



## HY-MECH SETTING TOOL

### PRODUCT 10-066

The Hy-Mech Setting Tool is used to run and set Cement Retainers on tubing.

### OPERATION

The Hy-Mech Setting Tool is installed on the Cement Retainer by screwing it onto the top of the retainer with a left hand thread, approximately six turns. When the thread bottoms out, it is backed off until the shear screw holes in the setting tool and retainer line up, and brass shear screws are installed. The ball may be inserted into the top of the tool before it is made up to the tubing if desired.

The Hy-Mech Setting Tool/Cement Retainer assembly should be run into the well at a moderate speed. The integral by-pass ports will allow the tubing to fill if there is fluid in the well.

When setting depth is reached, a steel ball is dropped if it was not run in place. After the ball seats, the tubing is pressured to achieve 10MPa (1500 PSI) differential at the setting tool. This produces sufficient force to break the shear screws and set the top slips. The pressure should be held for two minutes. While maintaining pressure, the required tension is applied to completely set the retainer. The tension is slacked off and reapplied.

TOOL SIZE	BALL SIZE STEEL	PISTON AREA SQ. IN.	PISTON FORCE @ 1500 PSI	SETTING TENSION DAN/LBS
2 7/8	5/8"	1.61	2,415 lbs	6,700/15,000
3 1/2	5/8"	2.57	3,855 lbs	8,900/20,000

*The tubing is then slacked off until approximately 400daN (900 lbs.) tension is still on the plug and rotated seven to eight turns to the right. This will release the Hy-Mech Setting Tool from the retainer. The tubing will drain through open ports in the tool as it is pulled.*

