FREE VYRCO RESOURCE

Mold vents: observe before intervening

Guide and record for locating findings, preserving evidence and preparing an authorized review.

Intermediate level | Mold, maintenance, process and quality technicians.

Create one record per vent location without confusing a visual observation with a measurement, root cause or repair authorization. Complements general inspection (01), defect documentation (06) and post-maintenance verification (14).

Original VYRCO form and general guidance. Not a cleaning, flow-testing, injection-setting or machining procedure. Dimensions, materials and criteria must come from applicable, approved documentation.

Documentation sequence

1. Identify and limit access

Record the mold, revision, cavity and location ID. Use an oriented map and a visible reference so another person can locate the point. Document only under safe, authorized access conditions; if access is unavailable, mark not inspected. Do not disassemble to complete this record.

2. Recognize the function; do not assume the design

DME explains that venting allows air to escape during filling. [DME-V] Identify the type from the drawing or manual: parting-line vent, porous element, specific component or other. If undocumented, record unknown type. A visible groove alone does not establish its function.

3. Separate observation from measurement

Describe the location, visible residue, marks or apparent damage. Keep an overview and a close-up with IDs and orientation, without changing originals. Enter not measured when no measurement was taken; a photograph does not establish depth, flow rate or conformance.

4. Link records without diagnosing

Link available part IDs and process, material and cavity records. BASF distinguishes categories such as diesel effect, black specks and burning streaks. [BASF] Record appearance without automatically selecting a cause. A nearby mark and residue do not prove causation.

5. Prepare the technical inquiry

Request the exact component identification, drawing, revision and applicable method. DME states that cleaning-agent selection for its sintered vents depends on the plastic. [DME-S] Do not transfer that guidance to another product or select a solvent without validation.

6. Close with explicit open items

Separate: observation recorded; evaluation pending; intervention authorized under another work order; or documented verification. Record the owner and required evidence. If work occurred, link its order and subsequent verification. Do not mark fit for service merely because the location looks clean.

1 / Identification and evidence

BLANK TEMPLATE. One record per location. The fictional example is separate.

Record ID / date / time zone / observer
Mold / revision / cavity / location ID
Map and orientation / reference for locating the point
Vent type and component / document or unknown
Access condition / procedure and authorization reference
Observed / not inspected / justified not applicable / reason
Objective description / exact location / condition before action
Photos: overview and close-up / IDs / original file location
Related parts: IDs / cavity / shot or unknown
Material and process: grade / lot / revision / source or unknown

Do not invent dimensions or fill gaps with zero. If the document is unavailable, enter criterion pending. Keep each record revision and link evidence without attaching confidential information.

2 / Evaluation and follow-up

BLANK TEMPLATE. One record per location. The fictional example is separate.

Drawing or manual / revision / characteristic to evaluate
Specification and tolerance copied from the document / unit
Original result / unit / not measured when applicable
Method / instrument / verification status / operator
Hypothesis separate from facts / missing evidence
Technical inquiry / responsible function / reference / response
Proposed action / separate order and authorization / or pending
Comparable after-work evidence / date / intervening changes
Verification pending or completed / criterion / results record
Authorized owner's decision / name or internal ID / follow-up

Do not invent dimensions or fill gaps with zero. If the document is unavailable, enter criterion pending. Keep each record revision and link evidence without attaching confidential information.

Original FICTIONAL example

Situation

Fictional mold DEMO-VENT; record OBS-V01; point V-A in cavity C-A, located on fictional map MAP-A. Dark residue is observed in an area identified as a vent on that map. All example identifiers and events are invented.

Recorded evidence

Overview IMG-G and close-up IMG-D, with the same orientation recorded. Fictional part P-A has a dark mark; its shot is unavailable. The link is retained as incomplete context, not proof of cause.

What is unknown

The dimensional drawing is unavailable and geometry was not measured. The record says not measured and criterion pending, not vent out of tolerance. Internal blockage has not been established.

Proposed action

Ask the mold owner for the current drawing and applicable procedure. No depth, cleaning product or modification is proposed. The point remains pending evaluation; the mold is not declared released.

Later comparison

If a separate work order authorizes intervention, record its ID and after-work evidence with comparable orientation. If material or process changes, record those changes too; a later part without the mark does not by itself prove that venting was the cause.

Example closure

Documentation is complete for its visual scope; technical evaluation and release decision remain pending. Completing the record is not the same as resolving the defect.

Primary sources and scope

Sources accessed: 2026-10-18

DME-V - DME - Venting Solutions

Scope: air evacuation during filling. Dimensions, intervals and commercial performance claims are not adopted.

Open primary source

DME-S - DME - Sintered Vents FAQ

Scope: plastic-dependent cleaning-agent selection for DME sintered vents. No agent is selected and no method is generalized to other components.

Open primary source

BASF - BASF - Injection Molding Troubleshooter

Scope: distinguishes defect categories; used for terminology, not part diagnosis. No process adjustments from linked sheets are incorporated.

Open primary source

Limitations and hold points

- Do not reach into a moving mold, bypass guards or use this form as an energy-isolation procedure. Follow authorized safety procedures.

- Do not scrape, polish, deepen, drill or test with pressurized air to complete this record. Any intervention requires separate instructions and authorization.

- No tolerances, pore sizes, flow rates, compatible products, cleaning intervals or injection settings are specified.

- Manufacturer references are not universal: confirm the component, resin, drawing and revision. The example does not validate a design or repair.

- Does not certify safety, capability, root cause, legal compliance or mold/product release. Approval of this material does not authorize an intervention.

Original VYRCO material, an independent project. No employer or customer data. Do not share confidential information. Contact: info@vyrco.com.