



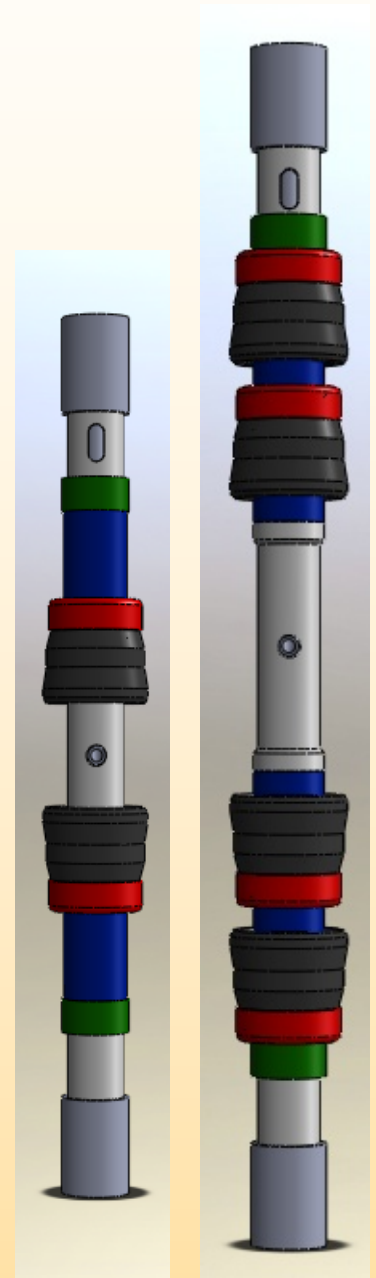
INFORMATION BOOKLET

Wash Tool

The Pro Tool Wash Tool is an opposed cup tool that opens the perforations with the use of different types of fluid, water being the most common. Fluid is pumped down the tubing and forced out the pressure port, into the cup spacing, opening perforations, and forcing the fluid out into the formation. The tool is moved across the perforations slowly, breaking down the perforations, repeating the process as needed.

Features, Advantages and Benefits

- Single and Double cup options available
- Available in spacing from 6 inches to 3 feet
 - 6" is preferred on standard wash jobs allowing for smaller isolation during cup wash.
- Available in variety of sizes
- Able to run variety of fluids with tool, i.e. water, acid, chemicals

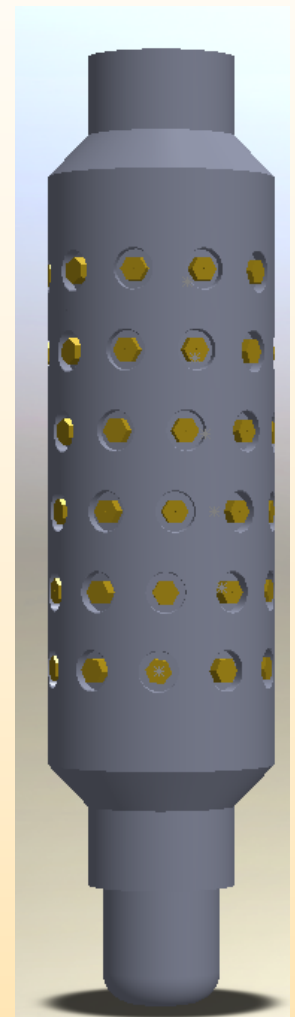
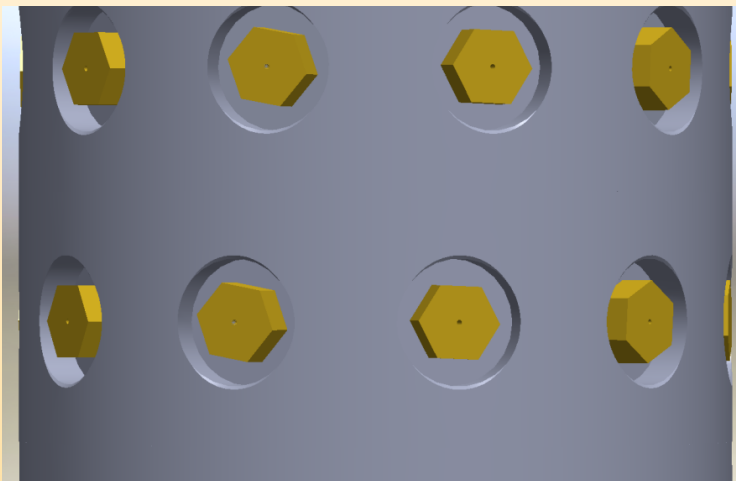


