



MACHINES PLUS ACADEMY | PRACTICAL PRINTING GUIDE

Daily & Weekly DTF Printer Maintenance

A practical maintenance routine to help reduce avoidable downtime, protect white-ink reliability and keep a DTF workflow predictable.

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We share practical knowledge because better information leads to better decisions, better operators and better print businesses.

Prepared by Machines Plus
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The short answer

DTF maintenance works best as a little-and-often routine. A few minutes of checking and cleaning at the right time is usually better than waiting for print quality to collapse and then trying to recover the machine.

The exact routine depends on the printer. Some machines automate white-ink circulation, agitation and cleaning; others require more operator involvement. The manufacturer schedule always takes priority.

Machines Plus field note

Do not treat maintenance as a repair job. The goal is to stop residue, dried ink, powder contamination and missed nozzle problems from becoming a production problem in the first place.

Daily operator routine

☐	Confirm the room is within the printer manufacturer's recommended temperature and humidity range.
☐	Leave the printer powered in the state required for automatic maintenance; do not switch it off at the wall unless the manufacturer tells you to.
☐	Check ink levels and waste/maintenance capacity before starting a long production run.
☐	Perform the white-ink agitation or circulation routine required by the printer and ink system.
☐	Run a nozzle check before production and correct missing nozzles before printing saleable work.
☐	Inspect the cap, wiper and surrounding maintenance area for visible contamination if the manufacturer makes those areas operator-serviceable.
☐	Keep the media path and platen/feed area free from lint, film scraps, powder and adhesive residue.
☐	At the end of the shift, carry out the scheduled cleaning routine and record anything unusual.

What to look for during a nozzle check

- One or two missing nozzles that repeat in the same position.
- Weak or uneven white compared with the normal pattern.
- Deflection, where jets fire sideways rather than straight.
- A pattern that improves after cleaning but quickly fails again - often a sign that the root cause has not been corrected.

Weekly maintenance

Weekly work should be based on the manufacturer schedule and production load. A machine running long shifts may need some items more often; a lightly used printer may have different storage requirements.

Area	What to check
Capping station	Clean only as specified. Check for ink build-up, fibres or debris that could stop the cap sealing properly.

Area	What to check
Wiper / cleaning blade	Remove contamination using the approved method. A dirty or damaged wiper can drag residue across the printhead.
Around the printhead	Use only the approved tools and fluid. Do not touch or wipe the nozzle surface unless the manufacturer explicitly instructs it.
Media path	Remove film fragments, powder and dust. Check pinch rollers and guides for contamination.
Waste system	Check waste bottle/maintenance tank level and any tubes that are intended for operator inspection.
Shaker / dryer	Vacuum or clean powder residue according to its manual; inspect filters, exhaust and take-up areas.
Consumables	Check film and powder storage, ink dates and the stock needed for the coming week.

Five maintenance mistakes to avoid

- Turning the printer off at the wall and preventing automatic circulation or cleaning.
- Using household cleaners, alcohol or unapproved fluids in the ink system or around sensitive parts.
- Cleaning repeatedly without checking why the same nozzle failure keeps returning.
- Allowing powder dust to migrate toward the printer and maintenance station.
- Leaving a white-ink printer unused for long periods without following its storage procedure.

When a problem keeps coming back

Symptom	Check first
White drops out after standing	White-ink circulation/agitation routine, ink condition, cap seal, nozzle check history.
Same nozzles missing every day	Cap/wiper condition, dried residue, scheduled head-area cleaning, service requirement.
Nozzles fail during long runs	Room conditions, ink level, automated maintenance, excessive heat or airflow, contamination.
Ink marks on film	Head-area contamination, film curl/height, media path, static, debris.
Powder dust everywhere	Shaker settings, extraction, powder return system and housekeeping around the finishing equipment.

Keep a simple maintenance log

A maintenance log helps separate a one-off fault from a pattern. Record the date, nozzle-check result, cleaning performed, white-ink condition, room temperature/humidity and any parts replaced. This also gives technicians better information if support is needed.

Good habit

If the machine has been reliable, do not “improve” the routine by adding extra cleaning chemicals or unnecessary manual cleaning. Follow the schedule that is working and the current manufacturer instructions.

References & further reading

Epson SureColor F1070 User's Guide

<https://files.support.epson.com/docid/cpd6/cpd64429/helpcontents.html>

Mimaki TxF150-75 manuals - Operation and Care & Maintenance

<https://mimaki.com/product/inkjet/dtf/txf150-75/download-manual.html>

Roland DG TY-300 / TY-300i Direct-to-Film Printer

<https://www.rolanddg.com.au/products/printers/ty-300>

Important

This guide provides general educational information. Always follow the current instructions supplied by the manufacturer of your printer, ink, film, powder, heat press and substrate. Settings and maintenance requirements vary by product.

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