COMPLETION
OIL TOOLS
PRODUCTION PACKER
HYDRAULIC PACKER SERIES
The **COT™ HYDRO-SET I** packer is an industry standard, fully hydrostatic, hydraulic set and Straight pull shear release, single string retrievable packer. It can be used in the following applications: Production, Injection, and Zonal Isolation.

**ADVANTAGES:**
- No extra pump unit required.
- Hydraulic hold-down buttons for differential pressure.
- No additional retrieving tool required.

**OPERATIONAL BENEFIT:**
- Single String Packer
- Adjustable Straight Pull Shear Release & optional Rotational release
- No mandrel movement during setting
- Field adjustable shear screw.

**Working Temperature:** 0-400°F
**Pressures Rating:** up to 10000 psi
Available for all casing size and grades
MODEL: CT-HYDRO 3

ADVANTAGES:
- Suitable for H₂S service
- Optional Premium Elastomer Trim
- Short, compact design is ideal for negotiating tight spots and deviated wells
- Bi-directional Slip System opposed dovetail slips prevent movement of the packer in either direction
- No mandrel movement - mandrel movement is not required during setting sequence - this feature becomes important in stacked applications.
- Hydraulic Set requires only 2500 psi to fully pack-off.

OPERATIONAL BENEFIT:
- Fast running during run in
- No mandrel movement during setting allows stocked packer applications

COT™ HYDRO-SET III HYDRAULIC PACKER

Hydraulic Set Single String Packer is tubing conveyed retrievable tool that provides isolation inside the casing or tubing. The “CT-HYDRO 3” Packer is designed to be used in all applications. The packer is available with a large bore or standard bore.

Zero gap packing element

Working Temperature: 0-400°F
Pressures Rating: up to 10000 psi
Available for all casing size and grades
The COT Hydraulic Set Production Packer is a hydraulic-set cut-to-release packer that combines the pressure and temperature ratings and reliability of a permanent packer with the convenience of a retrievable packer.

**MODEL: CT-HYDRO 4**

**ADVANTAGES:**
- Hot, corrosive, deep, deviated, production or test completions.
- Wells where minimum casing deformation or damage is desired.
- Single-trip completions.
- Multi packer installations.
- Liner top isolation / mono bore completions

**OPERATIONAL BENEFIT:**
- No milling required to retrieve HYDRO 4 packer
- Maximum sealing and retrieving reliability
- Design to minimize rig time during completion and de-completion
MODEL : CT-HYDRO 5

ADVANTAGES
- Single string packer.
- Allows operator to use this packer when high volume water injection.
- Can be provided for ISO V0 and V3 validation grade.

OPERATIONAL BENEFIT
- Large bore packer
- Straight pull release or Cut to release.

COT™ HYDRO-SET V HYDRAULIC PACKER

Acner array element designed

barrel slips which provide full circle uniform load

Working Temperature: 0-400°F
Pressures Rating: up to 7500 psi
Available for 7” casing size
The Packer is designed to facilitate the electric submersible pump’s chemical injection line and gas vent required with a completion. In CT-ESP packer model, the electric cable used to supply power to the electric submersible pump can either be incorporated or passed through the packer’s bore.

**ADVANTAGES:**
- Single-trip capability
- Single-piece mandrel construction
- Furnished with universal 1.900” API NU connection Penetrator available with 1” flat and round cable.
- Multi-string completions with control line.
- Available in Straight Pull and Cut to release option

**OPERATIONAL BENEFIT**
- Bi-directional barrel-slip design provide high loading capacity and transfer load.
- Convenient and handy cable connection all major cable pack-off or feed-thru devices.
- Field adjustable straight pull release.
- Standard penetrator available for all casing size and grades.

**Working Temperature:** 0-400°F

**Pressures Rating:** up to 5000-7500 psi

Available for all casing size and grades
FEED THRU PRODUCTION PACKER

The Feed Thru Packer is required in applications of monitoring, gas venting, chemical injection in various slim-hole projects, standard and deviated wells.

FEATURE AND BENEFIT:
- Low setting pressure.
- Straight pull release, adjustable up to 55,000 lbs.
- Shear screw isolated from hydraulic pressure.
- Short in length.
- Tested in Q125 casing.

