WHAT THE FAQ?

YOUR QUESTIONS ANSWERED!

Here At FC we're constantly asked all sorts of technical stuff via the mediums of Facebook, email and being shouted at in petrol stations. Now although we're a knowledgeable lot, contra to popular belief we don't actually have the answer to everything so we thought we'd get onto the industry experts to find out the definitive info that should clear up any of your niggling questions. This month we head over the Seven Bridge to South Wales to hook up with experts in silicone enhancements, say hello to Samco Sport.

Q Why are silicone hoses better than rubber?

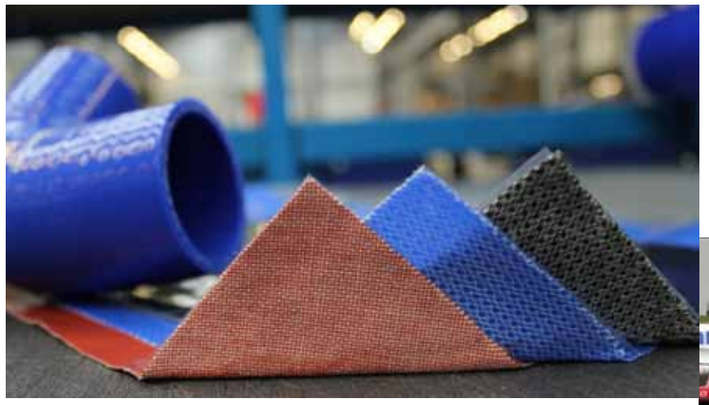
A For the very best looks and performance it has to be silicone. Silicone hoses operate at much higher temperatures and pressures than other rubbers, they don't perish, and they look great. If you are tuning your engine and pushing it to its limit, you don't want your hoses to let you down.

Q Where does silicone come from?

A Silicone rubber is based on silicon, more specifically monomeric silicone/oxygen chemicals known under the generic title of 'silanes.'
As with conventional hydrocarbon rubbers, silicone rubbers are available in a wide range of grades specifically developed to suit differing applications. You'll find silicone in a number of things from shampoo to cables but for automotive use componets should always use a specific high-grade. Here we use a grade specifically developed to comply with the requirements of S.A.E. J20 the most widely recognised international standard for 'Coolant System Hoses'. It's always worth checking out because not everyone does.

Q Why don't manufactures use silicone as standard?

A Some do, but only some of the high-end specialist automotive manufacturers who have to take advantage of the benefits silicone offers over conventional rubber. The high volume automotive companies would also like to take advantage but unfortunately the manufacturing costs for silicone hoses are much higher and that's hard to justify!



Q Me and a few of the guys on my forum have 1955 Chevy Pickup trucks, we're desperate to get some radiator hoses but you don't list our model, is there anything you can do?

A If we don't currently do a kit for your vehicle, you have 2 options. Check out our vast range of standard race parts and by using elbows, straights, reducers, joiners etc, you can plumb most cooling and intake systems. Secondly, if you are part of a car club, we can look at offering you a group buy providing a minimum order quantity is required. Our sales team will be happy to help you out with this.

Q Is a thicker hose better than a thinner one?

A While a thick walled hose might seem to be a better bet but it's often not the case. Thick hoses can cause fitting and functional problems due to increased rigidity and they can also cause problems with tensioning the clips properly (due to highly scientific stress relaxation & compression set issues) in other words they can pop off easily. In any case a thick hose built from poor quality materials will be consistently outperformed by a properly-designed thin product built from good quality materials.

Q What gives a silicone hose its strength?

A This comes primarily from the type of reinforcing fabric and the number of plies used. As with all things it's a matter of specifying the right material for the application, using multiple plies of a poor quality, low strength, fabric will result in a hose with a lower burst strength and a reduced service life when compared to a hose using fewer plies of the right grade of fabric. The grade of fabric used can also be used to enhance the hose properties for specific applications for example the use of 'glass cloth' in hoses used in very high temperature applications. The strength is in the fabric, not the silicone.

Q What's the difference between the silicone hoses on my car and those in F1?

A Absolutely nothing. All our hoses are used with the same hi-spec materials, are hand made in the same way, probably by the same builders. For a Samco hose there is no difference, but then we do supply 9 out of 10 teams.

Q How do you make hoses different colours?

A The base silicone compound we use is the same. The only difference are the dye pigments used to give it its colour. This is one of the major aesthetic advantages silicone has over conventional hydrocarbon rubbers.

Q What about camo?

A That's a trade secret, I'm afraid!

Q Why are some of the hoses on eBay cheaper than others? What's the difference?

A They can often burst and will degrade over time in a hot engine bay. The difference can be a number of things but more often than not, it's down to the type of raw materials used and where the product is made. Ours are made in the UK with proper automotive grade silicone and the best materials – so we don't have any problems there.

Q How important is quality control?

A To us? Very! Our British Standards quality accreditation is backed up by our laboratory where we do the testing and development of all new products, existing products and raw materials. We are confident of the quality of our hoses so much so that we offer a lifetime warranty on everything we produce - just 'Fit & Forget!'

Q Can you burst a Samco hose?

A If you have a lab and a pressure tester then yes, but if you don't, then you'd have a job to. With radiator caps blowing off at approx 2bar, you'd have a struggle bursting a Samco hose which tends to pop at about 17bar.

Q Does silicone degrade over time?

A Silicone rubbers have excellent resistance to oxidation, ozone and weathering combined with an exceptionally wide operating temperature range giving silicone rubbers excellent extended service life characteristics.

Q Is a race car the best test for your hoses?

A Any car in any environment is a good test of our product, whether that's on track or the daily drive. We also make hoses for commercial trucks and buses, in exactly the same way we make Samco hoses for cars, and its here where the product is really put to the test! A bus running 24/7 in somewhere hot and humid like Hong Kong is where the hose is under the most stress, yet it continues to do its job year after year.

FAQ OFF

Q How long does a hose take to make?

A This really depends on the hose we're making. A 25mm 90° elbow would take a couple of minutes to make, then maybe an hour to complete where as a big intake hose with numerous spouts and inserts would be an overall 4 hours…. It really is dependant on the complexity of the item.