



*Circulating and flow-back tools
for casing and drill pipe*

AutoFill™ Casing Fill-up And Circulating Equipment



About DrawWorks, L.P.

- Formed In 1998
- 65 Years Of Engineering Experience In Design Of Downhole Tools
- 30+ Patents In The Field Of Surface And Downhole Oil Field Equipment
- First Development – AutoFill™ Casing Fill-up And Circulating Equipment
- New Developments- DWCRT and Flush Mount Spider
- Hundreds Of AutoFill™ Tools Worldwide



DrawWorks, L.P.

AutoFill™ Casing Fill-up and Circulating Tool

The **AutoFill™** allows the operator to fill, circulate, and recover fluid while running casing. With the AutoFill™ you can continue to use the rig pumps and top drive while running or pulling each joint of casing vs man-handling a swedge and hose. The **AutoFill™** Casing Fill-Up & Circulating System saves time, enhances rig safety, and well control during drilling operations.

- Our casing FAC tool is the easiest to operate and the easiest and most inexpensive to maintain.
- We offer training at our site in Texas as well as on-site training.
- We are presently servicing many of the major casing companies Domestically and Internationally.

The patented AutoValve™ [Mudsaver](#) Valve is a fully open ball valve used with the AutoFill™ system to prevent mud from escaping when the valve is removed from the casing with no back pressure.



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AutoFill™ Casing Fill-up and Circulating Tool



➤ Rig Adapter

Top Drive Adapter

- Available in any thread to connect to the top drive

Conventional Rig Adapter

- Allows the tool string to be connected to the hook of the traveling block of a conventional rig (hook or rotary rig).

➤ Push Plate Sub

- Prevent slip type elevators from getting stuck on the casing.