OPERATIONAL BENEFIT:
- Furnished with different feed through options compatible with tubing encapsulated, control line.
- No mandrel movement for setting.

Working Temperature: 0-400°F
Pressures Rating: up to 10000 psi
Available for all casing size and grades
MECHANICAL PACKER SERIES
MECH-PACH™ I MECHANICAL SET PRODUCTION PACKER

Mechanical Set Packer is a high performance Full Bore Single String Retrievable Packer. It is specifically designed to perform reliably in high pressure fracturing and production applications.

FEATURES AND BENEFITS:

- Tubing can be landed in tension, compression or neutral
- Full opening ID for stimulation and thru-tubing perforating
- Bypass opens before release of upper slips for safety and ease of release
- Staged loading of upper slips for ease of release

MODEL: CT-MH-1

OPERATIONAL BENEFITS:

- Ease of operation ¼ turn to right to set, ¼ turn to right to release

Working Temperature: 0-400°F
Pressures Rating: up to 10000 psi
Available for all standard casing size and grades
MECH-PACH™ II DOUBLE GRIP MECHANICAL RETRIEVABLE PACKER

Retrievable casing packer is a retrievable set down packer that features a large bypass area through packer. The packer is available in a single grip version and a double-grip version (with hold down button).

**MODEL NO: CT-MH 1 & MH-2**

**FEATURE AND BENEFIT**
- Compression set.
- Repositionable packer.
- Standard right-hand set, optional left-hand set.
- Long stroke mandrel.

**Applications**
- Low pressure production.
- Stimulation.
- Testing operation

**Working Temperature:** 0-400°F
**Pressures Rating:** up to 7500 psi
Available for all standard casing size and grades
Our Lok-Set Retrievable Casing Packer is a general purpose packer for production, injection, zone isolation, or remedial operations. It holds pressure from above or below while allowing the tubing to be placed in tension, compression, or in a neutral condition.

**ADVANTAGES:**
- Internal by-pass.
- Can leave tubing in tension, compression or neutral condition.
- Right hand rotation sets & releases the packer.
- Converts to mechanical bridge plug with the addition of a valve, Parts interchangeable.

**OPERATIONAL BENEFIT:**
- No tubing weight required during landing.
- Allowing landing of the tubing in tension, compression, or neutral.

**MODEL: CT-MH-3**

**MECH-PACH™ III LOK-SET MECHANICAL DOUBLE GRIP PACKER**

High drag force dog for easy setting.

Opposed, non-transferring dovetail slips prevent movement of the Packer in either direction.

- Working Temperature: 0-400°F
- Pressures Rating: up to 7500 psi
- Available for all standard casing size and grades
MODEL: CT-MH-4

ADVANTAGES:
- Allows tubing to be left in tension, compression or neutral.
- Internal By-Pass allows packer to equalize prior to releasing.
- Withstands pressure differentials from above and below.
- Ideal packer for Production, Stimulation & Injection purposes.

OPERATIONAL BENEFIT:
- Production completion.
- High Pressure Water Injection.
- Casing integrity Testing & treating operations.

MECH-PACH™ IV MECHANICAL SET PRODUCTION PACKER

This is a mechanical set double grip retrievable production packer for medium to high Pressure applications. This 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.

Working Temperature: 0-400°F
Pressures Rating: up to 7500-10000 psi
Available for all standard casing size and grades
MECH-PACH™ V RETRIEVABLE MECHANICAL SET SQUEEZE PACKER

Packer is a full-opening, hook wall packer used for testing, treating, and squeeze cementing operations. In most cases, the tool runs with a circulating valve assembly. Packer body includes a J-slot mechanism, mechanical slips, packer elements, and hydraulic slips.

MODEL: CT-MH 5

ADVANTAGES:
- The full-opening design of the packer mandrel bore allows large volumes of fluid to pump through the tool.
- Pressure through the tubing activates the hold down button.
- Its larger slips hold high load capacity.
- Hold down buttons directly connected to body which increase load capacity.

OPERATIONAL BENEFIT:
- Tubing-type guns and other wireline tools can be run through the packer.