Jet Wash Tool

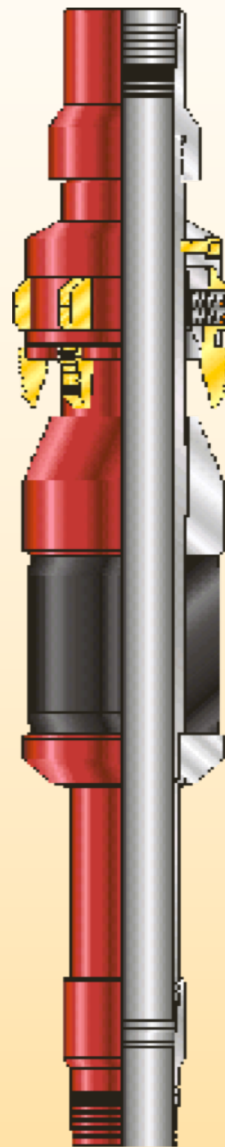
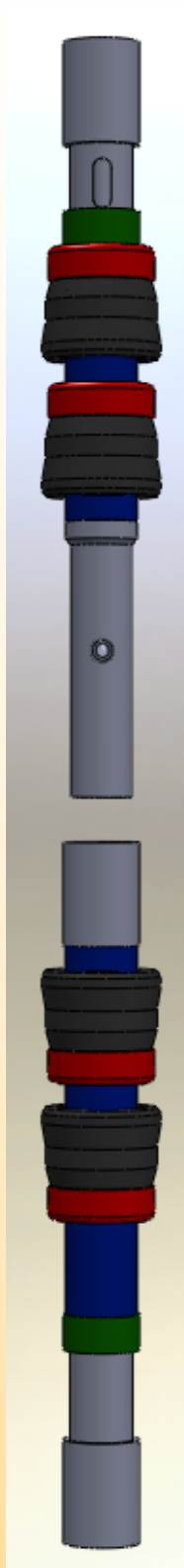
The Pro Tool Jet Wash Tool is a small compact tool. The Jet Wash Tool has 65 jets in circular pattern allowing complete coverage of the wall of the liner or casing. Moving tool slowly up and down the well allows complete coverage of the well.

Features, Advantages and Benefits

- Use production string to run with the Jet Wash Tool
- Cost effective, you don't have to call out special equipment with tubing or power swivels to turn the tool
- Tool has jet pattern allowing to cover entire wall of casing or liner resulting in no need of an additional swivel
- Able to run variety of fluids with tool, i.e. water, acid, chemicals



Test Tools



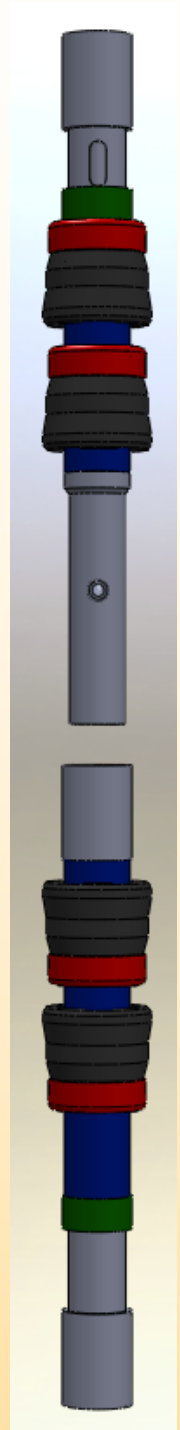


Straddle Tool

The Pro Tool Straddle Tool is a 2 piece tool that is used for testing casing to locate areas that will not hold pressure. The Straddle Tool can be spaced with joints of tubing allowing for easy and quick use for testing the casing as well as using the tool for long spacing wash tool for acidizing. The tool has a built in bypass allowing for easy well control when running and using the tool. This tool can easily be used to pin-point areas that will not test.

Features, Advantages and Benefits

- Cost effective
- Rig friendly
- Tool can be ran with multiple joints allowing for easy use at rig location
- Available in variety of sizes
- Able to run variety of fluids with tool, i.e. water, acid, chemicals





AD-1 Tension Packer

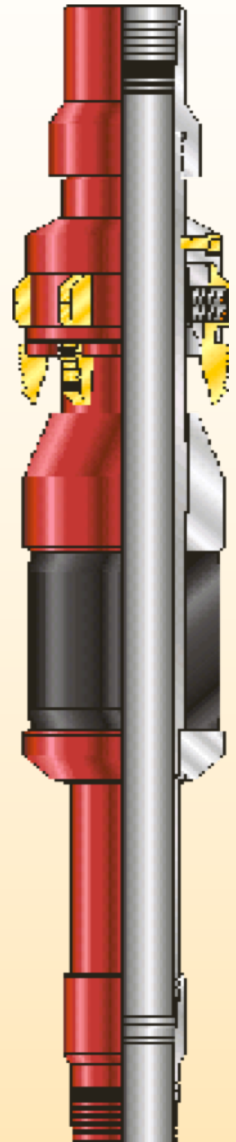
The Pro Tool AD-1 tension set, single-grip, retrievable production packer is compact, inexpensive and can be utilized for most low pressure production, water injection and pressure work applications. The AD-1 incorporates three release methods to ensure retrievability.

