

## Special report

# Joint venture

*Roger Bisby tests Buteline's fittings to the limit.*



**O**ver the last few years I have had the chance to play with any number of crimp systems for plastic and copper pipes. They all have their advantages but they also have disadvantages. First there is the expense of the crimping tool, some of these cost more than a second hand van. Then there is the fact that you can't get a crimping tool into confined spaces and there is also the fact that the fitting isn't demountable – though this could be put on the plus side in many locations.

What crimps have going for them is a really neat leak free joint which is completed in seconds. I took a whole selection of Buteline fittings together with some coils of pipe and some straight lengths to see what I could achieve. On the straight lengths of pipe, the ends were slightly rounded in and I had to snip a tiny amount off to get the pipe into the fitting. The pipe goes between an outer and inner and when the crimp is done there is no way to get it apart. It is also completely leak free because there is no reliance on an 'O' ring or olive. The crimping tool clicks closed to a fixed position so you don't have to worry about how much tension is put on the crimp. It is 100% every time. The internal spigot of the fitting has several grooves and the pipe material flows into these grooves as the tons of pressure are exerted by the clamping tool but the double seal joint doesn't produce stress of



pressure on the pipe. As the joint is formed, the mouth of the fitting flares outwards to prevent it impinging on the wall of the pipe. This means that the pipe can bend away from the joint with no concern about leaks.

You may wonder how strong this joint is and it is a question I asked. The answer is that the pipe gives up long before the joint. I decided to put this to the test by towing a pick-up truck with my van. It was so easy that we decided it wasn't really a test because the stretch of the pipe took the snatch out as if it were a flexible link on a tow rope. We then decided to leave the hand brake on the pick-up and see if we could pull the pipe apart but all that happened was the pipe stretched and the joint stayed intact. If you ever break down and need a tow, this could be the answer.

Back on the plumbing front, the Buteline system comes with every fitting you can think of. I am not going to go into them all here because you can see them from a glance at the catalogue. I ran the supplies to a shower from under a bath and then fitted an outside tap in Buteline. My final job was linking up a radiator in a new extension. The pipe is slightly easier to bend than ordinary polybutylene and it makes it very easy

to thread through joists. I have absolutely no worries about water tightness of the joints I made but what does concern me is some poor plumber coming along in years to come and trying to tee into the system.

This system originates in New Zealand and though they are nominally the same they don't fit our 15 and 22mm fittings so the only way to join this pipe is with Buteline fittings – which include converters to metric copper as well as threaded fittings.

The other way to look at it is that if you buy into this system and get the crimping tools as part of a deal on some pipe and fittings you are then set up and if there are alterations to be done then they can't be done by a diyer no matter how clever they think they are they will need that tool.

What we are really talking about here is a flame free system that looks totally professional and there is no doubt that the demand for such systems is set to grow. As more and more manufacturers produce their own crimping system, the price of fittings and tools will come down. When it is cheaper than push-fit then these systems may well reach critical mass.



**Circle 400**  
on the Reader Enquiry Card to find out more!