

2015 CATALOG

ROD PUMPS | GAS SEPARATORS | TACs & MORE



don-nan.com
800-348-7742
API 11AX-0033

About Us

Don-Nan was founded in 1962 by Vernon & Dorothy Carruth in Midland, TX. The name itself was created by combining the names of their two children, Don and Nancy. From the beginning, the foundation of the business was built on a commitment to excellence in service and quality with unwavering integrity and an eye towards innovation.

Working from this philosophy led Don-Nan to become one of the foremost rod pump specialists and largest manufacturers in the world. Today, Don-Nan operates three distinct sales divisions with service centers throughout the Permian Basin, wholesale distribution throughout the remaining oil producing areas of the U.S. and an international division that ships parts and fully assembled pumps globally.

Don-Nan's manufacturing division was created in 1981 and by 1994 had gained credentials as an API licensed full line manufacturer of subsurface rod pump products. In 2003, manufacturing added the ability to hone pump barrels and also built a valve rod facility. Shortly thereafter, the main manufacturing plant moved into a new 40,000 square ft. building that was doubled in size just eight years later. Manufacturing now houses over 160,000 square feet and continues to grow at a sustainable pace, including a state of the art chrome plating facility constructed in 2014.

Our commitment to quality extends beyond manufacturing to all aspects of the business such as engineering, sales, finance, and others. With inventory and field support in strategic locations, we are ready to respond in a timely, professional manner 24 hours a day. Our technical staff is always happy to assist in pump selection and design, as well as present pump schools and field training as requested.

Don-Nan was acquired by Schlumberger in the fall of 2014, and has remained virtually unchanged with senior management at Don-Nan remaining intact and future plans on track. As we continue to grow and become more intertwined with our new parent company, our commitment remains in providing service, quality, integrity and innovation. That's the Don-Nan way!

Barrels

The most common base material and coating options in the industry are readily available. Barrel recommendations are always based on application conditions, including depth limitations and barrel lengths.

501 Stainless Steel

A first choice for many, AISI 501, 4/6% chrome alloy steel with HRC 60, this barrel is recommended for wells with high solids and moderate amounts of CO₂ and low H₂S.

Chrome Plated Brass

Admiralty brass plated with chrome on the I.D. produces an Rc 70 hardness minimum and is recommended for wells with moderate amounts of H₂S and CO₂ and high amounts of solids.

Chrome Plated Steel

Chrome plated steel barrels hold up excellent against solids in the well due to the slick, extremely hard surface of the chrome coating. However, the steel barrel will only withstand low amounts of CO₂ and H₂S.

Nickel-Carbide Coated Brass

Nickel carbide coating produces a smooth surface that holds up well against CO₂. Because the base metal is brass, this combination of materials is also performs well combating H₂S. However, it is not recommended for abrasive conditions.

Nickel-Carbide Coated Steel

Nickel carbide coating is a process in which carbide particles are deposited in a nickel matrix and applied to a thickness of 0.001" to 0.0015", resulting in a finish that holds up excellent against CO₂.

Steel

High carbon steel barrels without any coating are recommended for mild to average pumping conditions where abrasion and corrosion are not a problem.

Plungers

Plungers are straightened, coated and precision ground on the outer diameter to meet API specifications and available in a large assortment of options and sizes.

Spray Metal

Spray metal plungers are recommended for use in severely corrosive and abrasive conditions. Precision tubes are ground on the outer diameter and flame sprayed with a nickel based powder that creates an extremely durable coating with an Rc 58/62.

Chrome Plated

Chrome plated plungers have a minimum Rc 70 hardness rating and perform excellent in highly abrasive conditions. Chrome is not particularly well suited to battle corrosion.

Grooved Plungers

Grooved Plungers have shallow but wide grooves cut out of the body and are available with spraymetal or chrome coatings. Grooved plungers are typically used in conjunction with an upper barrel extension so that collected solids may wipe clean with proper stroke length. An additional advantage is that this plunger may often be flipped and reinserted into the pump for extended use.

Pressure Actuated

The pressure actuated plunger is precision crafted like any other Don-Nan plunger except that near the end of production, grooves are made and subsequently filled with nylon rings. This plunger is most suited for high water cut wells in which lubrication and sand are problems.

Ends & Pins

Plunger pins come in a variety of configurations to meet specific well condition and pump configuration needs. Pins are available in pin-end, box-end and undercut box-end as well as a variety of metallurgies. The most common metals used for pins are Monel, Stainless Steel and Alloy Steel.