Applications

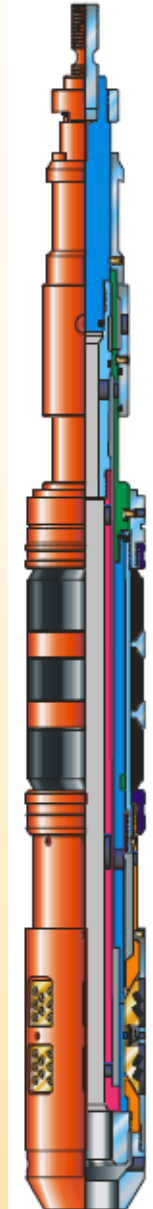
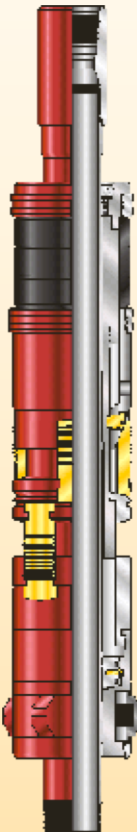
- Low pressure production shallow applications
- Injection wells
- It can be used for well stimulations, testing and other pressuring operations and left in the well as a production packer

Features, Advantages and Benefits

- Compact
- Rocker type slips
- Right-hand safety joint emergency release
- One piece field proven packing element
- J-slot control for normal set and release
- Cost effective
- Three release methods
- Full opening
- Large bore design available



Retrievable Bridge Plugs





Loc-Set Packer

The Pro Tool Loc-Set Packer is a compression set, retrievable packer that allows the tubing to be landed in tension, compression, or neutral conditions. Right hand rotation sets and releases the packer, making the tool simple and reliable to operate.

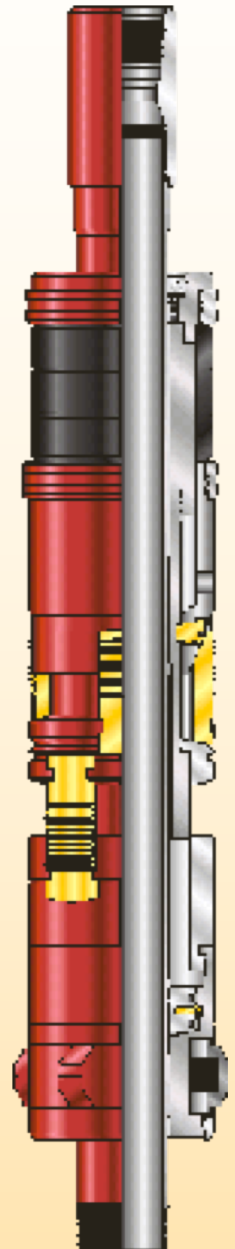
Coatings can be applied for corrosion resistance in waterflood applications. Internal bypass allows pressure equalization before the slips are unset, providing safety and reliability.

Applications

- Production
- Injection
- Zone isolation
- Remedial operations

Features, Advantages and Benefits

- Opposed dovetail slips for positive set
- Right-hand rotation sets or releases the packer
- Convertible to Mechanical Bridge Plug with the addition of a "H" Valve
- Tubing can be disconnected above packer
- Internal bypass and "H" Valve allows pressure to equalize before packer is unset
- Holds pressure from above and below
- Compact design for snubbing or doglegs
- Reliable, rig-friendly design





WRP Wireline Set Bridge Plug

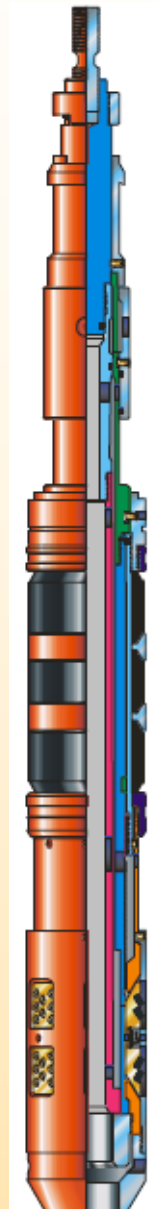
The Pro Tool WRP is a wireline set, packer type, retrievable bridge plug capable of holding differential pressure from above or below. Utilizes standard wireline or hydraulic setting tools.