Double seal elements for easy swab off

Hold Down Buttons activated when differential pressure work

Working Temperature: 0-400°F
Pressures Rating: up to 10000-15000 psi
Available for all standard casing size and grades
SNAP SET COMPRESSION PACKER

Snap Set Compression Packer with & without hold down are retrievable set down packers featuring a bypass area through the packer and an integral unloaded. They are used as an upper packer in a single string two packer installation, for zone isolation, injection or production.

ADVANTAGES:

- Proven multiple packing element system.
- Operation of the packer is simple. No tubing rotation is required.
- A collate-type snap-latch prevents the packer from setting before landing the seal assembly or before setting a lower retrievable packer.
- Lower portion of the tool is rotationally locked to deliver torque in either direction through the packer.

OPERATIONAL BENEFIT:

- Onshore-Offshore work over.
- Production completion.
- High Pressure Water Injection.
- Casing integrity Testing & treating operations.

MODEL: CT-MH-6

Hold down buttons activated when differential pressure work.

Working Temperature: 0-400°F
Pressures Rating: up to 7500 psi
Available for all standard casing size and grades.
MECH-PACH™ VI COMPRESSION SET MECHANICAL PACKER

Retrievable Casing Packer is a compact, economical set-down packer that can be used by itself for production applications or, with a companion unloader and hold-down, it can be used for well stimulation, testing and other pressuring operations and then left in the well as a production packer.

MODEL: CT-GCP

FEATURE AND BENEFIT:
- Short and compact
- Permits passage of recording instruments
- Low cost
- Alternate Packing Element System For temperatures up to 250°F.
- Simple construction
- Ease of operation

OPERATIONAL BENEFIT:
- Furnished with different feed through options compatible with tubing encapsulated cable line, control line
- No mandrel movement for setting.

Working Temperature: 0-400°F
Pressures Rating: up to 5000 psi
Available for all standard casing size and grades
SEAL~BORE PACKER SERIES
EXTENDED REACH RETRIEVABLE SEAL BORE PACKER

The Extended Reach retrievable seal bore packer is one of the most celebrated packers having compact design and can carry long tail pipes even in highly deviated wells.

FEATURE AND BENEFIT:
- Field proven design
- Torque-through feature
- Bi-directional barrel-slip design
- Equipped with high performance running tool
- Special design for Horizontal and high angles wells

OPERATIONAL BENEFIT:
- High Pressure High Temperature Environments.
- Deep Water Projects.
- Open End Closed Holes.
- High running speed during run in.

MODEL: CT-ERD

The ERD packer is particularly suitable for Extended Reach Drilling (ERD) Wells.

Barrel-slip design which distributes loadings and minimizing case stress

Acner array wire mesh element with protector

Working Temperature: 0-400°F
Pressures Rating: up to 10000 psi
Available for all standard casing size and grades
MODEL: CT-HSSRP-1

ADVANTAGES:
- No extra pump unit required.
- Hydraulic hold-down buttons for differential pressure.
- No additional retrieving tool required.

OPERATIONAL BENEFIT:
- Single String Packer
- Adjustable Straight Pick up Shear Release & optional Rotational release
- No mandrel movement during setting

HYDRAULIC SET SEAL BORE PRODUCTION PACKER

CT-HSSRP-1 packer is a fully hydraulic set seal bore retrievable, high performance retainer production packer. Although originally designed for premium gravel pack applications.

- Barrel-slip design which distributes loadings and minimizing case stress
- Acner array element designed

Working Temperature: 0-400°F
Pressures Rating: up to 10000 psi
Available for all standard casing size and grades
The Wire Line Set Drillable Packer is Permanent Production Packer is a high-performance permanent production packer. It is frequently used as a high-performance squeeze or as a permanent or temporary bridge plug.

**COT™ PERMA-SET III & IV WIRELINE SET SINGLE/DOUBLE BORE DRILLABLE PACKER**

- **FEATURE AND BENEFIT:**
  - Proven reliability
  - Two opposed sets of full-circle, full-strength slips
  - A packing element that resists swab off but packs off securely when the packer is set
  - A smooth, continuous ID sealing bore
  - Unique Interlocked expandable metal back-up rings

- **MODEL: CT-WDP & CT-WDDP**

- **FEATURE AND BENEFIT:**
  - Proven reliability
  - Two opposed sets of full-circle, full-strength slips
  - A packing element that resists swab off but packs off securely when the packer is set
  - A smooth, continuous ID sealing bore
  - Unique Interlocked expandable metal back-up rings

- **OPERATIONAL BENEFIT:**
  - Slim-lined Solid construction that save rig time by providing a faster run-in without fear of impact damage or premature setting

- **Working Temperature:** 0-400°F
- **Pressures Rating:** up to 10000 psi
- **Available for all standard casing size and grades**
PREMIUM PACKER SERIES
HPL-4” Retrievable Packer is hydraulic set, **large bore double grip Packer**, used for production, zone isolation, multiple string completions, commingling hook up’s and for stimulation.