DIFA

DISMANTLE, INSPECTION, & FAILURE ANALYSIS

Don-Nan service centers follow a standardized procedure for dismantling and inspecting every pump repair which includes collecting foreign material samples, cataloging failures through descriptions, and capturing every damaged part with high resolution photography.

Apart from our standardized procedure, operators may request a cold breakdown of their pump to get a better idea of what was happening downhole. And as always, operator personnel are welcome on the shop floor to observe.



In addition to the inspection that happens in the pump shop, Don-Nan dedicates engineering staff to failure analysis and houses the advanced equipment required to get to the root of the problem.



**Schedule a shop visit or
request engineering analysis today!**

Pump Trak

All the information you need, right at your fingertips.

ptr.don-nan.com

Abby 4501										
Pump	Size	Installed	Pulled	Days	Reason	Serviced	Foreign Material	Service Type	Ticket Cost	Comments
HP-1740	2-1.5-RXBC-20-5	8/18/2010	10/26/2010	69	Tubing Leak / Tubing Failure	10/29/2010	None Found	Repaired	\$283.89	Valve Rod worn, Secomore
HP-1648	2-1.5-RXBC-20-5	10/28/2010	1/28/2011	92	Tubing Leak / Tubing Failure	1/28/2011	None Found	Repaired	\$324.61	Build Back Single Vamore
HP-1804	2-1.5-RHBC-20-5		4/27/2011		Lowered Or Raised Pump	4/28/2011	None Found	Repaired	\$139.91	
HP-1409	2-1.25-RHBC-16-5-4	4/27/2011	7/12/2012	442	Rod Part	7/12/2012	None Found	Repaired	\$667.00	made DV travelingTopmore
HP-2826	2-1.25-RHBC-16-5-4	7/12/2012	9/24/2013	439	Tubing Leak / Tubing Failure	9/24/2013	None Found	Junked	\$0.00	pump was junked outmore
HP-3681	2-1.25-RHBC-20-4	9/24/2013		643						

Abby 4505										
Pump	Size	Installed	Pulled	Days	Reason	Serviced	Foreign Material	Service Type	Ticket Cost	Comments
HP-1814	2-1.5-RWBC-20-5	10/7/2010	9/6/2011	334	Other	9/7/2011	None Found	Junked	\$0.00	J&S Build New Pumpmore
HP-1636	2-1.25-RHBC-16-5-4	9/6/2011	2/3/2014	881	Tubing Leak / Tubing Failure	2/5/2014	None Found	Junked	\$0.00	Built back new 2-1.2more
HP-3826	2-1.25-RHBC-20-4	2/3/2014	2/27/2014	24	Other	2/27/2014	None Found	Repaired	\$145.02	Rod Guide - Beat Outmore
HP-2395	2-1.25-RHBC-20-5	2/27/2014		487						

Abby 4509										
Pump	Size	Installed	Pulled	Days	Reason	Serviced	Foreign Material	Service Type	Ticket Cost	Comments
HP-1116	2-1.25-RHBC-20-5-4	11/14/2008	3/9/2009	115	Tubing Leak / Tubing Failure	3/10/2009	None Found	Repaired	\$1,265.53	Plunger grooved / scmore
HP-1136	2-1.25-RHBC-20-5-4	3/9/2009	8/3/2009	147	Rod Part	8/20/2009	None Found	Repaired	\$1,874.91	Valve Rod worn, Extemore
HP-950	2-1.25-RHBC-16-5-4	8/17/2009	10/13/2009	57	Tubing Leak / Tubing Failure	10/15/2009	None Found	Repaired	\$120.63	
HP-1346	2-1.25-RHBC-16-5-4	10/15/2009	7/20/2010	278	Rod Part	7/23/2010	None Found	Repaired	\$976.42	Plunger grooved / scmore
HP-1131	2-1.25-RHBC-16-5-4	7/20/2010	7/23/2010	3	Pump Failure	7/26/2010	Sand	Repaired	\$204.72	Barrel plunger stuckmore
HP-1708	2-1.25-RHBC-16-5-4	7/23/2010	2/15/2012	572	Tubing Leak / Tubing Failure	2/15/2012	None Found	Junked	\$0.00	Top Pin - Worn, Valvmore
HP-2621	2-1.25-RHBC-16-5-4	2/15/2012		1230						

Abby 4513										
Pump	Size	Installed	Pulled	Days	Reason	Serviced	Foreign Material	Service Type	Ticket Cost	Comments
HP-1592	2-1.5-RXBC-20-5	5/5/2010	12/15/2010	224	Other	12/15/2010	None Found	Repaired	\$380.17	Downsized to 2-1.25-more



Real-time information.

