



40 Fathom Grotto Air/Gas Fill Policies

Effective 9 April 2007 • Supersedes All Previous Versions

The Grotto can provide a variety of air, Nitrox and Trimix fills at competitive prices. All we need is sufficient time and a little advance warning, so that we can Do It Right. Here are some things you will want to know ahead of time.

- The safest possible fills (and ones that don't magically "shrink;" as tanks cool) take time. A lot of time. When blending, we try to fill at the recommended rate of 50-75 psi/minute (that's 45 minutes to an hour to fill 3,000 psi). The planning and preparation needed to blend Nitrox and Trimix adds to this (rushing leads to mistakes). Therefore, it's important you let us know as soon as possible when you will need gas.
- To avoid delays, arrive at the Grotto with your tanks full and ready to dive. Nevertheless, if you need fills before your first dive or between dives, get your tanks to the fill station and alert the staff as soon after arrival (or as soon after surfacing) as possible.
- We shouldn't have to say this, but yes, your tanks must have a current hydrostatic test stamp and a current VIP decal. Cylinders that will be exposed, at any time, to oxygen concentrations in excess of 40 percent must be oxygen clean and service rated.
- Be aware that, due to the limitations of our current fill system, we can't fill past 3,000 psi. A larger, more capable fill system is being planned; however, three grand is all we manage for now.
- It is your Guide's responsibility to make sure you are sufficiently trained and certified to dive the mix you get.
- Upon bringing cylinders to the fill station, remove all BCs, back plates, harnesses, wings, regulators and any other paraphernalia. (Leaving this stuff on cylinders while they are being filled just leads to damage.)
- Make sure each of your cylinders is marked with a piece of duct tape with your name prominently visible. (We don't fill tanks if we don't know who they belong to.)

- If you are getting Nitrox or Trimix fills, your tanks need to be clearly marked with the results of the gas analysis you did prior to your last dive (i.e., EAN32, 18/24, etc.). If we can't accurately tell what is in there, we will have to dump the gas that remains and start from scratch (and you will get to pay for the extra gas).
- You may also get to pay for the additional gas if we have to do a re-mix because your cylinders were mislabeled when you brought them to us.
- Bear in mind also that, even if your cylinders are accurately labeled, we may still need to dump what is in there and start from scratch, in order to get the mix you want.
- Filling tanks *is not* a spectator sport. Stay out of the fill station whenever filling is in progress. (Trust us, getting "blowed up" ain't fun.)
- *This one's important:* Do not remove any blended cylinders from the fill station until you have:
 - Analyzed the mix.
 - Correctly labeled the cylinder's contents.
 - Recorded the fill pressure, FO₂, MOD and limiting PO₂ in our fill station log and signed it.
- Don't expect us to analyze your gas for you. In case no one told you, as a Nitrox or Trimix diver, this is your responsibility. Don't ask to use our analyzer, either. If you are going to do this kind of diving, you really should have your own.

As a final note, while all diving entails risk, the riskiest thing many of us in the business do is fill tanks belonging to strangers. We personally know two people who were seriously and permanently injured while filling cylinders — and one person who wasn't even that lucky.

There is enough explosive energy in an aluminum 80 to lift a full-size fire truck five feet up in the air. That kind of force can rip a human body to shreds.

There is sufficient risk involved in filling cylinders as it is. Don't ask us to assume more.