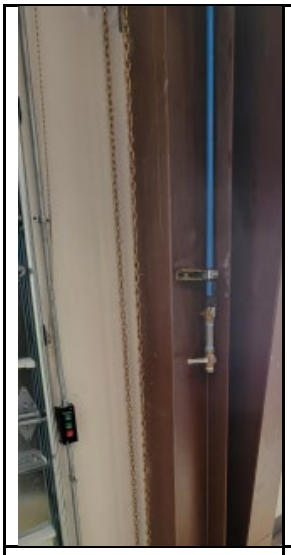
Air Drain Low points

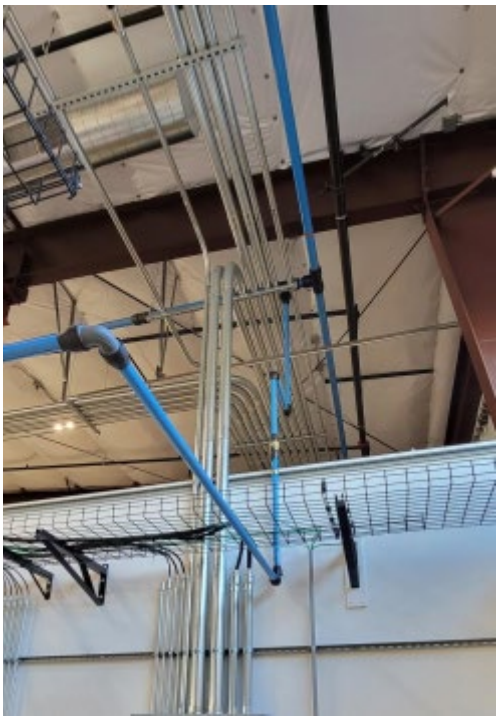
Instructions as below, area specific instructions apply to that instance (as described below pictures)

1. Install Model PD7020 Posi-Drain using only pro-press or other rigid pipe before and after valve rated to a psi at or greater than 150psi
2. Plumb drain side to nearest wall and penetrate wall for outside drainage
3. Elbow down within 6” of ground
4. Seal all penetrations
5. Ensure all piping is strapped and secure

		
3 typical instances in shop, disconnect stainless tube and lower ball valve and plumb directly to AirNet installed ball valve. Posi-Drain should attach to nearest wall approximately at 42”	Install in compressor building. Posi-drain can be located low and routed from ball valve to existing ‘T’ at water/oil separator	Install at air dryer. Posi-Drain can be installed near existing Posi-Drain and plumbed to oil/water separator. Over extended ¼” pneumatic hose should be extended using either a new line or a stainless union so it is not so tight. Clear hose leading from existing Posi-Drain should be replaced with copper pro-press fittings

Airline Slope

- Airlines need to be sloped at minimum ¼” per foot
- This line was never fixed in the previous scope of work, the ‘T’ on this needs to flipped around and a condensate leg upward needs to be added.



Reduction of Emergency Drains

In 3 locations swap over the ‘T’ drip leg for a ¾” (D20) drop versus a 1-1/2” (D40) drop. Off of the ‘T’ plumb down 6” to a D20 x 3/4” NPT connector into a water pressure regulator that is adjustable down to 20PSI (an RV style brass water pressure regulator is fine). Connect another D20 x 3/4” NPT connector out of that down to 42” to another D20 x 3/4” NPT connector similar to Detail 3.

Airline drop deletes

- Previous location of Axile/Zoller line (pull entire line back to post)
- Eliminate up to 10 of the below (Can use unions or Quickdrop D40 to D20 with short pipe and D20 endcap)

Revised and new machine drops

Below is a list of machines that will have their drops re-done to match one of the attached details (1, 2, or 3). With these revisions we will essentially be able to just unbolt the NPT quick drop connector and reuse the existing hole with a Quickdrop D40 (1 1/2") x D20 (3/4"). The detail drawing does not show it, but the pipe has to go up at least a few inches before dropping back down, so 2 elbows will also be needed per drop on top of the part numbers identified in the details.

- Doosan PUMA 2500SY – Detail 1
- Doosan PUMA 2500SY (air wand) – Detail 2
- Doosan DVF 5000 – Detail 2
- Doosan DVF 5000 (air wand) – Detail 2
- ANCA Grinder – Detail 2
- Tsugami SS38MH-5AX & bar feed – Detail 2
- Haimer Balancer – Detail 1
- Haimer pre-setter – Detail 1
- WFL M30G – Detail 1
- WFL M30G (air wand) – Detail 1
- Manual Mill(s) & air wands – Detail 2
- Manual Lathes(s) air wands – Detail 1
- ACRA grinder – Detail 1
- Okuma M560 – Detail 1
- Okuma M560 (air wand) – Detail 2
- Sugino pump – Detail 1
- Sugino machine – Detail 1

New machine drops

- Waterjet – Detail 2 & Detail 3
- Laser Cutter – Detail 1

Quantities

This is just a tally for the number identified above

- Detail 1 - 11
- Detail 2 - 8
- Detail 3 - 1

Additional Information

- Plugs (have quantity 20 on hand) Plugs for wall mount NPT D20 Part number 2811 0075 02
- VHS valves can be found here:
    a. SMC VHS40-N04A-S-Z valve, 3 port lock out, VHS HAND VALVE (smcpneumatics.com)
    b. SMC VHS50-N06A-S-Z single action relief valve, VHS HAND VALVE (smcpneumatics.com)
- Be prepared with 1-5/8" Unistrut and thin Unistrut
- All Unistrut needs end caps
- All pipes must be well secured
- Some drops can be secured to posts, others to walls and some to the machines
- I would plan to have some extra 1-½" unions on site for when we eliminate drops
- For air wand drops, coiled hose should be attached to manifold at bottom of new drop
- For machine connections all flexible hose connections should be shortened so that the line can run from the manifold to the machine
- All hoses over barbed fittings must use a single or double ear hose clamp, no screw adjustable connections are allowed
- Any of our existing onsite materials can be used
- All drops need to be validated with OMIC prior to installation, this will require onsite coordination to ensure our expectations are being met

Picture of a drop