

OVERVIEW:

Proper maintenance of shrink fit holders is essential for tool holding performance, safety, and longevity.

Maintenance should focus on cleanliness, storage protection, routine inspections, and safe heating practices — especially for holders used with through-spindle coolant.

1. Cleaning

- Wipe down the holder with a dry, lint-free cloth after each use to remove chips, coolant, and debris.
- Inspect the bore and outside surfaces for contamination, burrs, or visible damage.
- For long-term storage, perform an oil wash with air gun, remove any fluid residue, and apply a rust-preventive agent.

2. Protection & Storage

- Store holders in a clean, dry area away from heat, humidity, or corrosive environments.
- Avoid contact with sharp or heavy objects that can damage the tool taper or bore.
- Never use an open flame or torch on shrink fit holders — doing so may alter the holder's material properties.

3. Inspection Checklist

- Inspect tool shanks and holders for wear, corrosion, pitting, or any scoring in the bore.
- Confirm that retention knobs (pull studs) are torqued to spec and not damaged.
- Ensure the cutting tool meets the minimum clamping length for the shrink bore.
- Look for signs of overheating or cracking, especially near the heating zone. If you see these signs — then do not use the holder.

4. Periodic Maintenance

- Infrequent use → Do a quality check on the holder to identify any issues before using.
- Frequent use → Manually inspect bore wear and wall thickness regularly.
- Heating systems should also be inspected or replaced per machine usage guidelines.
- Maintenance tip for shrink fit holder — watch video:

<https://www.youtube.com/watch?v=o4f9Dkf8mig>

5. Safety & Operational Warnings

- NEVER use a torch for heating — use only certified shrink fit heating machines.
- Always power off and unplug the machine before servicing or cleaning.
- Do not start the heating cycle without a holder and heating head installed.
- Start the cooling process immediately after heating to prevent material distortion.



Critical Safety Warning: Pressure Build-Up Hazard

- If coolant residue remains inside the bore, rapid heating can cause internal pressure build-up. This may result in violent ejection of the tool or thermal cracking of the holder. Always verify the bore is completely clean and dry before heating.

Additional Tips

- Ensure cutting tools are clean, dry, and seated properly before heating.
- Don't exceed the recommended heating temperature; overheating compromises clamping strength.
- If a cutting tool becomes stuck, wait for a complete cooldown before reheating.

Need Assistance?

If you have any questions or concerns regarding shrink fit holders, please contact Tim Reeves in the Lyndex-Nikken Service Department at: timr@lyndexnikken.com

