

## **RETRIEVABLE PACKERS**

### **Overview** (Short Description & Operation)

- T Packer
- CS Packer
- Posi-Lock Packer
- On-Off Seal Unit
- Tubing Tester
- Pump Out Plug
- C Expansion Joint
- E Expansion Joint
- Blast Joint
- Tandem Tension Packer
- Tandem Compression Packer
- SR-1 Packer
- SR-2 Packer
- Hydro-Master Packer
- ETH Packer
- Whipstock Packer
- Re-Entry Guide
- Dehydration Nipple
- Tubing Drain Sub
- Dual String Cross Over
- Flow Diverter

### **T Packer**

Mostly used in shallow production or injection installations. It is best suited for applications where pressure differential from below is expected.

The packer is run to the setting depth, and the appropriate amount of tension is applied to set it. To release the tool simply apply more tubing tension than the amount of shears installed in the packer, or lower tubing to re-jay the packer.

### **CS Packer**

This compact, rugged, single grip compression packer is ideally suited for applications where a pressure differential from the annulus side is expected. It also utilizes many of the components of the field proven T Packer.

The CS Packer is run to setting depth. Left hand torque is applied to the tubing and the required amount of set down weight is applied to the packer. Pick up on the tubing to release the packer.

### **Posi-Lock Packer**

This field proven versatile packer is capable of handling up to 80Mpa pressure from either above or below. Production, Injection, high pressure Fracturing, Acidizing and Testing are just some of the applications the packer is used for.

To set the Posi-Lock Packer preset the simple Safety Shear System on surface and run to desired depth. With compression on the packer apply right hand torque to release the packer.

### **On-Off Unit**

This unit is a short, compact, overshot type receptacle with a Jay, that engages automatically and releases with a one-quarter turn left hand rotation.

The unit must be in a fully compressed position to disconnect. Applying left hand torque to the tubing moves the tubing upward. To reconnect set down on the tool and the On-Off will automatically relatch.

### **Tubing Tester**

It was designed to allow testing of the tubing string before beginning high-pressure treatments, or before setting a Completion Packer. The Tubing Tester is available for all common tubing sizes.

### **Pump Out Plug**

The Pump Out Plug may be utilized as a temporary plug to facilitate setting of hydraulic packers. The plug is available in all common tubing sizes and threads.

### **C Expansion Joint**

The C Expansion Joint is placed in the Tubing String to allow for pipe contraction or expansion, due to the effects of temperature or pressure.

A.P.I. tubing connections are standard on the C and E Expansion Joints, but all common tubing connections are available if ordered in advance.

### **E Expansion Joint**

This is a swivel joint type Expansion Joint that will turn freely until fully extended or compressed. Full extension or compression engages a clutch that allows torque to be transmitted through the joint.

### **Blast Joint**

Usually this tool is used to protect the tubing string from the abrasive action of flowing gas or oil when positioned opposite the perforations. Also to protect from abrasion of doing a hydraulic fracturing operation down the annulus.

Blast Joint comes in lengths of 0.6m (2 ft.), 1.2 m (4 ft.), 1.8 m (6ft.), 2.4 m (8ft.), 3 m (10ft.), and 6 m (20ft.).

### **Tandem Tension Packer**

It provides an efficient and economical method of isolating multiple zones.

Once the packers are in position the bottom packer is set in the usual manner. The Tandem Tension Packer can be released by simply slacking off the tension and rotating to the right one half turn.

### **Tandem Compression Packer**

This packer is very similar to the one mentioned above except that it uses tubing compression to pack-off instead of tubing tension.

### **SR-1 Retrievable Packer**

This is a versatile, full bore, double grip packer used for stimulation and production testing operations and is especially suited for applications in deep, high-pressure wells.

Make the packer up onto the tubing string and run to setting depth, making sure that the last tubing movement is upward. The packer is released by picking up the tubing.

### **SR-2 Retrievable Packer**

The SR-2 is used in applications where excessive bottom hole or injection pressures are not expected, and sufficient tubing weight is available to keep the packer set. This packer is identical to the SR-1 except that it does not use the hydraulic hold down assembly.

Setting procedures are the same as for SR-1.

### **Hydro-Master Retrievable Packer**

This economical, single string, fully locking, hydraulic set retrievable packer is suitable for applications where displacing and setting after the wellhead has been installed are desirable.

Pressuring up the tubing against a plugging device sets the Hydro-Master. The release is done with a straight upward pull.

### **ETH Retrievable Packer**

The Endless Tubing Hydraulic Packer was designed for applications where high differential pressures are not expected.

### **Whipstock Packer**

This packer is used to accurately set a whipstock in cased hole for window cutting and sidetracking operations. Ideally suited for cased holes where multi-lateral extensions are desired.

The Whipstock Packer connects to a Wireline Setting Tool and is set in the same manner as a Permanent Packer. Retrieving Tool is used to retrieve the packer.

### **Re-Entry Guide**

The guide is used to allow safe entry into the packer, or production string of wireline tools. It is always run as the bottom piece of the string. It is available in common tubing sizes and connections.

### **Dehydration Nipple**

The nipple may be used in a production string where the injection of chemicals may be necessary to dissolve solids or other injection requirements.

### **Tubing Drain Sub**

It provides the methods of draining or circulating through tubing when pulling out of the hole, where the tubing is unable to drain or be circulated normally.

### **Dual String Cross Over**

It is used in conjunction with two packers in a dual zone completion to cross over the upper zone production into the tubing for pumping purposes.

### **Flow Diverter**

It was developed to help overcome operational difficulties and increase gas production in areas where multiple zone wells cannot be co-mingled.

### **FOR CLIENTS:**

**All requests on quotes of any described tools can be submitted either through email or facsimile. EMAIL: [pcpump@protexcis.com](mailto:pcpump@protexcis.com) FAX: 1.403.252 9350**