Applications

- Temporary bridge plug for acidizing, fracturing, cementing, casing pressure test, well head replacement and zone isolation.

Features, Advantages and Benefits

- Wireline, hydraulic, or coiled tubing set
- Caged bi-directional slips with carbide inserts
- Balanced equalizing system
- Bypass valve opens before plug is released
- Over shot washes to gage rings
- Straight pull release
- Rotational safety release mechanism
- Optional wireline or coiled tubing retrieve
- Swab resistant packing element system
- Compact design





AS Bridge Plug

The Pro Tool AS Bridge Plug is a high pressure packer style bridge plug used for multiple selective zone treating and testing operations. The AS bridge plug is a superior design. The AS bridge plug is designed to set in tension or compression, which makes it ideal for shallow applications to test wellhead for deep, high pressure applications. The plug is designed with a large internal by-pass to prevent swabbing when running and retrieving. The by-pass closes during the setting of the plug and opens prior to releasing the upper slips to equalize pressure when unsetting.

Applications

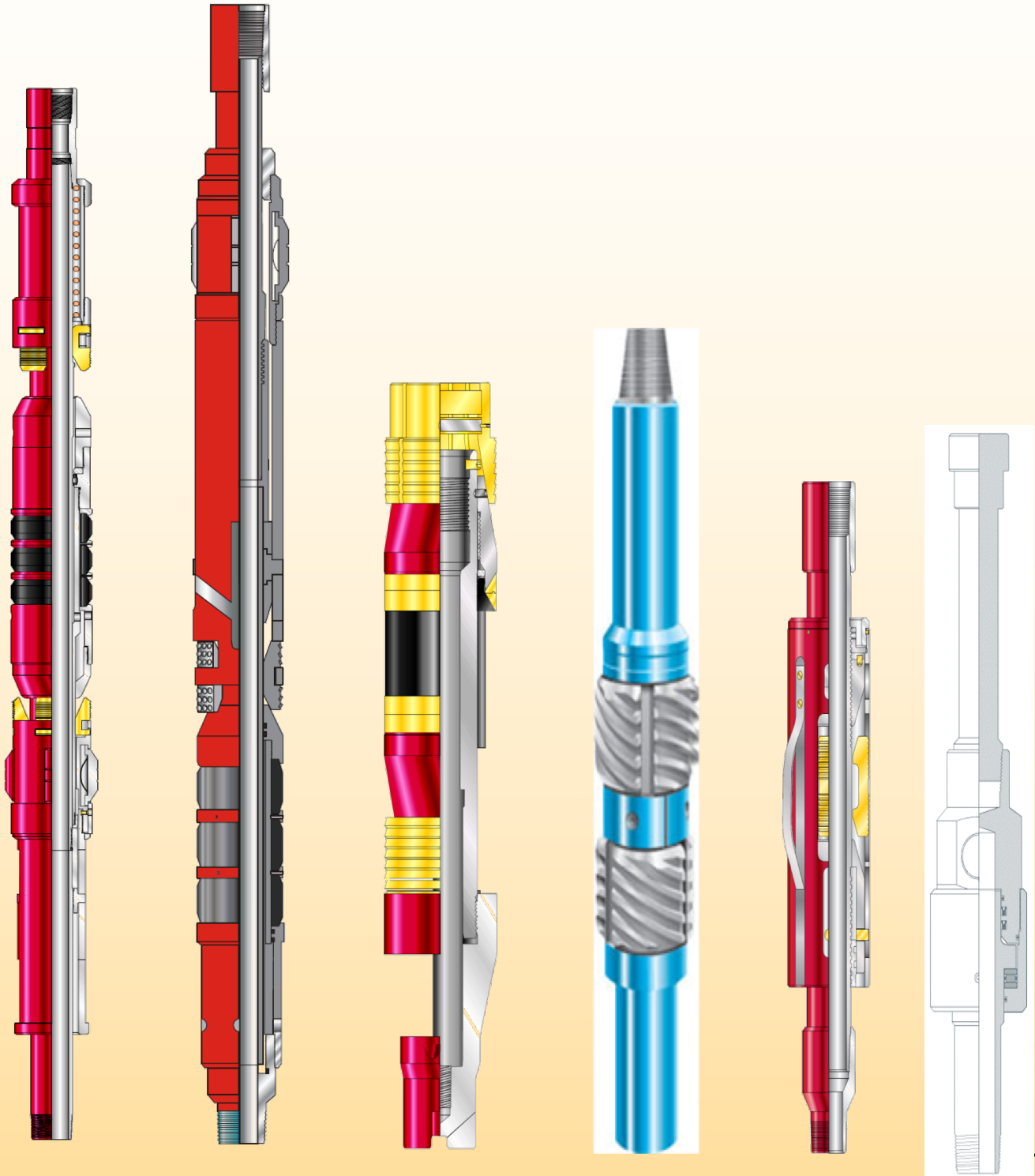
- Temporary zonal isolation
- Shallow set to test wellhead
- Deep high pressure testing
- Squeeze cementing
- Fracturing
- Multi selective zone treating and testing operations

