CCOHS CCHST

Canadian Centre for Occupational Health and Safety 🍁 Centre canadien d'hygiène et de sécurité au travail

Metalworking Machines

Metalworking Machines - Shapers

On this page

What should you do before using a shaper?

What are some safe work practices to know when using a shaper?

What should be avoided?

What should you do before using a shaper?

Shapers can be dangerous if not used properly.

- Read the owner's manual carefully.
- Make sure you understand instructions and are properly trained before operating a shaper.

Please refer to the OSH Answers on Metalworking Machines - General for general safety tips.

A shaper is used to finish metals with a cutting tool that moves back and forth (the table is stationary). The cutting tool cuts in one direction only. It is similar to a <u>planer</u> where the work table moves back and forth while the cutting tool is held stationary.

What are some safe work practices to know when using a shaper?

- Wear C.SA-certified safety glasses with side shields, or a face shield.
- Wear appropriate CSA-certified footwear.
- Make sure that the shaper has a working emergency start/stop button (e-stop) within easy reach.
- Secure the work with shaper vises, parallels, hold downs, or clamps and bolts.



• Ensure the work is mounted squarely.



- Make sure that the vise, tool, and ram are securely fastened.
- Remove any burrs, rough edges or cuttings that may obstruct how the work piece fits into the vice.
- Check that the tool and tool head clear the work piece, and the column on the return stroke.
- Make sure that the table cross-feed, tool-head feed, and attachments are working properly.

- Set the cutting tool properly to avoid vibration or chatter.
- Stand to the side (parallel) of the cutting stroke and not in front of it.
- Prevent cuttings from flying. Use a metal shield or wire screen at all times.
- Use a brush or rake to remove cuttings after any moving parts have stopped moving.
- Keep the floor around the shaper free of oil and grease.
- Keep the working surface clean of scraps, tools, and materials.
- Keep belts, pulleys, cutters and other parts in good repair. Replace when worn or dull.
- Keep machine guards in good repair and in use every time.

What should be avoided?

- Do not remove cuttings or reach across the table while the ram is moving.
- Do not adjust the machine while it is operating.
- Do not use bolts or nuts with stripped threads to hold down work clamps.
- Do not leave a shaper running unattended.
- Do not use bare hands or compressed air to remove cuttings.
- Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewellery that can become entangled in moving parts. Confine long hair.
- Do not bypass guards.

Fact sheet last revised: 2024-11-27

Disclaimer

Although every effort is made to ensure the accuracy, currency and completeness of the information, CCOHS does not guarantee, warrant, represent or undertake that the information provided is correct, accurate or current. CCOHS is not liable for any loss, claim, or demand arising directly or indirectly from any use or reliance upon the information.