High resolution pictures.

Pump and supply tickets.

Export spreadsheet data.

Well Optimization reports.

Pump templates.

Contact your sales representative for setup and login information.

*PumpTrak only available at Don-Nan pump service centers.

Well Optimization

Don-Nan Well Optimization technicians utilize state of the art equipment and software to provide the most accurate information possible. The software provides fluid levels, collar count, production levels and potentials, differential pressures, and animations of downhole activity. Technicians work directly with operator field personnel and remote staff as well as upload reports to PumpTrak.



Service Rates	Pump Customer	Standard Rate
Fluid Shot	\$60	\$70
Dynamometer	\$200	\$225
Fluid/Dyno Combo	\$240	\$280
Cost per Mile Traveled	\$0.75	\$0.90

*Well Optimization only available in Permian Basin.

Insert Pump Anchor

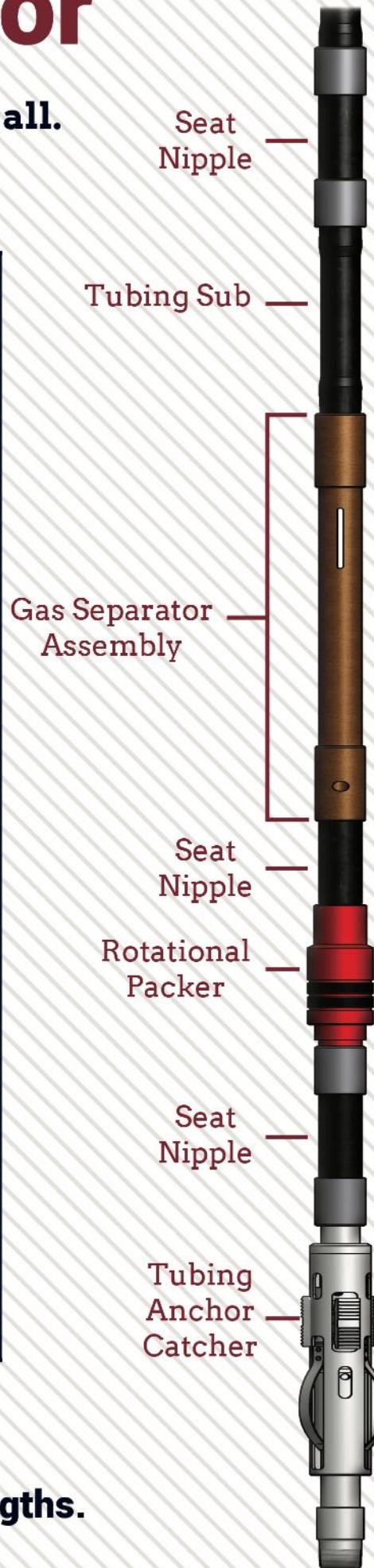
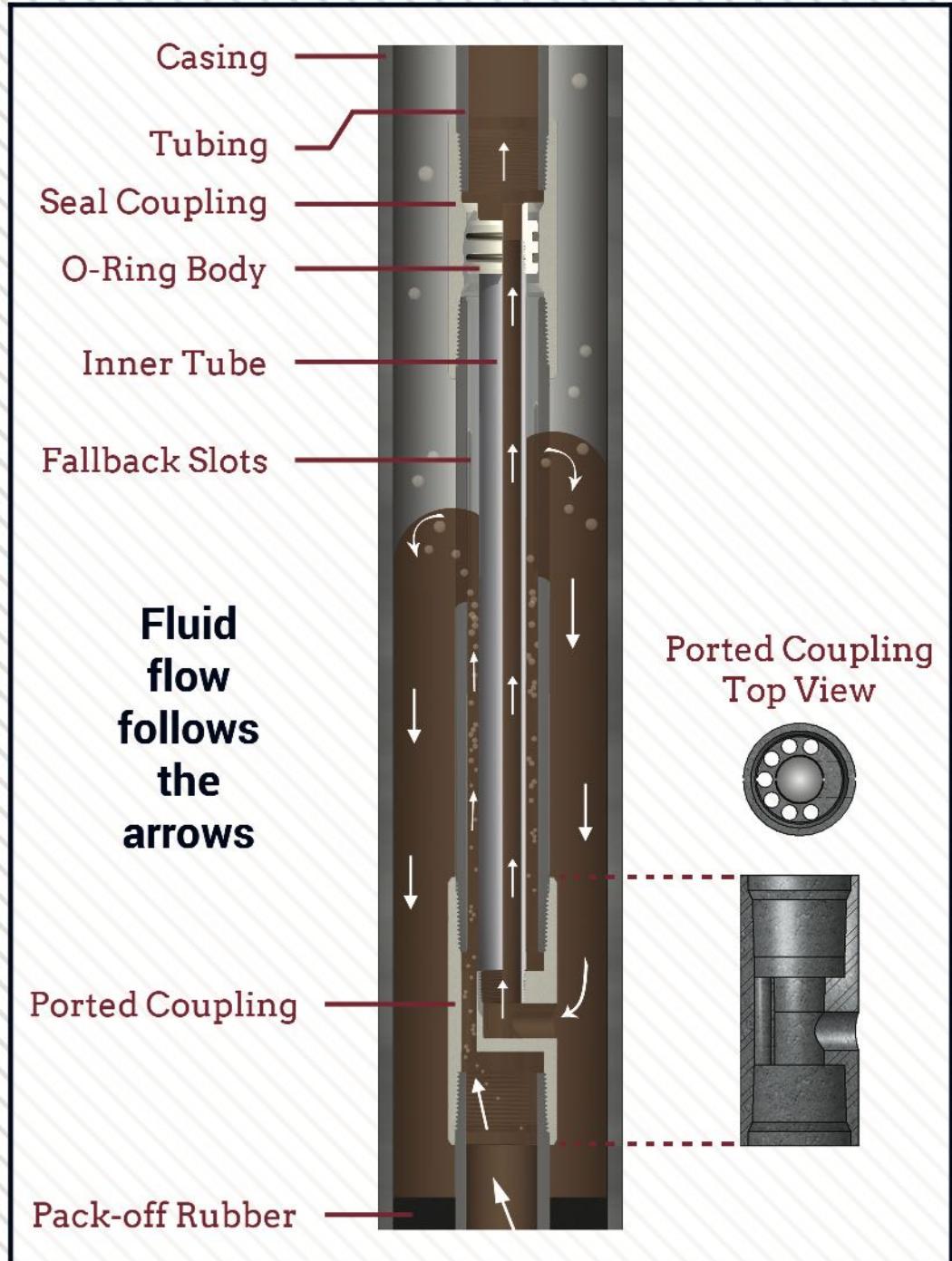
This tool is necessary when a seating nipple for an insert pump is not present in the tubing. The insert pump anchor therefore serves the dual purpose of anchoring the pump and packing off the fluid production string.