Features, Advantages and Benefits

- Field-proven superior design
- Left-hand rotation releases from the plug
- Patented upper releasing system
- ¼ right hand turn to set and ¼ right turn to release
- Large internal by-pass
- Pressure releases prior to releasing upper slips
- Can be set shallow or deep



Service Tools



ArrowSet I-X Mechanical Production Packer

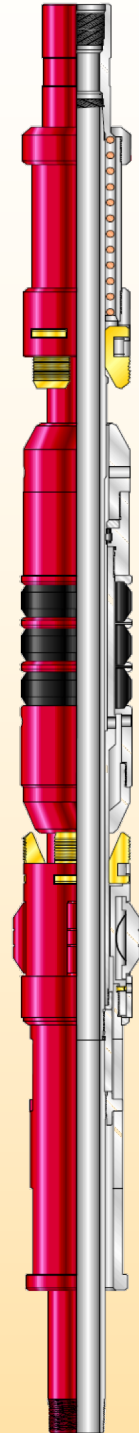
The Pro Tool ArrowSet I-X Mechanical Production Packer is a retrievable, double-grip compression or tension set production packer that can be left in tension, compression, or in a neutral position, and will hold pressure from above or below. A large internal bypass reduces the swabbing effect during run-in and retrieval, and closes when the packer is set. When the packer is released the bypass opens first allowing the pressure to equalize before the upper slips are released. The ArrowSet I-X also features a patented upper slip releasing system that reduces the force required to release the packer. A non-directional slip is released first making it easier to release the other slips.

Applications

- Effectively meets several requirements for zonal isolation, injection, pumping, and production
- Full opening gives unrestricted flow and allows the passage of wireline tools and other accessories

Features, Advantages and Benefits

- Holds pressure differentials from above or below
- Can be set using tension or compression
- Can be left in tension, compression, or neutral position
- Only one quarter right rotation is required to set and release
- Field proven releasing system, dressing is versatile, meets most production, stimulation, and injection needs
- Optional safety release features available upon request
- Elastomer options available for hostile environments
- Bypass valve is below upper slips so the debris is washed from slips when the valve is opened
- Bypass valve opens before upper slips are released



32-A Tension Service Tool

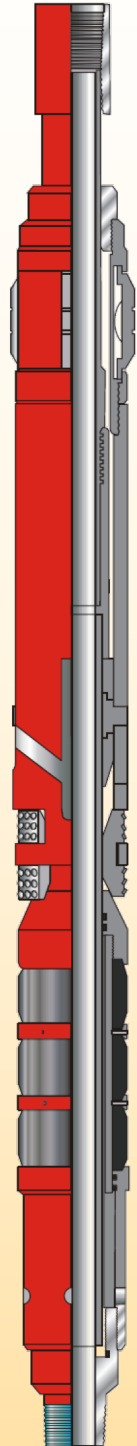
The Pro Tool 32-A Tension Service Tool is a heavy duty, tension set, retrievable service tool that is suitable for testing, fracturing and cementing.

The emergency release system uses a right hand rotation of the tubing string which relaxes the packing element system and allows the slips to retract from the lower cone. This allows the packer to be removed from the well.

The unloader is run in tandem with the 32-A service tool and provides a equalized by-pass to minimize the swabbing effect on the packing elements while the packer is being run or retrieved.

