @ 220 V (1,280 W total)
- Per local electrical code.
- Software, recipes, calibration: identical.
- DO NOT field-swap voltage variants.

BVA Pump — Pressure Adjustment (Maintenance Only)

BVA E-Pump Pressure Adjustment





P: Low Pressure Adjust Valve (5/16” hex bolt)

Q: High Pressure Adjust Valve (1/4” hex bolt)

Set Screw: 3 mm hex bolt.

* Before adjust, need to loose set screw priority, after adjust pressure, set screw needs tighten set screw.

VALVE BLOCK

- P — Low Pressure adjust (5/16-in hex bolt).
- Q — High Pressure adjust (1/4-in hex bolt).
- Set screw — 3 mm hex bolt.
- ALWAYS loosen the 3 mm set screw FIRST.
- Then adjust P or Q in small increments.
- RE-TIGHTEN the 3 mm set screw to lock.

AFTER PHYSICAL ADJUSTMENT

- Run F.C.T. Pressure Calibration (Manual §10.1).
- Verify LIVE PRESSURE against external gauge.
- Update calibration record.
- Tag out for production until full calibration cycle is signed off by Lead Operator.
- Do not return to production with partial calibration.

Document Control

Document	KWÄD V5 — Quick Reference Guide
Document Number	AR-QRG-KWAD-001
Revision	2.2
Effective Date	April 30, 2026
Equipment	KWÄD V5 — Automatic E-Hydraulic Rosin Press Machine (V2, V3, V5 frames)
Software	Flow Control Technology™ (F.C.T.) V5.4.2
Pump (US)	BVA Hydraulics ZPE30S4L01A-XP (110 V / 60 Hz)
Pump (EU)	BVA Hydraulics ZPE30S4L01D-XP (220 V / 50 Hz)
Cylinder	100-ton 2-in stroke single-acting (CE-marked); BVA optional BOM
U.S. Patents (Press)	Patent 1: 11,040,510	Patent 2: 11,511,465
EU Patent (Press)	EP 3938197 (Application No. 20719248.5; 12 March 2020)
U.S. Patent Pending (Bag)	Application No. 63/875,878 — Rosin Bag V3.6 / V3.7
Trademarks	Logo Reg. No. 7,051,799	Name Reg. No. 6,203,574
Companion Documents	AR-SOP-KWAD-001 (controlling SOP); AR-MAN-KWAD-001 (User Manual)
Manufacturer	Access Rosin, Inc.
Supersedes	AR-QRG-KWAD-001 Rev 2.1

KWÄD

AUTOMATIC E-HYDRAULIC ROSIN PRESS MACHINE

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