Available for 2^{3/8}", 2^{7/8}", & 3^{1/2}" tubing.

Gas Separator

The separator that started it all.



Available in 20 ft. & 40 ft. lengths.

Solution GS

The Best Solution in Downhole Gas Separation

The Solution Gas Separator is an improved design over the original Gas Separator in that it creates more gas breakout and a much cleaner, gas free fluid entering the pump above. This marked increase in performance is attributed to an enlarged inner tube, the addition of fluid disruption rings, and more pressure drop opportunities.

Fluid is directed through the separator by a packer or other mechanism below the separator that seals the tubing/casing annulus.

- No welded connections
- Utilizes pack-off rubber
- Install above perfs

Gas
Separator
Assembly

Rotational
Packer

**AVAILABLE IN 20ft. & 40ft.
LENGTHS FOR 2^{7/8"} TUBING**

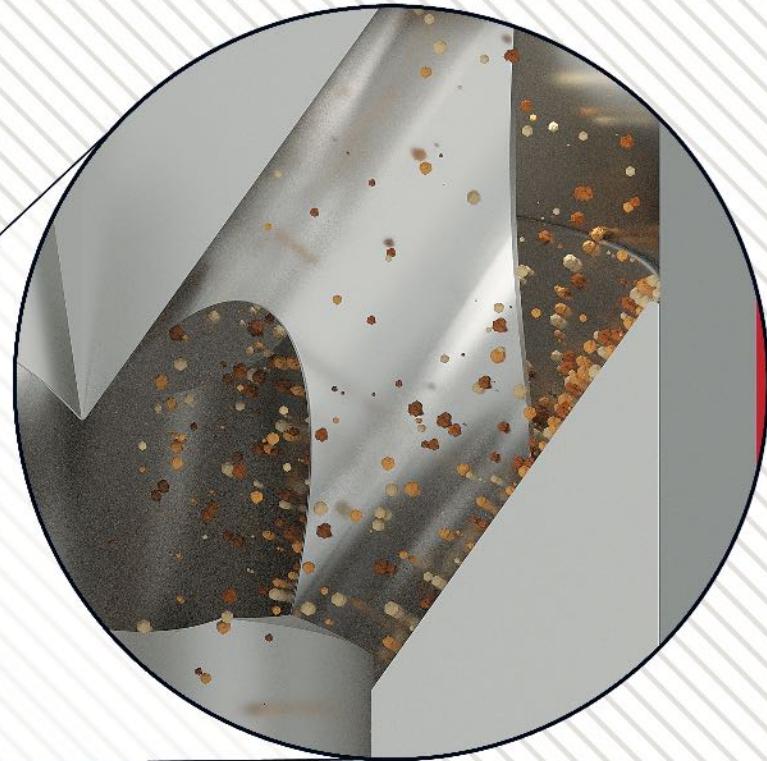
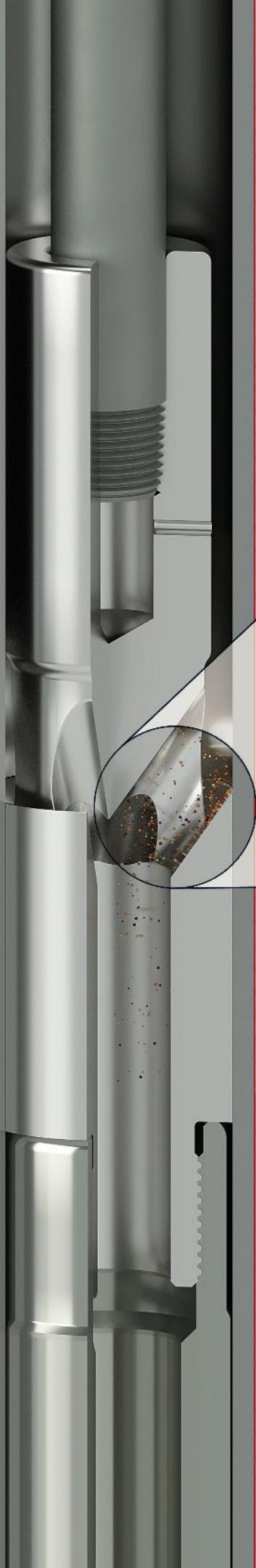
Slimhole Tubing Anchor

The unique design of the Slimhole tubing anchor catcher allows for greater flow between the anchor and the casing than a standard TAC. The tapered ends direct solids away from the mechanical parts of the anchor, reducing maintenance costs.



Sand Diverter

**Small Change
Big Impact**



Normally, sand and fines would gather up on the shoulder of an adapter and become wedged against the inner barrel wall eventually cutting into the barrel and plunger. This creates excess fluid slippage and equates to lost fluid production.

The Sand Diverter plunger adapter fits tight like the plunger and funnels sand and fines back inside, so as not to allow cutting during operation or even upon restarting.

**Available for valve rod,
pull tube, & tubing pumps!**

Shallow Well Pumps

If you are expecting to pump at a depth of 6,000 feet or less, the Shallow Well Sand and Trash pumps are the way to go for low to moderate fluid volumes.

SW TRASH PUMP

The Shallow Well Trash Pump is unique among insert pumps in its inverse design. The plunger is now stationary, as is the pull tube to which it is connected, and the barrel has become the traveling portion.

This pump is most useful in wells that produce lots of iron sulfide, sand, and other solids.

It also performs very well in situations where a well may be inactive long enough for solids to settle around the pump. This is because fluid is discharged from a three-wing cage at the top which does not allow re-entry to the pump. The barrel movement upon restarting safely reintegrates solids into the fluid without damaging the pump.

SW SAND PUMP

The Shallow Well Sand Pump is nearly identical to its deep well counterpart, the main difference being that the holdown position has moved from the bottom to the top of the pump.

This change in holdown position creates two distinct advantages. One is that the fluid discharge point is directly above where the pump is seated, making it virtually impossible for solids to compact enough to result in a stuck pump.

The other advantage is that the fluid level may be pumped below the seating nipple, with the barrel acting as a gas anchor.

Just as with the Deep Well version, this pump may be outfitted with our patented Sand Diverter.

TYPICAL PRODUCTION RANGE: 10 to 300 BPD

CUSTOMIZABLE FOR A WIDE RANGE OF DOWNHOLE SCENARIOS

Deep Well Pumps

At Don-Nan, we believe in making every well your best well and that means building a pump designed for the conditions in which that pump will be expected to perform. If you are looking to pump at 6,000 feet or more you can't go wrong with these two applications as a starting point.

DW SAND PUMP

The Deep Well Sand Pump is assembled using a heavy wall, internally threaded barrel for strength under immense pressure and an oversize barrel cage with alternate pattern ball for reduced gas interference.