Features, Advantages and Benefits

- Holds pressure from above or below
- Full opening for tubing ID compatibility
- Bi-directional slips to secure service tool in place
- Right-hand rotational safety release
- **TO SET:** The 32-A service tool is run with the SC unloader above the tool, allowing equalization of the fluid levels while the running the tool to setting depth. To set the tool, pick up on the tubing string and rotate ¼ turn to the left (or right, if right-hand set) at the tool. Slack-off tubing weight while holding torque will allow the tool to take weight. Packing elements are not compressed and unloader is in the open position and circulations between tubing and annulus is possible. Tension is pulled to compress the packing element system and closes the unloader isolating tubing from annulus.
- **TO RELEASE:** Slack-off tubing weight which will result in setdown weight on 32-A and open the unloader and establish communication between tubing and annulus. Rotate tubing string ¼ turn to the right (or left if right-hand set) at the tool and pick up on tubing while holding torque. The service tool will jay into the running slot and can be moved, reset or retrieved from the well. The unloader should remain in the open position while packer is free.
- **EMERGENCY RELEASE:** If service tool will not release using the normal procedure, right-hand rotation will release the safety joint. This will relax the packing elements and retract the lips from the cone allowing the service tool to be pulled from the well. The service tool must be pulled from the well and redressed before trying to reset service tool.



PCR Cement Retainer

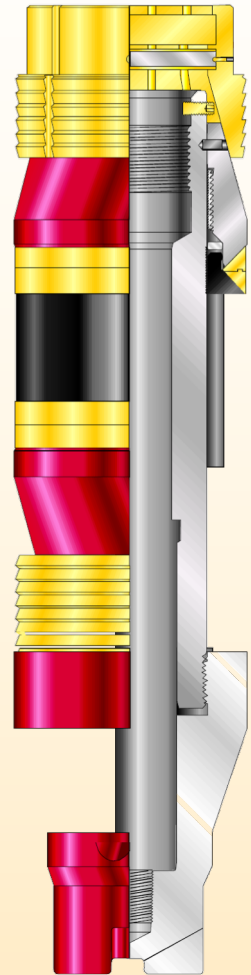
The Pro Tool PCR Cast Iron Drillable Cement Retainer's modular field proven design makes it a versatile tool in a variety of settings, especially in sensitive zones

Applications

- Cementing
- Well abandonment
- Temporary or permanent zone isolation

Features, Advantages and Benefits

- Modular, drillable design
- Simple, surface controlled valve automatically closes to lock in the squeeze pressure when the stinger is removed
- Mechanical or wireline set
- Components rotationally locked for easy drillout
- Allows pressure testing before squeeze
- Valve protects sensitive zones in low fluid wells
- Simple conversion to bridge plug and from mechanical to wireline set
- Fast drill out
- Available in composite



Wellbore Rubber

The Pro Tool Wellbore Rubber is a multi use tool that is used on companion style wellheads during BOPE installing or removal. The WBR is designed with a multi-step feature allowing the rubber to be used with a variety of wellhead sizes. This tool eliminates the well being "open" for a long period of time when installing or removing the up BOPE.

Features, Advantages and Benefits

- Rugged Construction
- Off-set grooved opening allows for better sealing when set in the wellhead.
- Long handles keep rig personnel out of crush points when installing and/or removing the WBR
- Multi-step design allows for wide variety of wellhead sizes (6"-14" opening)
- Available for 2 7/8 and 3 1/2 tubing.
- Wide top plate allows the tubing slips a solid surface to sit when placing the slips at the wellhead.
- Variety of elastomers available



BA Tubing Anchor Catcher

The Pro Tool tubing anchor catcher is typically run below a sucker-rod pump to anchor the lower end of the tubing string. This allows the tubing string to be landed in tension, reducing the tendency to corkscrew the tubing from cyclical loading during rod pump operation. The result is higher pump efficiency and reduced tubing and rod wear.

The double-grip slip in the BA Tubing Anchor Catcher also prevents parted tubing from falling to the bottom of the well.

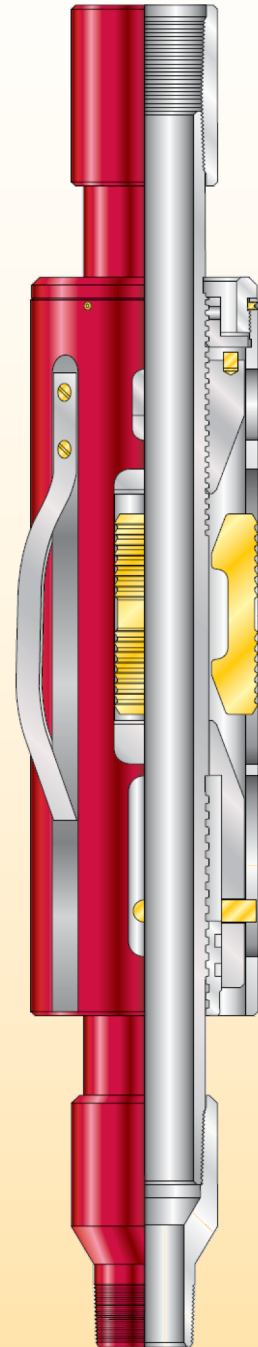
The anchor catcher can also be used for any single string application requiring a bottom hole non-sealing anchor on the tubing string.