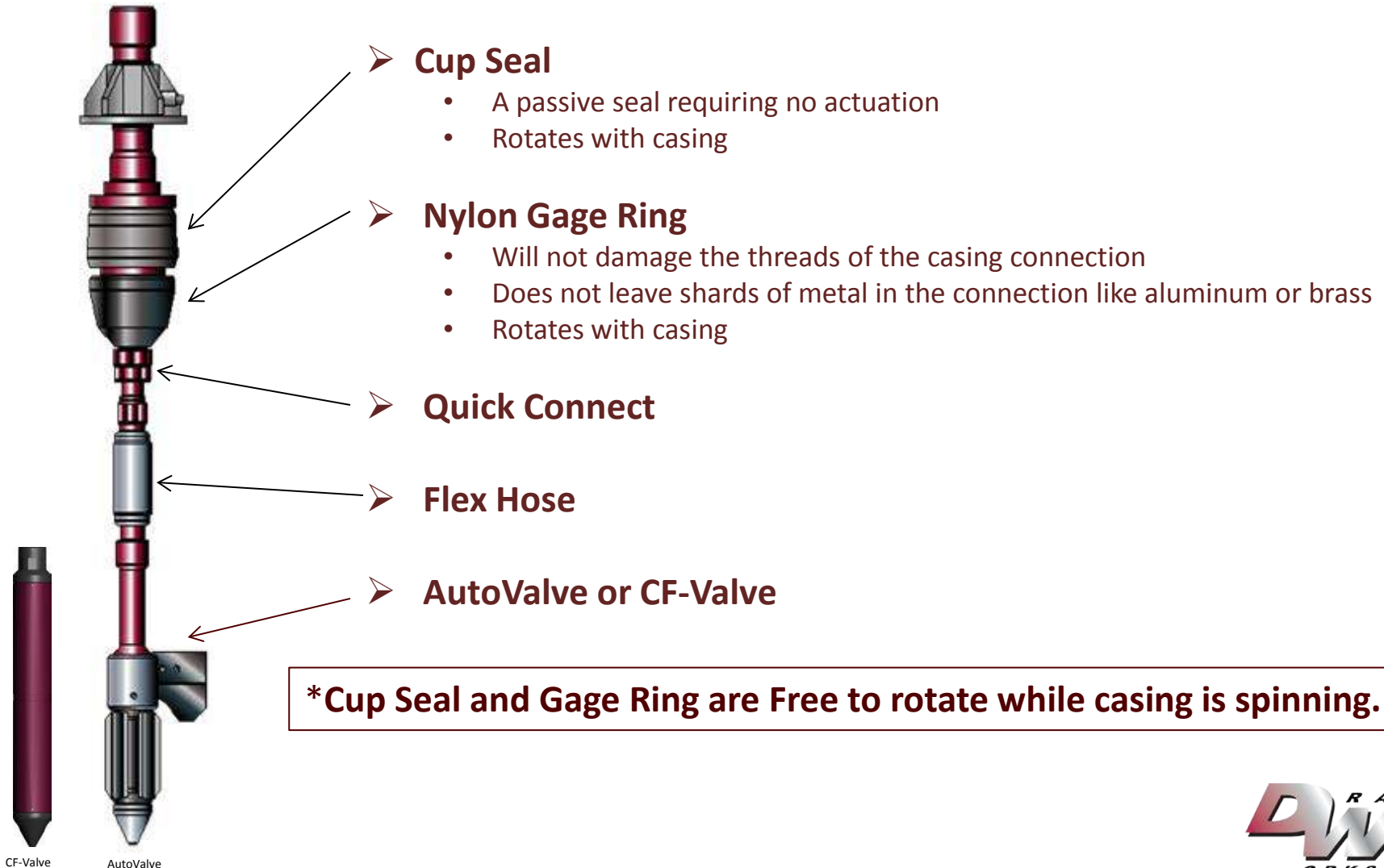
➤ Spacers

- Used to space out the seal unit for different bail lengths



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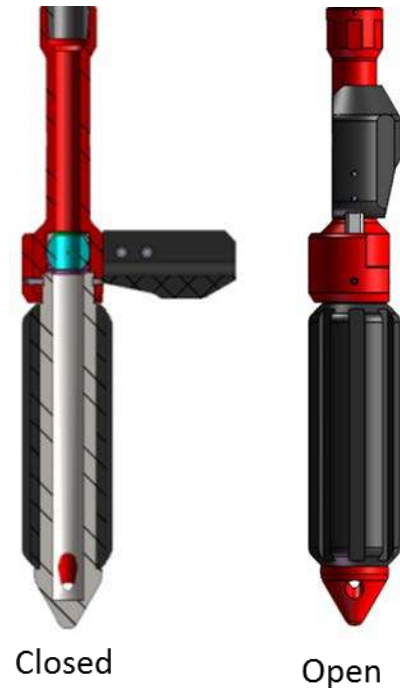
AutoFill™ Casing Fill-up and Circulating Tool



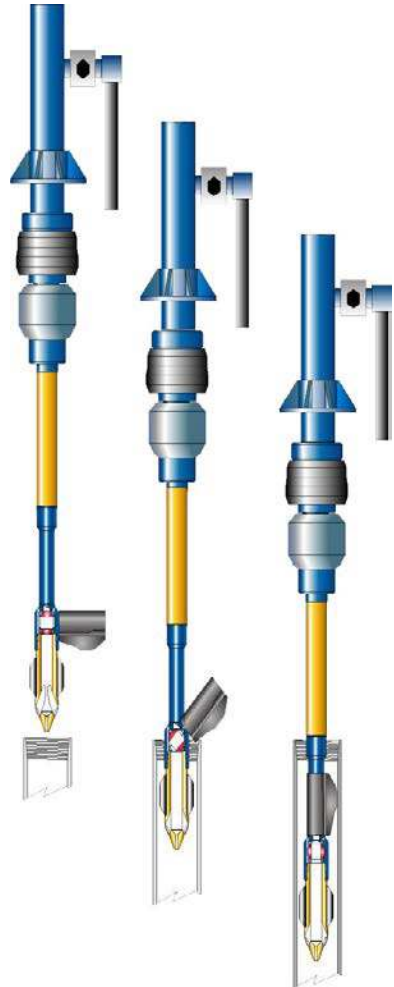
Highlights of the AutoValve

- Includes the only full-opening fill-up tool that allows both circulation and fluid recovery.
- Easy to run and least expensive to maintain casing circulating system.
- Erosion-resistant with no exposed edges or mechanisms in the ID
- High flow rate capacity.
- Prevents well surging.
- Plastic gauge rings prevent thread damage.
- Once removed from the casing it immediately closes
- Available for 4-1/2 in. to 20 in. casing.