The plunger is spraymetal coated and fitted with our patented Sand Diverter plunger adapter for superior performance in dealing with all types of sand and particulates.

This pump design also has included a Top Seal, which protects the O.D. of the pump barrel from stagnant fluid and prevents settled sand from sticking the pump.

SAND & GAS ULTIMATE PUMP

The Sand and Gas Ultimate Pump is double valved with a pull tube. Like a typical 2 Stage HVR, this pump has 2 traveling valves to prevent gas locking and an open cage at the top that prevents solids from re-entering the pump.

Unlike any other company's 2 Stage HVR, our Sand Diverter is also available for use with a pull tube, as well as an oversize barrel cage, providing superior performance and lengthening pump life.

TYPICAL PRODUCTION RANGE: 50 to 500 BPD

CUSTOMIZABLE FOR A WIDE RANGE OF DOWNHOLE SCENARIOS

Oversized Cage

Minimize Gas Interference

Increase Fluid Flow

The use of an Oversized Cage with an alternate pattern ball increases efficiency compared to an API configured pump using the same barrel.

By reducing the volumetric space between the standing and traveling valves (unswept area), we have increased the compression ratio. The end result is smooth fluid transfer between valves.

API Configuration

Oversized Cage

Size	Material Option
1 1/4"	Stainless, Monel
1 1/2"	Alloy, Stainless, Monel
1 3/4"	Alloy, Stainless

One Piece Insert Guided Cage



Extend Cage Life
Maximize Fluid Flow

Stellite insert is inertia friction welded in place. This creates a much more stable and strong product compared to multi-piece cages.

CS cages are available for use with barrels, plungers, & in double valve configuration.



Available for 1^{11/16}" Through 2^{3/4}" Pump Bore

Gas Valve

Pressure tested to 5k psi.

316 Stainless Steel for Corrosion Resistance

**PLUNGER
MOUNT
FOR A
TOP
ANCHOR
PUMP**



Creates a controlled leak to help maintain proper pump fillage and transfer of fluid.

**BARREL
MOUNT
FOR A
BOTTOM
ANCHOR
PUMP**



Size dependent on pump configuration.

Carbide Insert Valve Rod Guide

Outlasts every other guide.



Fits 7/8"
and 1 1/16"
valve rod.

Extra heavy-duty alloy or nitronic
clutch resists wear from tagging.

Carbide insert protects against valve rod
cutting. This is especially helpful when
sinker bars are used to force the traveling
assembly down through compression.

2" with 1.625" fishneck

2.5" with 2" fishneck

**Also available as
Vertical Discharge**

Top Seal

Protect the outside of the barrel on a bottom holdown pump by sealing it off from solids and corrosive fluid.



Rubber element is bonded with steel insert and can be replaced should it become damaged in operation.

To set the Top Seal, simply place the weight of the rods onto the pump; pulling will release.

Available for pumps in $2\frac{3}{8}''$ & $2\frac{7}{8}''$ tubing.

Sand Shield

Sometimes, simple is better.

A simple add-on directly below the rod guide, specially made rubberized fins seal the outside of the pump from moderate buildup of sand and solids falling through fluid on well shutdown.



Fits 1^{1/4}" to 2" Pumps in 2^{3/8}" & 2^{7/8}" Tubing

Bottom Discharge Valve

Designed for bottom holddown pumps with a stationary barrel, the BDV discharges about 10% of the fluid flow to the annulus between the pump barrel and tubing. This fluid discharge just above the holddown prevents corrosion to the outside of the pump from stagnant fluid and keeps solids integrated into the fluid, greatly reducing the likelihood of a stuck pump situation.