**ADVANTAGES:**
- The Packer can be set after the well is flanged up and the tubing is displaced.
- The tool does not depend on trapped hydraulic pressure.
- Large bore ID.

**OPERATIONAL BENEFIT:**
- Field adjustable shear release

**MODEL NO: CT-HPL-4**

- Double grip slips prevent movement of the Packer in either direction due to pressure differentials.

**FULLY HYDRAULIC SET LARGE BORE PRODUCTION PACKER**

- High durability element

**Working Temperature:** 0-400°F
**Pressures Rating:** up to 5000 psi
**Available for only 5-1/2” casing size**
This packer was specially designed with in-built straight pull release and rotational release feature which makes it unique in itself and is advantageous to the operator as it nullify the requirement of high capacity rig hence improves cost savings.

**FEATURE AND BENEFIT:**
- Bi-directional slip design provide high loading capacity and transfer load
- Double piston feature useful for high directional wells
- Compact design for tight clearance deviated wells

**OPERATIONAL BENEFIT:**
- Field adjustable setting and releasing screws.
- In built rotation release and straight pull release.

**MODEL:** CT-HPSR-6

**Triple Seal Durometer elements for high reliability**

**Working Temperature:** 0-400°F

**Pressures Rating:** up to 10000 psi

Available for all standard casing size and grades
COT™ PERMA-SET VI HYDRAULIC SET DOUBLE BORE DRILLABLE PACKER 15K

These Packers incorporate maximum strength, uniformity of setting pressure, standardization of materials and a one-piece body.

Feature and Benefit:
- Slim-lined solid construction design
- Two opposed sets of full-circle slips
- Suitable for hydro-fracturing application

Operational Benefit:
- Expandable metal gives support to rubber which increases the reliability and can easily sustain high pressure
- Its slip provides high loading capacity and transferring of load in a radial manner onto casing
- Single trip packer (HDP)

From a long period of time a large bore packer for high pressure and high temperature application, with validation grade of V0 was in demand. All the leading companies were trying to develop a packer which can meet this special requirement. From the whole, COT successfully developed, Tested and launched its HDDP model fulfilling this special market requirement.

Model: CT-HDDP-15K

Available for all standard casing size and grades

Working Temperature: 0-500°F
Pressures Rating: up to 15000 psi
The Wire Line Set Drillable Packer is Permanent Production Packer, a high-performance permanent production packer. It is frequently used as a high-performance squeeze or as a permanent or temporary bridge plug.

**FEATURE AND BENEFIT:**
- Proven reliability
- A packing element that resists swab off but packs off securely when the packer is set
- A smooth, continuous ID sealing bore
- Unique Interlocked expandable metal back-up rings

**OPERATIONAL BENEFIT:**
- Slim-lined Solid construction that makes possible a significant savings in rig time

**MODEL:** CT-WDP-15K

**FEATURE AND BENEFIT:**
- Bonded seal packing element resists mechanical damage and swab off
- Two opposed sets of full-circle, full-strength slips

**WORKING TEMPERATURE:** 0-400°F
**PRESSURES RATING:** up to 15000 psi
**AVAILABLE FOR:** all standard casing size and grades

Pressures Rating: up to 15000 psi
BRIDGE PLUGS & CEMENT RETAINERS
**MODEL: CT-WLRBP**

**ADVANTAGES:**
- Wireline, hydraulic or coiled tubing set
- Equalizing valve opens before plug is released
- Straight pull release
- Over shot will wash to gage ring for easy retrieval
- Rotational safety release mechanism
- Optional sand line or coiled tubing retrieval

**OPERATIONAL BENEFIT:**
- Slips are standard for long life and durability
- Compact design for tight doglegs, short lubricators
- Simple, rig-friendly operation
- Holds pressure from above and below
- Easy, dependable retrieval

**WIRE LINE SET RETRIEVABLE BRIDGE PLUG**

WLRBP is a wireline set, retrievable plug capable of holding differential pressure from above or below. The WLRBP may be set on conventional wireline or hydraulic setting tools. The short design is easy to retrieve on tubing, coil tubing or sandline, using the appropriate retrieving tool.

