## **Poly-Rod Stabiliser**

Movement of the column can cause damage to the Poly Column. To minimise the damage a Stabiliser is used.



The Poly-Rod Stabiliser (pictured) is a device to minimise movement of the Poly-Rod Column in the bore. The Stabiliser is made from nitrile rubber, and is available in sizes 1½", 1½", and 2" – to fit the three sizes of Poly Column used. The Stabiliser will protect both the Pump and the Column from abrasion. They will also protect the bore casing from wear from the Pump.

The movement that is possible in the Poly-Rod Borehole System is both vertical and horizontal. This movement can cause damage to the bore. The vertical movement is created by "stretch and contraction" of the Column during the pumping cycle. Horizontal movement is possible when Pump Rods bend slightly on the down stroke. Both of these movements are primarily the result of tight Pump Cups.

The vertical and horizontal movement is most severe at the Pump and Foot Valve (if fitted), and this is where the Stabiliser should be fitted. Ideally the Stabiliser should be fitted to the Poly Column just above the Pump and the Foot Valve.

## How many Stabilisers should be fitted?

There is no definitive answer, and it will become a matter of personal choice. Some may argue that a Stabiliser should be fitted to every length of Column in the bore. The problem of vertical and horizontal movement is greatest at the bottom of the Column and this is where the need is greatest. The minimum number of Stabilisers is one; it is hard to imagine a need for more than an extra Stabiliser per very two 6 Metre lengths of Column.

Extra Stabilisers should be used in bores drilled into rock that is un-cased. Or around any areas within the casing that there are known obstructions (hard rock fragments protruding into the bore).