

AUTO FLOW SUB

PRODUCT 10-274

The **TechWest Auto Flow Sub** is a rugged and compact tool with a hydraulically activated sliding sleeve. The tool is run with the sliding sleeve and external ports open, providing an entry way for fluid to enter the tubing string from the annulus. When the sliding sleeve is hydraulically shifted, the tubing becomes sealed from the annulus.

The primary function of the Auto Flow Sub is to allow fluid to enter the tubing string while running in the well with TechWest's B hydraulic setting tool series (B105, B110, B120, B20). The tool equalizes pressure between the tubing and the annulus preventing tubing collapse.

The tool has four, large concentrically centered port holes providing minimal restriction to flow so that pressure is rapidly equalized.

OPERATION

To set the tool, a temporary seal is created with a ball and seat. The ball may be ran inside the tool, acting as a one-way valve or it may be dropped from surface. Running in with the ball in place provides some protection from accidentally setting the Hydraulic Setting tool prematurely.

Pumping fluid creates a pressure differential across the seal, exceeding the shear force of the shear screws and shifting the sleeve downwards, sealing the port holes.

Once the sleeve is shifted, a by-pass is opened allowing fluid to flow freely through the tool in order to act on the B setting tool.