**Swab resistant packing element system**

**Bi-Directional Barrel Slip Design**

Working Temperature: 0-400°F
Pressures Rating: up to 10000-15000 psi
Available for all standard casing size and grades
The Retrievable Bridge Plug is a high-pressure packer type plug used for multiple-zone and selective single-zone treating and testing operations such as acidizing, fracturing, cementing, and testing.

**MECHANICAL SET RTV™ BRIDGE PLUG**

**ADVANTAGES:**
- A large internal by-pass area.
- Reduce swabbing when running and retrieving.
- Useful for deep, high pressure wells.
- Ideal for test well head equipment.

**OPERATIONAL BENEFIT:**
- A releasing slip in upper slip which helps in releasing.

**Working Temperature:** 0-400°F

**Pressures Rating:** up to 10000 psi

Available for all casing size and grades.
DRILLABLE BRIDGE PLUG MECHANICAL SET

Mechanical Set Bridge plug are high performance drillable bridge plugs, commonly used for zonal isolation during stimulation or cementing jobs, or for temporary and permanent abandonments.

MODEL: CT-MBP

FEATURE AND BENEFIT:
- Wireline or mechanical set.
- Taper/Slim line design for quick wire line run.
- Simple conversion to cement retainer, reducing inventory.
- Rotationally locked.
- Cast-Iron Components enable a fast and easy drill out to save rig time.

OPERATIONAL BENEFIT:
- Temporary and permanent zone isolation.
- Well abandonment.
- Cementing.
- Stimulation.

Working Temperature: 0-400°F
Pressures Rating: up to 10000 psi
Available for all standard casing size and grades

IT IS ALSO AVAILABLE ON WIRELINE “MODEL CT-WLBP”
MECHANICAL SET CEMENT RETAINER

Cement Retainer is a high-performance drillable cement retainer ideal for most remedial cementing applications. This is designed to function as a drillable squeeze packer which, after cementing, acts as a plug trapping squeeze pressure on the cement below the retainer and isolating the newly cemented area from the hydrostatic pressures above the cement retainer.

**MODEL: CT-MCR**

**FEATURE AND BENEFIT:**
- Temporary and permanent zone isolation.
- Well abandonment.
- Cementing.
- Stimulation.

**OPERATIONAL BENEFIT:**
- Wireline or mechanical set.
- Taper/Slim line design for quick wire line run.
- Valve automatically closes when the stinger is removed, locking in the squeeze pressure.
- Simple conversion to bridge plug.
- Cast-Iron Components enable a fast and easy drill out to save rig time.

Working Temperature: 0-400°F
Pressures Rating: up to 10000 psi
Available for all standard casing size and grades

It is also available on wireline “MODEL CT-WLCR”
The COT Mechanical Setting Tool is designed to run and mechanically set the Cement Retainer or the Cast Iron Bridge Plug at any depth on tubing or drill pipe.

**Model: CT-MST**

**Advantages:**
- Setting cement retainers or bridge plugs on tubing or drill pipe
- Squeeze cementing
- Well abandonment
- Temporary and permanent zone isolation

**Operational Benefit:**
- Shear pinned to cement retainer or bridge for safety
- Allows user to set, pressure test tubing and squeeze in single trip
- Can quickly be configured to set cement retainers or bridge plugs

Drag blocks field proven design for long life
The Model CT-RHST Hydraulic Setting Tool is a single chamber, tubing pressure actuated setting tool used in gravel pack operations in conjunction with the Gravel Pack Crossover Tool or Hydro-Set Adapter Kit to run and set Models CT-ERSP Packers and Drillable type Production Packers on tubing.