AutoValve



➤ AutoValve



- Simple and reliable
- Ball valve is not subject to erosion
- Full opening for fill-up, circulating and flow back
- Once removed from the casing it immediately closes

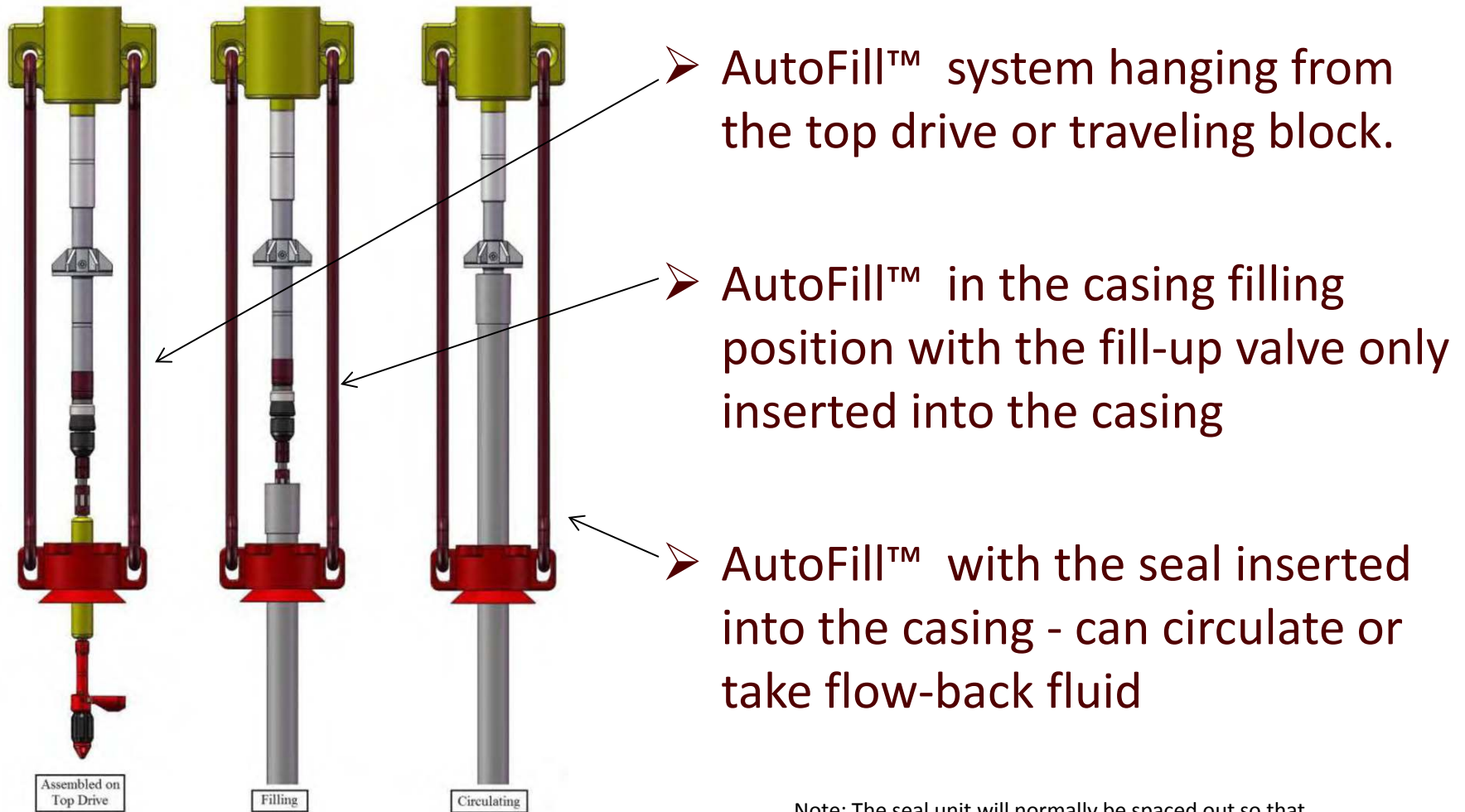
Highlights of the AutoFill™/ CF-Valve™

- Self aligning seats with a large flow area.
- Lower pressure drops.
- Check valve has a large flowback area.
- High flow rate capacity.
- Prevents well surging.
- Lower surge pressure on the well.
- No need for conversion kits for different casing sizes.
- Available for 4-1/2 in. to 30 in. casing.

CF-Valve



AutoFill™ Casing Fill-up and Circulating Tool



Note: The seal unit will normally be spaced out so that it is in the elevators, we have shown it above the elevators for illustrative purposes only.