Applications

- Sucker-rod pumping applications
- Single-string, non sealing anchored completions

Features, Advantages and Benefits

- The left rotation to set the catcher and right rotation to release it provide simple operation on the rig.
- The double-grip slip anchors the tubing to prevent upward and downward movements, increasing pump efficiency by lengthening the stroke and lowering operating costs by reducing maintenance and downtime from tubing and sucker rod wear.
- The double-grip slip catches parted tubing, reducing fishing costs.
- The full bore-through catcher provides access for wireline tools and other equipment.
- The straight-pull emergency shear release provides release-force adjustment with shear pins if the catcher cannot be retrieved normally.
- The catcher has few parts to take apart, making it easy and inexpensive to redress.



Hydro Tubing Anchor

The Hydro Tubing Anchor is a hydraulically-set, retrievable, tubing anchor / catcher featuring patent pending slip / cone design. The Hydro Tubing Anchor utilizes heat-treated steel alloy double-acting slips for maximum holding power in tension or compression. The fully enclosed slips allow for maximum bypass area around the outside of the anchor while maintaining a full open ID through the tubing. This versatile design can be used to route multiple capillary lines or monitoring cables past the anchor and to provide a gas/debris bypass area around the three slips.

The Hydro Tubing Anchor catcher prevents movement of the tubing during pumping strokes and holds it stationary if it should part. This increases pump efficiency, reduces rod and tubing wear, and keeps tubing and rods from falling into the well in case of a part.

Applications

- Sucker-rod pumping applications
- Single-string, non sealing anchored completions
- Great for directional wells and deviated wells
- No rotation required to set or release.

Features, Advantages and Benefits

- Patent pending, fully enclosed slip/cone design
- Maximum holding power in tension or compression
- Large flow area around tool
- Full open ID
- Shear release



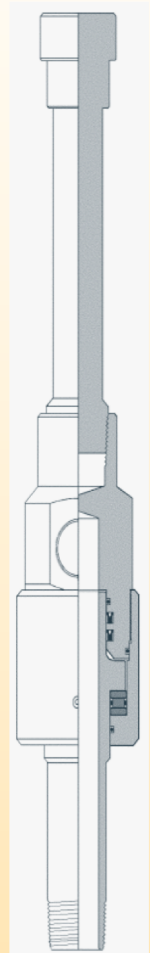


Tubing Swivel

The Pro Tool Tubing Swivel allows surface connections to remain in place while the tubing string is rotated or moved vertically. In addition to providing a lifting point for the elevators located above a high-capacity thrust bearing, these swivels also permit one or two connections for discharge or flow lines. A single flow connection, transverse to the tubing axis, is normally provided. The Tubing Swivel is commonly used for all overhead use of Kelley Hose operations.

Features, Advantages and Benefits

- **Rugged Construction.** The elevator sub is machined from solid bar stock allowing for rugged wear.
- **Rotating.** The swivel allows for tubing rotation while hoses are connected during the operation.
- **Safety.** The tubing swivel is a proven tool for safety on the rig site.





Coil Tubing Tools

Tool and Accessories



Titan Motor Assembly

The high performance Titan motor was designed exclusively for the workover/coiled tubing market. It provides many hours of reliable service under demanding conditions, such as repeated jarring and side loading from working in horizontal wells. This motor incorporates a patented bearing section that has no roller or ball bearings which can become damaged when jarred upon. Instead it utilizes a set of self lubricated sleeve and washer bearings that operate in a sealed "oil bath". This motor design has proven itself with several years of very dependable and economical service.

Features, Advantages and Benefits

- Rugged bearing design which allows for longer jarring durations
- Multiple sizes available



Carbide Mills

The Carbide Mill has become the standard for normal cleanouts. This economical mill can have many shapes and sizes to meet customer needs.

Features, Advantages and Benefits

- Custom sizing available
- Cement removal
- Cast Iron bridge plug removal
- Composite plug removal
- Scale Drilling
- Open hole drilling
- Mill designs
 - Standard and reverse clutch
 - Flat or convex or concave bottoms
 - Tapered, step, string or watermelon profiles
 - Crushed carbide, Star Cut carbide or carbide inserts
 - Straight or Twister mill bodies





External Slip Type Coil Tubing Connector

The Coiled Tubing Connector is designed to allow a means of connecting a bottom hole assembly to the end of the coiled tubing. This slip type connector is the ideal method for transfer of both tensile and torque from the coiled tubing to the bottom hole assembly.