**MODE: CT-RHST**

**FEATURE AND BENEFIT:**
- Short and Compact design Increases the efficiency of handling.
- Simple Constructed with minimum number of working parts, making it economical to maintain
- Ideally suited for deviated wells
  - Emergency rotational release

**OPERATIONAL BENEFIT:**
- It can be release by tubing and annuls
- In case of emergency it can be release by right hand rotation
Expansion Joint is designed for use above packers in well completions to compensate for tubing movement during treating and injecting operations and where rotation through the tool is required. The design allows torque to be applied through the tool at any position.

**FEATURE AND BENEFIT:**
- Multi-spline design for high torque load.
- Maximized tension carrying capability.
- ID compatible with tubing ID.
- Tool can be pinned at one-foot spacing from closed to fully stroked position.
- Shear value can be adjusted by varying the number of shear screws.

**OPERATIONAL BENEFIT:**
- Rotationally locked at all times for transmitting torque when required.

**SPECIFICATIONS:**
- Working Temperature: 0-400°F
- Pressures Rating: up to 10000 psi
- Available for all standard casing size and grades
The Packer Setting Tool Nipple for the Single String Hydraulic Packer is a connecting device for running the tool string into the well on the service string. The running tool is attached to the packer by a standard anchor latch with LEFT-HAND square thread, and released by a straight-pull shear release. In an emergency, after the shear ring has been sheared, rotational release can be accomplished by right-hand turn.

**ADVANTAGES:**
- Pressure Rating Equivalent to that of the Hydraulic set Single-String Hydraulic Packer.
- 50,000 lb. straight-pull release (Adjustable at rig site).
- Rotationally locked to packer to enhance running in Horizontal Wells.

**OPERATIONAL BENEFIT:**
- It can be rotate in any condition.
- In built Ball catcher sub.
SNAP LATCH SETTING TOOL

The Snap Latch Setting Tool is used to set mechanically Cement Retainers Bridge Plugs and Cement Retainers with Flapper Valves.

MODEL: CT-SLST

ADVANTAGES:
- One trip system.
- Mechanically sets tool with rotation and Up strain and functions as a stinger for subsequent cementing operations.
- Upper slip is securely locked in place and latch is solidly threaded into the body of the retainer.
- Snap latch feature latches into the retainer with set down weight and is released with tension.

OPERATIONAL BENEFIT:
- Easily converted to set either Cement Retainers or Bridge Plugs.
MODEL: CT-ON-OFF

ADVANTAGES:
- Standard Left-Hand Release
- Automatic Jay Up
- Bonded Seals
- All Nipple Profiles Available for Stinger
- Full Open or Solid Stinger Available
- 10K Rated
- Wash over shoe on all Models

The On-Off Tool is a tubing disconnect device that has an internal blanking plug locking profile with seal bore for utilizing flow control equipment. The Overshot has a box looking up which connects to tubing string and a pin looking down off the Stinger which connects to the packer.

Working Temperature: 0-400°F
Pressures Rating: up to 10000 psi
Available for all standard casing size and grades
SURGING TOOL

COT surging tool is a test and stimulation valve that is actuated with differential pressure applied to the annulus.

ADVANTAGES:
- To perform negative test in the well.
- To check the integrity of secondary cementing.
- Run in hole in closed position above packer or cementer.
- Surging tools actuated with differential pressure applied to the annulus. No rotation required.

OPERATIONAL BENEFIT:
- It is especially applicable for operations involving deep or deviated holes where rotation of the tubing string may be difficult.

MODEL: CT-ST

Working Temperature: 0-400°F
Pressures Rating: up to 7500 psi
Available for all standard casing size and grades
**MODEL: CT-PWT**

**ADVANTAGES:**
- Straddle-spacing easily adjusted in the field
- Reverse circulate without manipulation
- No ball and seat required

**PERFORATION WASH TOOL**

The Perforation Wash Tool is for washing or acidizing perforations in casing and sand screens. It is also used for checking non-perforations to verify injection rates and penetration or for opening voids behind the casing for more effective gravel pack operations.

- **Center cups**

**Working Temperature:** 0-400°F
**Pressures Rating:** up to 5000 psi
**Available for all standard casing size and grades**
Notes
Completion Oil Tools

B35(C2) Near Fire Station IID, RIICO Industrial Area, Khuskhera, Alwar, Rajasthan, India, 301707