StabberLess AutoFill™ System

Three Stabberless Configurations

- Eliminates having a stabber in the derrick
- Fast and easy to run
- Least expensive FACT to purchase and maintain
- The AutoValve allows fillup, circulation and fluid recovery with no back pressure
- Spring loaded CF-Valve fits a large range of casing sizes with no conversion parts needed
- High flow rate capacity
- Prevents well surging
- Plastic gauge rings prevent thread damage
- Available for 3-1/2 in. to 30 in. casing

AutoFill & AutoValve



Short Hose StabberLess & CF-Valve



Ridged StabberLess & CF-Valve

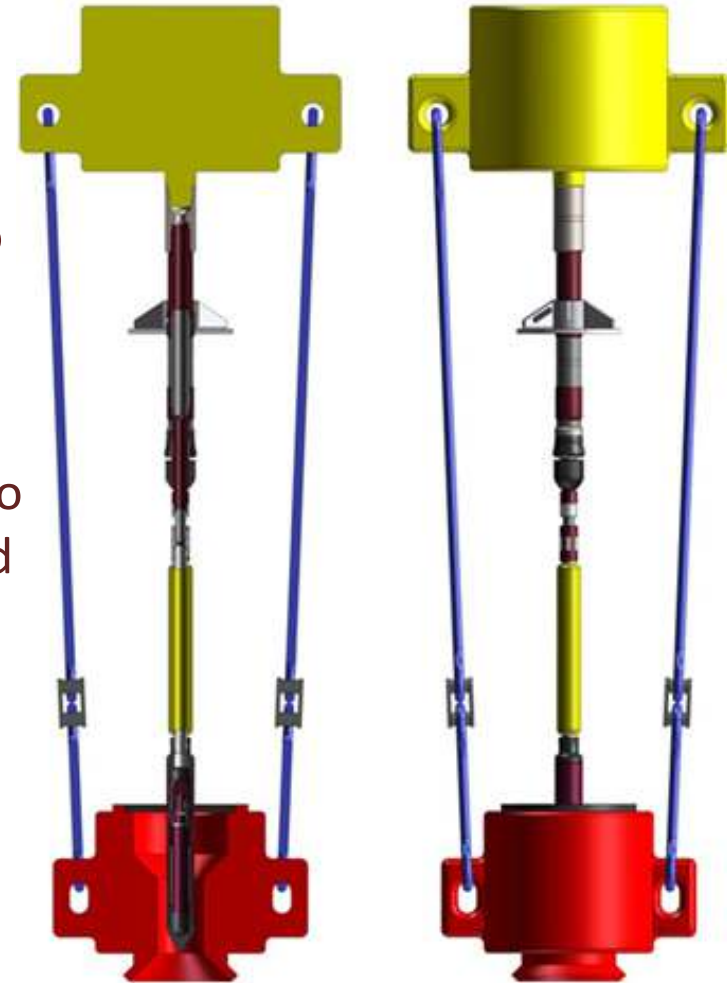


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Short Hose StabberLess AutoFill™ with CF-Series Valve

