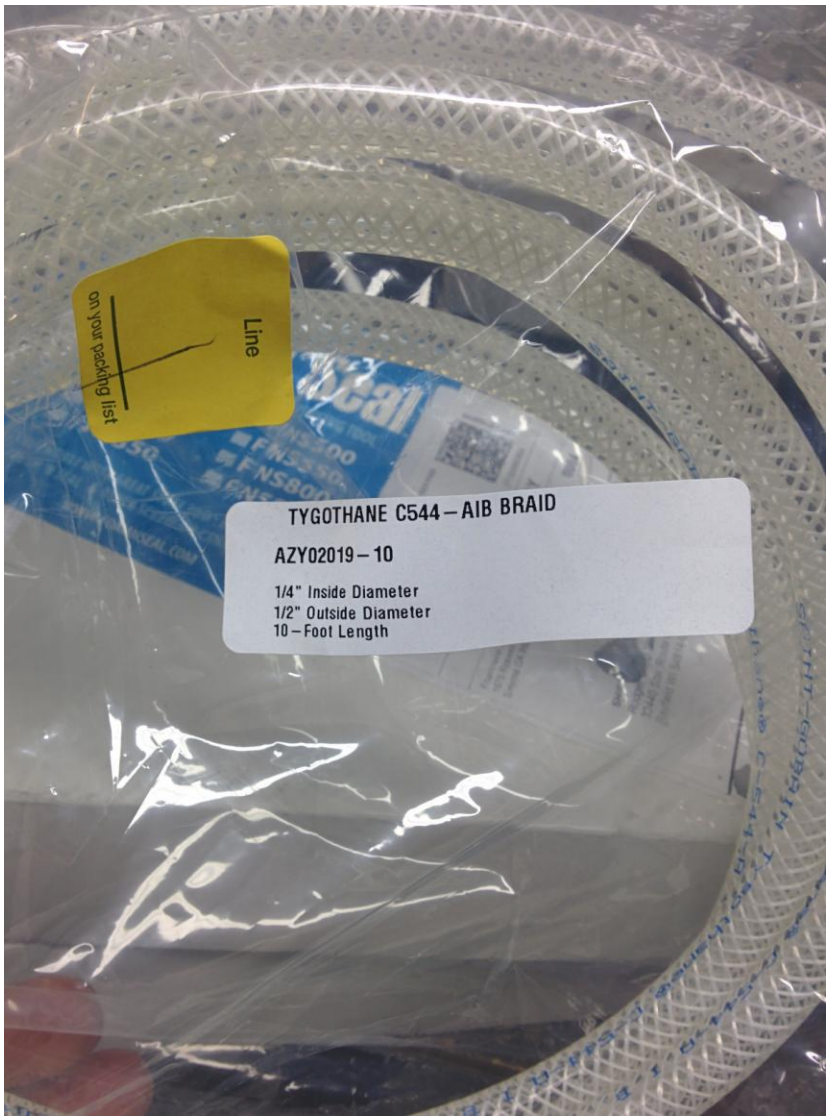
The following notes explain what I needed to purchase to connect the Wax-Oyl application guns to my compressed air source.

Hardwax HW-98 Gun



I bought 10' this hose to go from the Hardwax gun to my compressed air source. McMaster.com p/n 5439K21.

I bought this fitting to use on the above hose to adapt it to my compressed air fittings. McMaster.com p/n 6534K66.

The Hardwax gun has a 1/4" barbed fitting on it already. The above hose connects to this.

HRS Gun

The fitting on the HRS gun is a G 1/4 male fitting, which is a British fitting. This will require some adaptation to work with US fittings. This G 1/4 is also referred to as British Standard Pipe, Parallel (BSPP/BSPF). The G designation indicates parallel threads.

Information about this thread type is found at:

https://mdmetric.com/tech/thddat7.htm

https://www.pegasusautoracing.com/document.asp?DocID=TECH00098

http://www.ralstoninst.com/news/story/the-difference-between-npt-bspp-and-bspt-seals/

Here's a selection of BSPP fittings from McMaster.com.
http://www.mcmaster.com/#bspp-to-npt-pipe-fitting-adapters/=yzc653

I purchased mcmaster.com p/n 1283T24 to go from the HRS gun to my air fittings. However, this fitting will not form an airtight seal unless you add a gasket. I picked up a rubber washer with an I.D. of about 7/16" at a local hardware store that seems to work. Here are some photos.

Rubber seal that I bought to seal the fitting to the gun

1283T24 BSPP fitting with rubber seal on the HRS

Notes about the sealing characteristics of BSPP fittings

The BSPP fitting on the gun does not have a flat sealing surface that is typical of these fittings. Pegasus Auto Racing, https://www.pegasusautoracing.com/productselection.asp?Product=3240 says that there are 3 ways for a BSPP fitting to seal.

1. At the female port face, which uses a Dowty Seal. (author writes: the face of the BSPP fitting on the HRS is NOT flat. It is slightly angled and this seal will not work on it)

2. Between the tip of the male fitting there may be a slightly concave flare, in which case there may also be a corresponding convex flare in the female fitting. This method of fit up would not use a seal. (author writes: these flares are not present on one or both fittings)

3. If the female port has a chamfer, the an o-ring would be used. The above McMaster BSPP plug does not have a flare or a chamfer inside and therefore will not seal to the HRS fitting face.

4. Pegasus doesn't mention any other way for these fittings to seal. Therefore I had to invent something and used a flat rubber washer. Ugly, but seems to work.