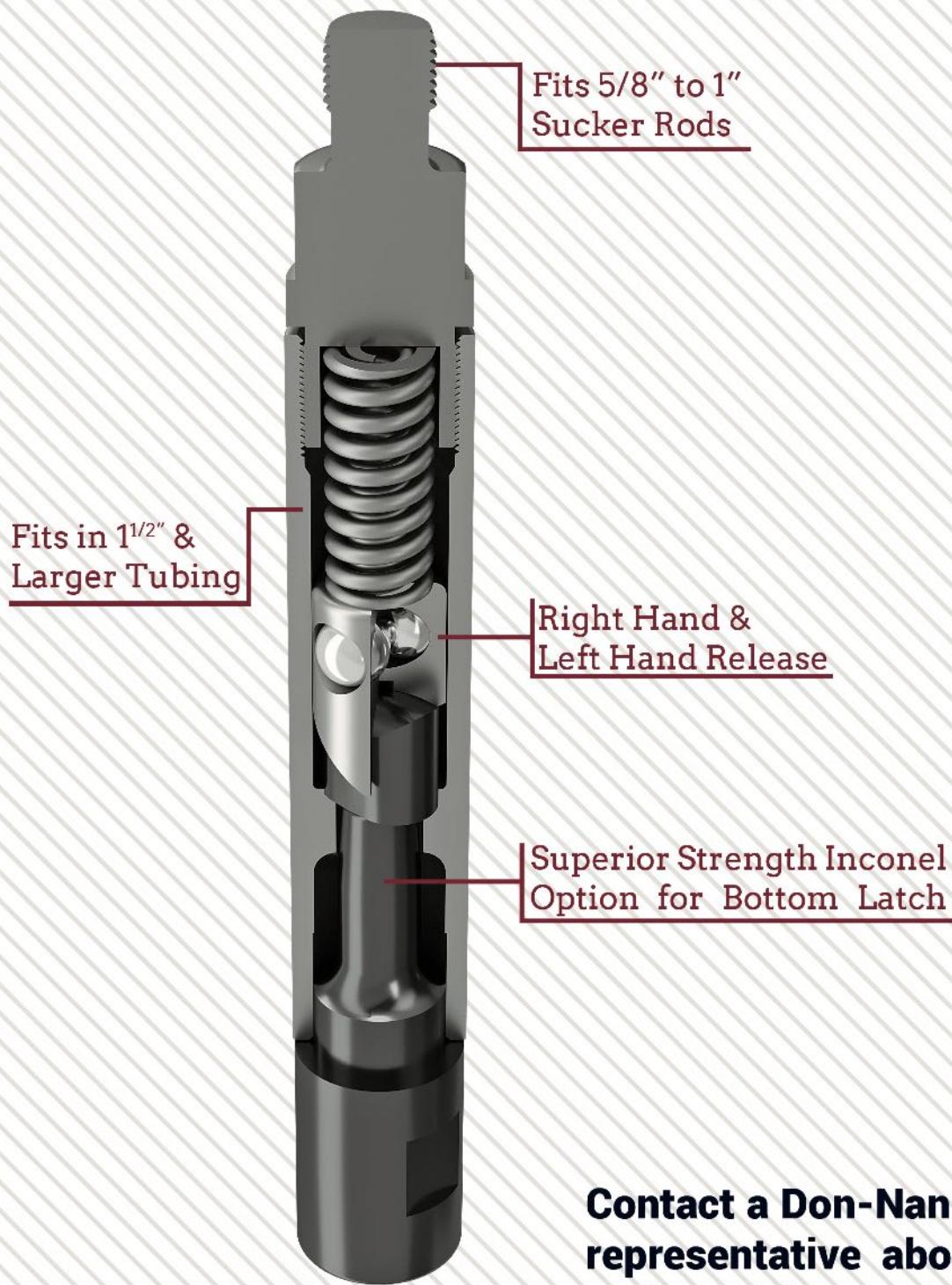
On the upstroke, fluid passes through the channels in the body of the BDV while the attached valve remains closed.

On the downstroke, the valve in the BDV cage opens allowing approximately 10% of the fluid into the annulus.

Available in 2" & 2^{1/2}" and a variety of metallurgies.