The “**SHORT HOSE STABBERLESS AUTOFILL™**” is designed to facilitate filling, circulating, and flow back when there is no stabber in the derrick and to reduce the time required to run casing. The CF-Valve allows the rig pumps to pressure up to fill-up simultaneously while making up and running each joint of casing. This tool hangs inside the elevator to allow easy stabberless operation and is widely used on land in the US.

When using a **StabberLess AutoFill™ System** with no man in the derrick, the safety aspect increases greatly.



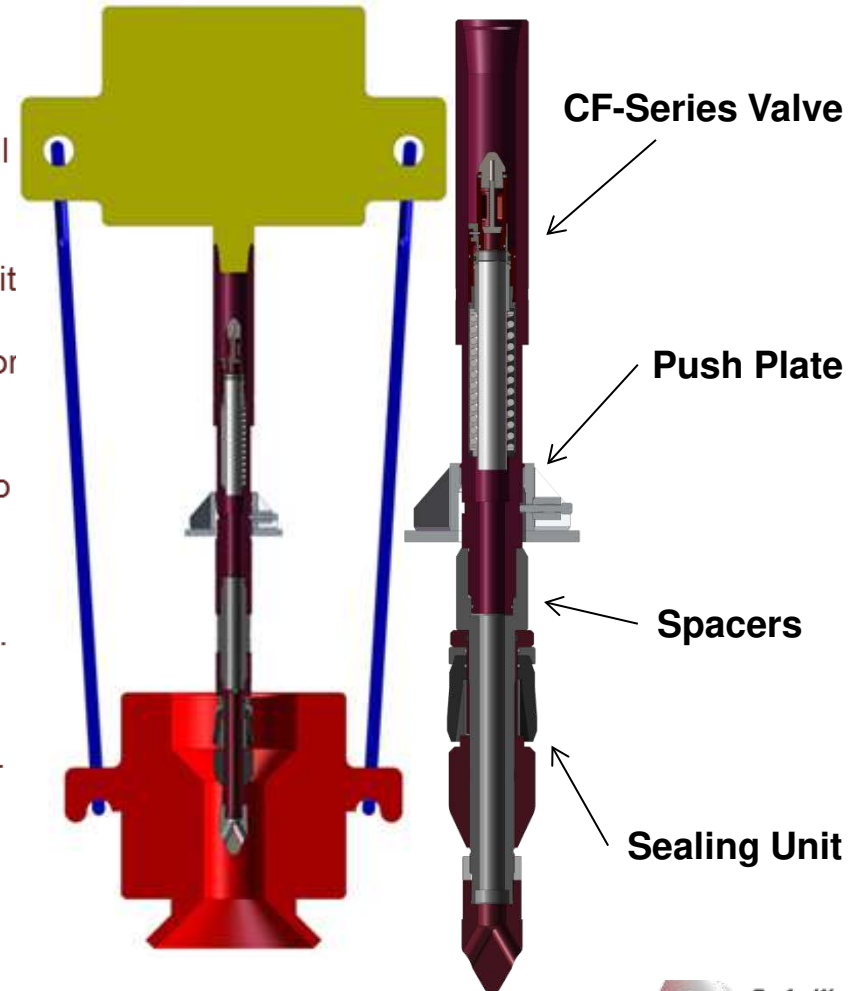
Ridged StabberLess AutoFill™ FACT with Internal CF-Series Valve

This spring loaded valve keeps the mud or circulating fluid from spilling out of the unit. It also has the option to take flow back, fill up, and circulate at any time

This assembly provides for a “false” shoulder for the casing to hit should the casing begin to float or should you hit an obstruction while running the casing. Should the elevators become difficult or impossible to release, the Push Plate can be moved upward allowing the traveling block and elevators to be lowered and the elevator slips to be released. Plus you can use the Push Plate to push through tight spots and keep from getting the casing stuck.

