



Frequently Asked Questions about SCBA Cylinders

Who regulates the manufacture of composite cylinders?

The Department of Transportation (US DOT) regulates the manufacture of composite gas cylinders (Breathing Apparatus Cylinders) through a Special Permit process. This is a rigorous process requiring bon fire, gun shot and cycle burst testing. There is no more rigorous testing or approval process than that required by the DOT. Canada requires Transport Canada approval and like its US counterpart, testing is both rigorous and thorough.

What is the most important approval for a SCBA cylinder?

The Department of Transportation (DOT) is the regulating authority for high pressure gas cylinders in the United States. This entity determines the basic requirements including the design, manufacture, and performance of these cylinders. These principles are enforced with the use of independent quality agents located within the manufacturing facility whom are mandated to inspect the product for quality and safety. Only the DOT has the authority to revoke a Special Permit for various reasons. If this were to occur, any SCBA cylinder manufactured under that Special Permit would have to be removed from service. NIOSH, as part of their ensemble approval process, requires that cylinders be DOT approved.

Are cylinders sold by SCI NIOSH approved?

NIOSH has not historically, nor do they currently provide separate approvals for component SCBA parts (such as cylinders). NIOSH only tests & approves full SCBA ensembles. NIOSH has approved - as part of the respirator manufacturers' ensembles - the same SCI cylinders (DOT # E-10945) that are being distributed to SCI customers directly and through our network of dealers.

What is the difference(s) between the cylinders sold by Respirator Manufacturers and those cylinders sold direct to First Responders through SCI direct sales program?

In the simplest terms, only the label is different. Cylinders sold through respirator manufacturers are of the same form, fit and function as those sold through SCI's direct sales program. First responders purchasing through SCI's program have access to other cylinders that are not available through respirator manufacturers. SCI customers have the opportunity to benefit from our DURA-LITE 15™ technology, Custom Labeling and our newest product, a 30 Year Life SCBA cylinder.

Do Respirator Manufacturers (e.g. Scott®, MSA®, et.el) manufacturer composite cylinders for use in the North America?

No. DOT (or TC) approved composite SCBA cylinders sold in North American are made by SCI or one of two other manufacturers holding a DOT Special Permit. Respirator manufacturers procure cylinders via a bid process, oftentimes selecting the lowest cost cylinders from one of these three composite cylinder manufacturers.

Do I need to retest my cylinders?

Yes, composites cylinders require periodical retesting. The DOT Special Permit that (or TC) regulates the type of cylinder describes the frequency and type of test required. Special permits are available on the web through the US Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) web site; <http://www.phmsa.dot.gov/>

Will the DOT extend the life on our 15 year cylinders?

No. We know of no DOT process or initiative intended to extend the life of composite SCBA cylinders currently used in the field. Furthermore, only SCI has an approval for a **30 Year Life** cylinder that is marketed direct to the Fire and emergency services industry.

Can we custom label our existing cylinders?

No. Only new cylinders purchased from SCI can be customized.

Is the 30 Year Life Cylinder available in Low Pressure (2216PSI)?

SCI's **30 Year Life** composite cylinder is only available in a 45 min, 4500 psi configuration.

Can I reuse my old valves assemblies when I order new cylinders?

Yes - if your current valves are being used in Carbon Composites SCBA cylinders already. Because valves do not have a stated shelf/useful life, they can be re-used. It's important however, that you check the condition of each valve before reusing them. Provided that they are in good condition and hold consistent pressure - your SCBA technician or Hydrostatic tester can provide a condition report on each valve - there is no reason to not re-use these valves. When replacing old and out dated carbon fiber or Kevlar wrapped cylinders, you will be able to reuse your existing valves. SCI strongly recommends that you have your valve assemblies over-hauled by a certified Hydro-Static Testing facility before you place them back into service.

No - If they're currently being used in aluminum or Hoop wrapped cylinders. Those valves will not work with composite cylinders.