

Compressed-Air Cleaning: Control the Jet and Debris

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Why this matters

Blowing a surface clean can send particles into another worker or turn settled dust into an airborne exposure. Air pressure alone does not determine whether cleaning is safe.

Objective: Verify an approved cleaning method before opening the air supply.

Key hazards or failure points

Flying chips; airborne dust; injection injury; hose movement; excessive noise; people entering the discharge area.

Practical controls

- Use an approved alternative such as suitable vacuuming when practicable. Identify the residue and applicable dust restrictions before selecting compressed air.
- Where air cleaning is permitted, use the approved nozzle, pressure control, effective chip guarding and required PPE. Never direct air at people or worn clothing.
- Use rated, sound hoses and fittings. Follow the prescribed isolation and pressure-release procedure before disconnecting or changing parts.

Verify It in the Field

Match the nozzle and supply arrangement to the documented pressure criterion and safe verification method. Never block a nozzle with a hand to test it.

Before use, inspect hose condition, connections and guarding in the required safe state. Confirm how debris is contained and others remain protected.

Confirm the residue assessment and any required dust-capture checks. A clear-looking surface or lower pressure does not prove airborne exposure is controlled.

Stop and reassess

Hold cleaning for unknown residue, uncertain pressure protection, damaged equipment or inadequate containment. Stop if anyone enters the discharge area; correct and reassess before resuming.

Ask the crew

1. Could a different method avoid blowing debris?
2. What proves the nozzle arrangement is suitable?
3. Where will the chips and dust go?

Use this HOP tool — Task preview: Preview one cleaning step before connecting the supply. Name the residue, where the jet could send it and who could be exposed. Compare the planned method with the approved controls. Assign any missing pressure or dust-control evidence before releasing the task.

Sources: OSHA 1926.302, 1926.1153, 1910.242; DOE Vol. 2, pp. 6–7. HOP concepts adapted from DOE-HDBK-1028-2009, Vol. 2 (June 2009). No claim to original U.S. Government work; no government endorsement implied.

Free next step: JHA/JSA planning and field-verification worksheet

Expanded guidance and separate forms: toddjeromejenkins.com/toolbox-talks/compressed-air-cleaning-jet-debris