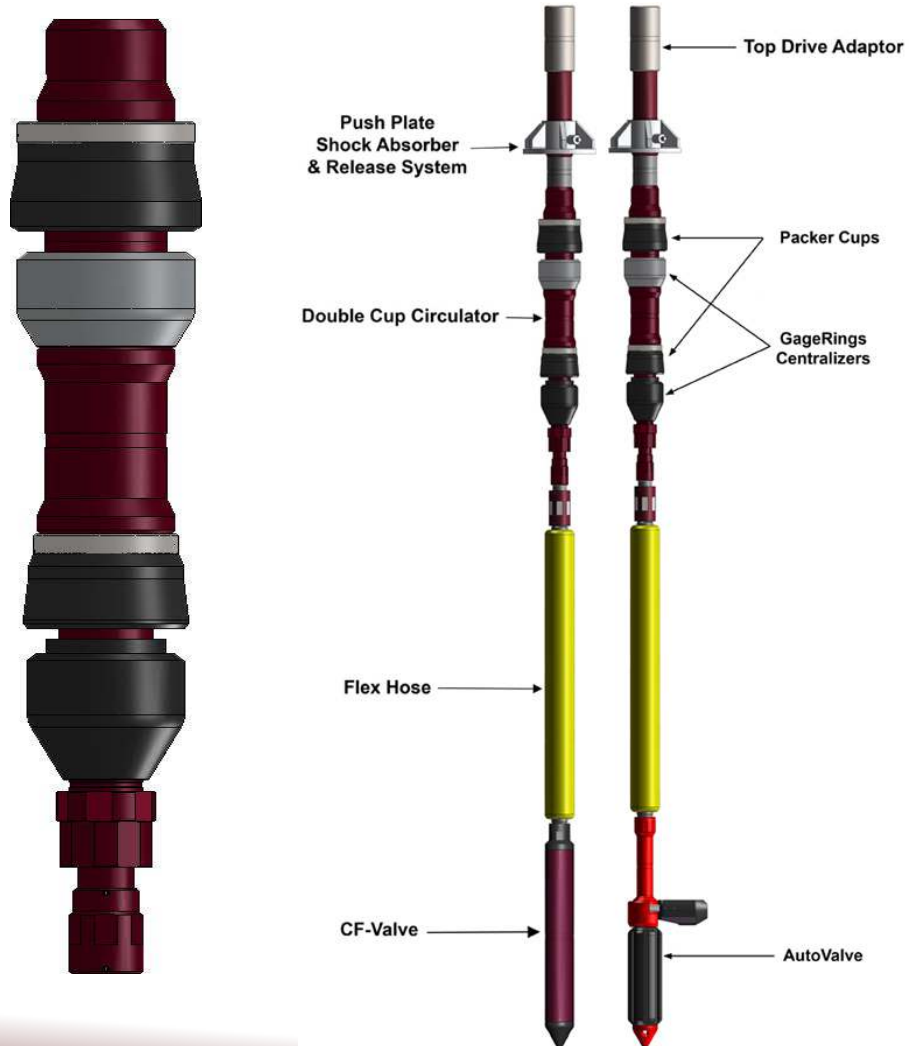
For accommodating 8' to 24' long Bails and different Top Drives.

Allows the unit to Seal to the casing allowing you to perform Fill-Up, Flow-back & Circulating Job