Features, Advantages and Benefits

- Slip type
- Full I.D.
- Torque Thru





Dual Back Pressure Valve

The Dual Back Pressure Valve is designed to provide a means of shutting off the coiled tubing from within the well. This tool can be used to simply prevent flow up from the bottom hole assembly.

Features, Advantages and Benefits

- Maintains Well Control
- Large I.D. for Ball Passage
- Dual for Back-Up
- Multiple sizes available



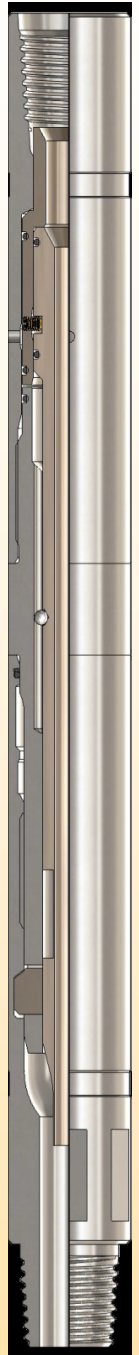


Hydraulic Disconnect

The Hydraulic Disconnect is an essential piece of equipment used for releasing the coiled tubing from the bottom hole assembly if it has become stuck while in the wellbore.

Features, Advantages and Benefits

- Hidden internal shear screws
- Internal splines for torque displacement
- Standard GH.S. Type internal fishing profile
- Impact resistant to jarring



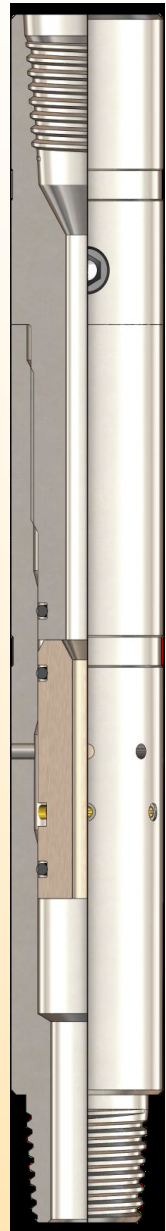


Circulating Sub

The Circulating Sub, normally run above a down-hole motor, is designed to provide a means of circulation to the annulus upon activation. This tool utilizes a drop ball for actuation.

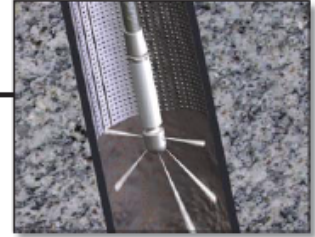
Features, Advantages and Benefits

- Saves wear on motor
- Circulating Path



SpinCat®

Downhole tools for Coil Tubing



Speed controlled, high efficiency, rotational jets provide optimal well cleaning.

Up to 3 bpm
5,000 psi
MAWP

- **Self rotating assembly**
- **Simple Maintenance**
- **Fluoro-Elastomer Seals**
- **Replaceable 1/8" npt nozzles**

Designed for the removal of Plugs, Scale, and Failed Linings

Self powered rotation

The **SpinCat®** family of tools provide simple, self-rotating solution for downhole coil tubing units. The viscous fluid governor controls rotation speed to maximize jet power delivered to the tubing walls. By using only a few rotating jets, each jet is bigger, with hard-hitting power. The replaceable jets are efficient and clean recesses and irregular surfaces without damaging the well pipe.

Diverse applications

Whether your deposits are paraffin, asphaltine, hydrates, calcium carbonate, barium sulphate, or mineral scale, the **SpinCat®** family of tools are ready to restore production without damaging the well pipe.

SpinCat® Specifications

Model	SC-168	SC-250
Pressure	5,000 psi 340 bar	5,000 psi 340 bar
Flow Range	0.7 - 1.3 bpm	0.7 - 3.0 bpm
Flow Rating	2.3 Cv	7.5 Cv
Outside Dia.	1.68 in 4.3 cm	2.5 in 6.4 cm
Overall Length	9.8 in 25 cm	16 in 40.6 cm
Inlet	1" AMMT	1-1/2" AMMT
Rotation Speed	150-200 rpm	80-150 rpm
Weight	4.6 lb 2 kg	15.9 lb 7.2 kg
PSI Loss @1bpm	330 psi 23 bar	31 psi 2 bar



Model B Invertible Packer

The Model B Invertible packers are ideal for use on coiled tubing in straight hole or deviated well applications, where rotation is not possible. The invertible packer is set and released by simple set-down and pick-up motion of the tubing.

Features, Advantages and Benefits

- Maybe ran in compression or tension
- Collet type slips with hardened edges
- High temperature elements
- Used for testing or injection purposes

