

Argon Cylinder Regulator Replacement - JSA - A

en-US · Basic task controls · v1.0 · 2026-10-12 · Sources: article section 9

Site: | Item ID: | Work area:

| Approval | Work supervisor | Technical reviewer | Release / handover authority |
|----------|-----------------|--------------------|------------------------------|
|          |                 |                    |                              |

1. Job details and team signatures

|                 |                 |  |          |  |            |  |
|-----------------|-----------------|--|----------|--|------------|--|
| Date / time     | Location / area |  | Assessor |  | Supervisor |  |
| Team signatures |                 |  |          |  |            |  |

2. Conditions and hold points

| Stage                  | Time | Location / area | Environment / readings | Item / condition | Controls | Plant / tools | Approval / signature |
|------------------------|------|-----------------|------------------------|------------------|----------|---------------|----------------------|
| HP-0 Start             |      |                 |                        |                  |          |               |                      |
| HP-1 Isolate and bleed |      |                 |                        |                  |          |               |                      |
| HP-2 Fit replacement   |      |                 |                        |                  |          |               |                      |
| HP-3 Leak check        |      |                 |                        |                  |          |               |                      |
| HP-4 Hand over         |      |                 |                        |                  |          |               |                      |

Complete after actual checks. Recheck after changes, defects or shift handover.

3. JSA risk assessment

| Job stage                 | Hazards and effects                                                           | Failure factors                                                                             | Technical and procedural controls                                                       | Site verification                                                                          | P | S | R | A |
|---------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---|---|---|---|
| 1. Identify gas and parts | 1. Wrong-gas exposure<br>2. Regulator rupture<br>3. Connection separation     | 1. Label not checked<br>2. Wrong inlet pressure<br>3. Thread match assumed                  | 1. Read label and SDS<br>2. Match regulator service<br>3. Check outlet and seal         | 1. Cylinder gas identity<br>2. Regulator model and rating<br>3. Outlet and seal match      |   |   |   |   |
| 2. Isolate and bleed      | 1. Trapped gas release<br>2. Hose movement<br>3. Cold gas contact             | 1. Regulator used as shutoff<br>2. Downstream pressure trapped<br>3. Unsafe bleed direction | 1. Stop downstream use<br>2. Close designated isolation<br>3. Bleed by approved route   | 1. Isolation point identity<br>2. Both pressure indications<br>3. Bleed path verification  |   |   |   |   |
| 3. Fit replacement        | 1. High-pressure leak<br>2. Seal failure<br>3. Regulator damage               | 1. Wrong seal installed<br>2. Thread damage ignored<br>3. Excess fitting force              | 1. Follow model procedure<br>2. Inspect mating surfaces<br>3. Use specified seal only   | 1. Connection identification<br>2. Seal and surface check<br>3. Assembly method record     |   |   |   |   |
| 4. Leak check             | 1. Part ejection<br>2. Gas accumulation<br>3. Hose whip                       | 1. People in release path<br>2. Ventilation ineffective<br>3. Outlet not controlled         | 1. Follow supply procedure<br>2. Keep release path clear<br>3. Use approved leak method | 1. Test method and limits<br>2. Leak result recorded<br>3. Ventilation functioning         |   |   |   |   |
| 5. Correct a fault        | 1. Pressurized injury<br>2. Worsening leakage<br>3. Oxygen-deficient area     | 1. Live tightening attempted<br>2. Cause not identified<br>3. Alarm disregarded             | 1. Stop and isolate supply<br>2. Relieve trapped pressure<br>3. Withdraw on gas alarm   | 1. Fault and isolation record<br>2. Compatibility rechecked<br>3. Safe atmosphere evidence |   |   |   |   |
| 6. Hand over              | 1. Unnoticed leakage<br>2. Wrong supply setting<br>3. Unsafe cylinder storage | 1. Results not recorded<br>2. Settings not communicated<br>3. Restraint removed             | 1. Record final leak test<br>2. Transfer operating limits<br>3. Keep cylinder secured   | 1. Gas and regulator IDs<br>2. Final pressure setting<br>3. Leak check and restrictions    |   |   |   |   |

P/S/R/A: Complete only after actual site assessment using the site risk method.

4. Pre-work checklist

|                                                 |                                                     |                                                      |
|-------------------------------------------------|-----------------------------------------------------|------------------------------------------------------|
| <input type="checkbox"/> Cylinder gas identity  | <input type="checkbox"/> Isolation point identity   | <input type="checkbox"/> Connection identification   |
| <input type="checkbox"/> Test method and limits | <input type="checkbox"/> Fault and isolation record | <input type="checkbox"/> Gas and regulator IDs       |
| <input type="checkbox"/> Outlet and seal match  | <input type="checkbox"/> Ventilation functioning    | <input type="checkbox"/> Leak check and restrictions |