CORVEX INDUSTRIAL

SOP-MNT-014 · Rev. C
Effective 2026-09-01
Owner: Plant Maintenance, Dayton OH
Applies to: CX-75 and CX-110 series

Lockout/Tagout before servicing a rotary screw compressor

Isolate every energy source on a CX-75 / CX-110 compressor before any maintenance, inspection or repair.

> **STORED ENERGY CAN KILL**
>
> A compressor that is switched off is not safe. The receiver tank and separator can hold air at up to **13 bar (190 PSI)** and the airend can restart automatically. Never start work until you have locked out, bled down and verified zero energy.

1 PURPOSE AND SCOPE

This procedure protects anyone servicing a Corvex rotary screw compressor from unexpected start-up and from stored pressure, electricity and heat. It applies to all assemblers, maintenance technicians and contractors working at the Dayton (OH) and Wrocław (PL) plants, on the assembly line test bays and in the field.

2 ENERGY SOURCES ON THE CX-75

Energy	Where	How it is isolated
Electrical, 400 V 3-phase	Main disconnect (red handle, left side of cabinet)	Disconnect OFF, personal lock + tag
Compressed air, up to 13 bar	Receiver tank, separator, discharge line	Close discharge isolation valve, open blowdown valve, gauge reads 0 bar
Control power, 24 V	Controller and remote start input	Isolated by main disconnect, remote start disabled at panel
Thermal	Airend, oil cooler, discharge pipe (up to 95 °C)	Wait 15 minutes after stop, check with IR thermometer

3 BEFORE YOU START

Required PPE
Safety glasses, cut-resistant gloves, hearing protection, safety shoes.

Required equipment
Your personal red padlock and key, a "Danger: Do Not Operate" tag, a 2-pole voltage tester, an IR thermometer.

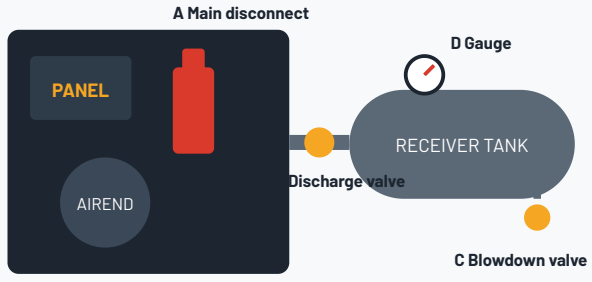

Figure 1. CX-75 isolation points: A main disconnect, B discharge isolation valve, C blowdown valve, D receiver pressure gauge.

4 LOCKOUT PROCEDURE

1. **Notify**
   Tell the shift lead and everyone working near the unit that you are locking it out, and why.

2. **Stop the compressor at the panel**
   Press STOP on the controller and wait for the unload cycle to finish. Never use the emergency stop as a normal stop.

3. **Open the main disconnect (A)**
   Turn the red handle to OFF. Set the controller to LOCAL so the remote start input is disabled.

4. **Apply your lock and tag**
   Put your own padlock through the disconnect handle. Hang your tag with your name, the date and the job. One person, one lock: everyone who works on the unit adds their own lock.

5. **Close the discharge isolation valve (B)**
   This keeps the plant air system from back-feeding into the compressor.

6. **Bleed the pressure (C)**
   Open the blowdown valve slowly until the receiver gauge (D) reads 0 bar and the hissing stops. Leave it open.

7. **Verify zero energy**
   Press START on the panel: nothing must happen. Test for voltage at the motor terminals with your 2-pole tester. Check the airend and discharge pipe are below 50 °C.

8. **Do the work**
   Only now remove guards and start the maintenance task.

5 RETURNING TO SERVICE

9. **Make it safe to run**
   Remove tools and rags, refit every guard and panel. Close the blowdown valve (C).

10. **Remove locks and tags**
    Each person removes only their own lock. Tell everyone near the unit it is about to start.

11. **Restore and test**
    Open the discharge valve (B), switch the disconnect ON, start at the panel and check for leaks and normal pressure.

> ⚠ **NEVER**
> remove someone else's lock, work under a lock you did not apply, or skip the zero-energy check because the job is "only five minutes".

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