On/Off Tool

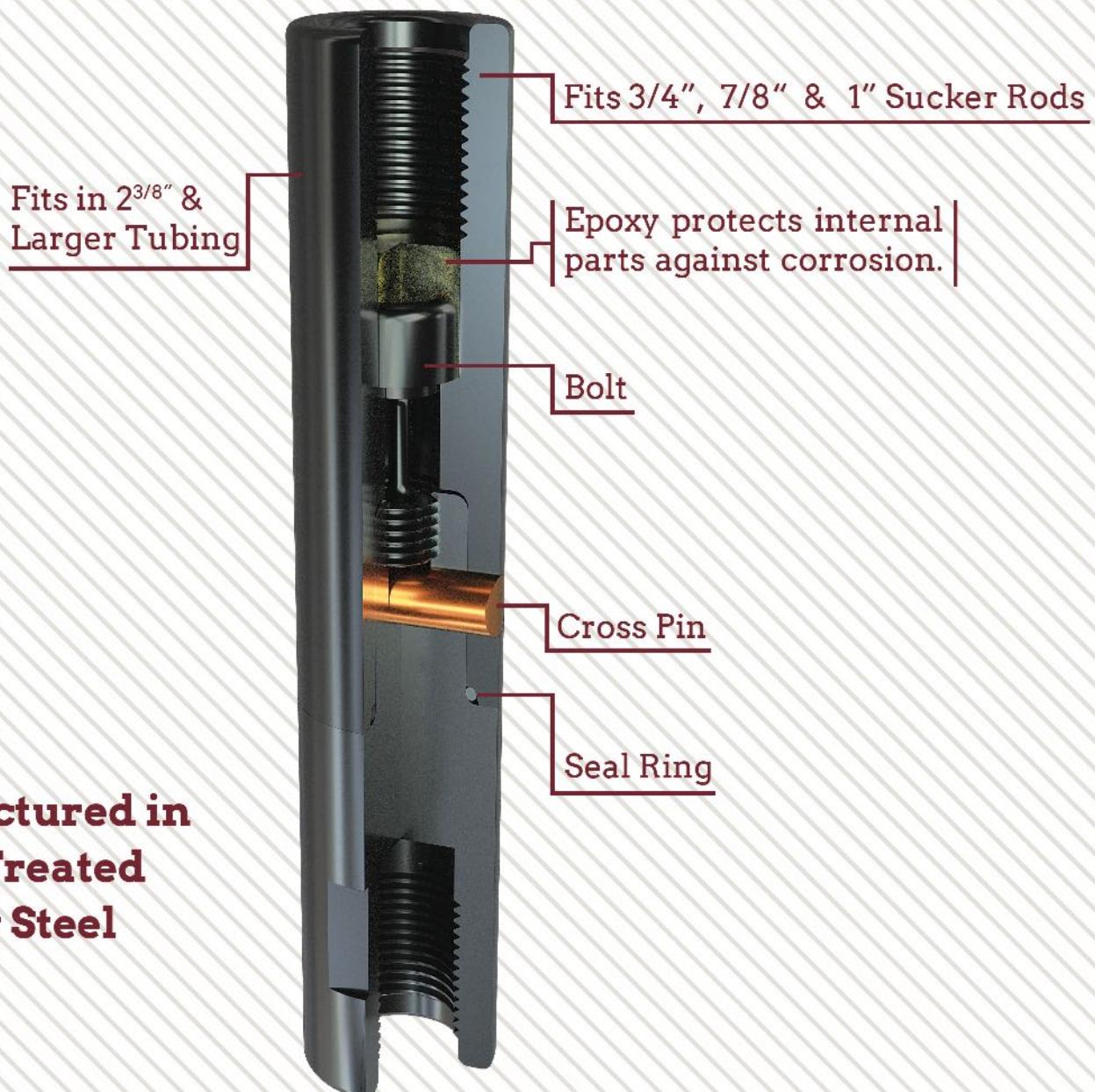
A requirement for bottleneck (oversize) tubing pumps, the On/Off Tool can also be added to many other pumps. It provides the option of pulling the pump with the rod string or leaving it downhole and is available in a variety of metallurgies and sizes. Simply set the weight of the rod string down, twist, and lift to unlatch. Reverse action to set.



Contact a Don-Nan technical representative about proper tool selection.

Shear Tool

In the case of a stuck pump, the Shear Tool allows a fiberglass sucker rod string to be pulled from the well without using detrimental rotational force. Once the targeted pressure has been reached, the bolt and cross pin inside the tool will break. The remaining rods and pump below may then be fished out of the well.



**Manufactured in
Heat Treated
Alloy Steel**

**Shear values range
from 18 to 33 kpsi
depending on size.**

Locations

Don-Nan has strategically placed locations to meet the needs of both operators and other pump shops. Service centers reside throughout the Permian Basin and wholesale warehouses are in the heart of every other major oil play.

Service Centers

Andrews, TX

432-523-2678
801 SW 9th St.

Big Spring, TX

432-268-1216
3401 E 11th Pl.

Midland, TX

432-682-7742
3427 E Hwy. 158

Artesia, NM

575-736-0251
11299 Lovington Hwy.

Hobbs, NM

575-393-6771
6520 Carlsbad Hwy.

Odessa, TX

432-381-9421
8350 W 42nd St.

Big Lake, TX

325-884-9800
410 Colorado St.

Kermit, TX

432-586-3294
200 N Pine St.

Stinnett, TX

806-878-2483
130 N Main St.

Wholesale Distribution

Gillette, WY

307-299-2772
5544 S. Winland St.

Lytle, TX

830-772-5900
18307 IH-35 S

Ratliff City, OK

580-276-6035
1548 Old Hwy. 7

Grand Junction, CO

970-250-8984
364 Bonny St.

Poplar, MT

406-768-7332
209 B Street W

International Distribution

Midland, TX

800-348-7742
3427 E Hwy. 158



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Midland, TX 79706
800-348-7742
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