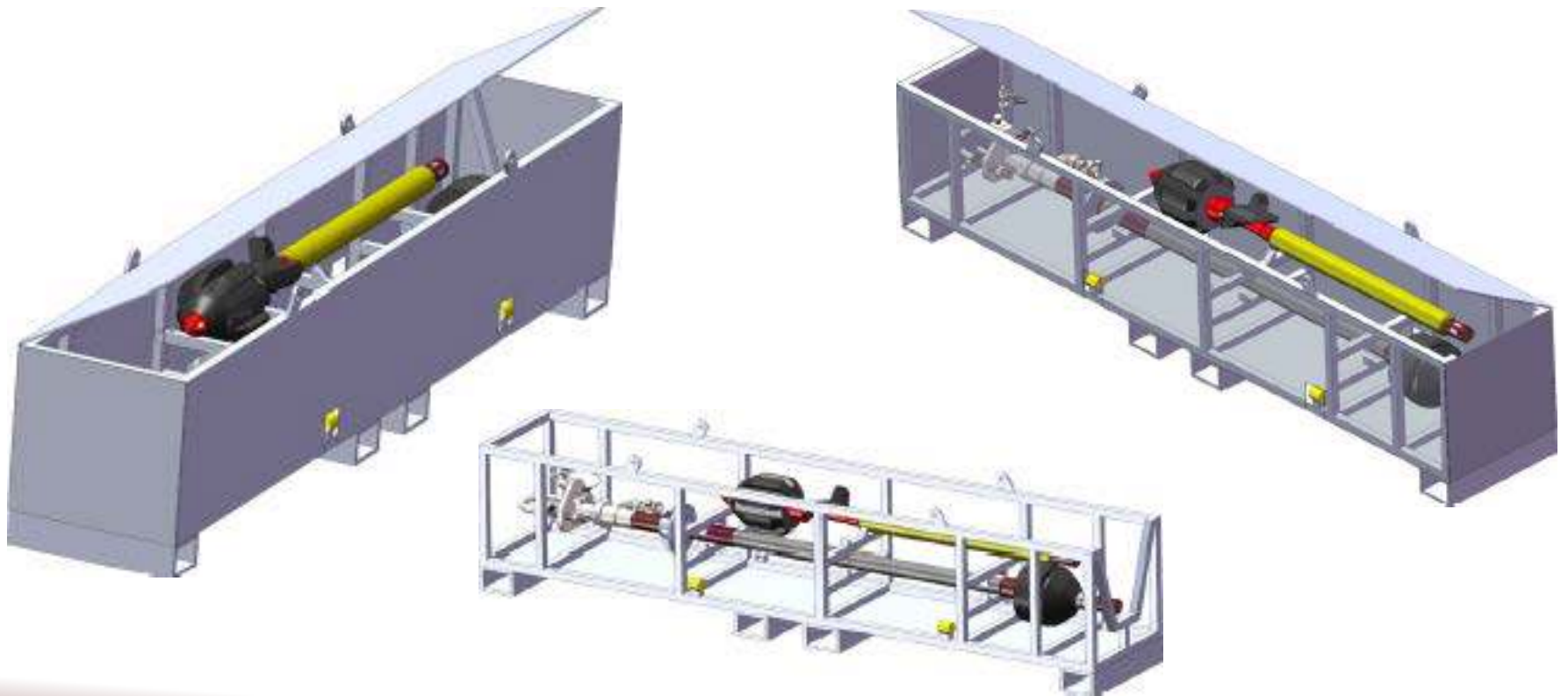
DrawWorks, L.P. Double-Cup Circulator Tool

The Double Cup Circulator provides the two sealing units while running a tapered string of casing.



AutoFill Job Baskets

Land and Offshore Custom Job Baskets
For Tool & Hose Assemblies



Worldwide Clients

Worldwide / International

- Weatherford
- BJ & Baker Hughes
- ITS Tubular Services
- NOV
- Premier-Egypt
- Al Ghraiths Oilfield Services
- Tesco Services
- Relentech
- AOS
- SOCAR
- Odfjell
- PT Indo Kaya Energi
- NAPESCO
- CTRS-DAS Al Sahara

Domestic

- Offshore Energy Services
- Tesco Services
- Express Energy
- Premier
- Timco
- Irongate
- Rocky Mountain Casing
- Byrd Oilfield Services
- Casing crews
- Pipe Pros
- Alfa Hunter
- B & L Casing
- Ciscon
- Noble Casing

