As the industry leader in Plunger Lift innovation and support, Integrated Production Services (IPS) is proud to present our current product offering. All IPS products are produced at our manufacturing facility in Waller, TX. The ability to produce our entire product line internally allows for unmatched quality control upon delivery and installation.
DESCRIPTION:
The IPS Pacemaker Plunger Lift System utilizes a proven, patented, two piece plunger design. The large bybass area of the plunger, coupled with high-strength materials and other proprietary system components, allows production companies to increase production and recoverable reserves.

FEATURES AND BENEFITS:
• Removes more wellbore fluid by making more trips per day.
• Eliminates the need for any shut in time.
• Works well with on-site compression.
• Provides a deliquification solution for slim-hole, tubing-less and packer completions.
• Operates with minimal bottom-hole pressure.
• Eliminates line pressure spikes.
• Maintains a low flowing bottom-hole pressure
• Broadens the application of plunger lift technology to also benefit wells that are above critical rate.

APPLICATIONS:
• 6” to 19” long Steel Sleeve that works in higher GLR wells
• Combine with Tungsten, Cobalt, Steel, Zirconia, Silicone Nitride, or Titanium ball.
• Fluid and gas rates determine ball weight requirements.
• Early intervention for liquid loading.
DESCRIPTION:

The Grappler uses new technology to improve the original, patented, two piece plunger design. IPS added detent balls in the seat of the sleeve to keep the plunger ball securely engaged during the upstroke of the plunger trip. With the plunger ball securely engaged, the sleeve will be able to carry more fluids to surface and will increase trip efficiency. The increase in efficiency will also make optimizing easier by eliminating ball and sleeve separation. This broadens the spectrum of potential wells, making the Grappler one of the most versatile plungers on the market.
**DESCRIPTION:**

The **Center Rod Plunger** is designed to fall at high speeds similar to a Pacemaker, but does not require as much flow time at surface to separate a secondary piece. This tool is designed as an intermediate step between Pacemaker candidates and conventional plunger candidate wells. The **Center Rod Plunger** requires no additional equipment at the surface to adapt the well for this application, and can run in wells with existing subsurface equipment. This plunger has a one piece center rod that runs through the fishing neck. The fishing neck is side pinned and chain forced to maximize strength and impact tolerance.

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**PADDED CENTER ROD**

**DESCRIPTION:**

The **Padded Center Rod Plunger** retains a superior seal in an intermediate bypass plunger. It is designed to fall at medium speeds unlike most bypass plungers. It does not require any flow time at the surface to separate a secondary piece. This tool is designed as an intermediate step between Pacemaker candidates and conventional plunger candidate wells. The **Center Rod Plunger** requires no additional equipment at the surface to adapt the well for this application, and can run in wells with existing subsurface equipment. This plunger has a one piece center rod that runs through the fishing neck. Pinning the fishing neck through the side of the threads allows for maximum strength and impact tolerance.
PADDED PLUNGERS

ULTRA SEAL

DESCRIPTION:
IPS Ultra Seal pad plungers offer the most advanced sealing mechanism in the market. The key to the success of the Ultra Seal plunger is an HNBR™ rubber seal attached to the body of the plunger between interlocking tabs under the pads. The interlocking tabs serve as a protector to the ultra seal which decreases gas slippage under the pads. The result is less fluid fallback during the plunger cycle to the surface which means the plunger requires less gas pressure to make a run.

SUPER SEAL

DESCRIPTION:
IPS Super Seal pad plungers offers advanced sealing technology. The four pad interlocked system is available in single, double, and triple pad designs. The interlocking tabs serve as a protector to the Super-seal which decreases gas slippage under the pads. The result is less fluid fallback during the plunger cycle to the surface and full contact with the tubing walls. Wear indicators are manufactured into the pads to show plunger life.

MINI SEAL

DESCRIPTION:
The IPS Mini pad plunger offers exceptional value along with strong sealing properties. The Mini Pad utilizes three interlocking pads per row that also lock into the mandrel providing an excellent seal at a great value. The spiral nose design will aid in the removal of solids and keep the plunger spinning to reduce negative wear patterns.
CONVENTIONAL PLUNGERS

CLEANOUT

DESCRIPTION:
The IPS Clean Out Plunger is a low maintenance and economical tool. These plungers are constructed with heat treated 4140 steel or 17-4 stainless and can be ordered with a solid or hollow body. They are extremely versatile and can handle many tasks ranging from paraffin or scale buildup reduction to temporarily use for sand cleanout. We offer different lengths and outer diameters for specific applications.

BRUSH

DESCRIPTION:
The IPS Brush Plunger has a flexible brush spirally wound onto a solid mandrel constructed with under cuts, ensuring de-scaling of the tubing. These plungers are constructed with heat treated 4140 steel. The brush element employed is a stiff, heat resistant, durable nylon material. IPS utilizes this element based on customer feedback and numerous field test results, proving it is a brush plunger that has a longer life span than the previous technology in other existing models.

SPHERE

DESCRIPTION:
The Sphere is the most recent addition in the IPS line of conventional plungers. With progressive thinking IPS has developed the lowest friction plunger on the market. The circular design allows this plunger to reach deeper into deviations and capture fluid that was previously unreachable by conventional designs. This is the first plunger to reach the coveted 90 degree mark. The Sphere is ideally suited for doglegged wells that often wear conventional plungers flat on one side. With the low friction design, and high rotation effect, production on marginal wells can be significantly increased. This low friction design also allows maximum fall rates that have been tracked at 500+ ft/min.
**TUBING SIZES**

**DESCRIPTION:**

The IPS 3K lubricator is an integral part of the plunger lift system. It contains an 8 round threaded cap and slotted outlets. With a high quality powder coated finish and innovative cap design, this lubricator can run both conventional and Pacemaker plungers. It also incorporates an easily maintained plunger catcher in the housing.

**APPLICATION & FEATURES:**

- Easy plunger removal
- Large high flow outlets with built in blocks
- Two piece cap for easy conversion from Pacemaker to conventional use
- 3,500 psi working pressure
- Available for H2S service
- Two styles of manual catches are available
- Deceleration spring speed rating of 3,000 ft/min
- Properly spaced outlets for maximum production

**TUBING SIZES:**

- 1-1/2”
- 1-7/8”
- 2-3/8”
- 2-7/8”
- 3-1/2”

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**SURFACE EQUIPMENT**

**3K LUBRICATORS**

**DESCRIPTION:**

The IPS 5K Flange Forged Lubricator is an integral part of the plunger lift system. It contains a heavy-duty spring to absorb the shock of plunger arrival impact. It keeps the plunger in place to allow fluid unloading. A removable Bowen Cap allows access for plunger retrieval and overall inspection. Available with flanged outlets.

**APPLICATION & FEATURES:**

- 2-3/8” & 2-7/8”
- Dual flow outlets for increased production in high volume gas and liquid wells
- Rugged forged alloy steel construction for extreme shock and arctic conditions
- Can withstand impact loads from fast-rising plungers due to the high load bearing Bo-wen Cap threads & improved deceleration springs
- Designed to maximize Pacemaker System production with properly spaced separator rods, plunger placement and ball blocker outlets
- Can be easily customized based on your well specifications
- Threaded cap inlet for chemical injection
- Deceleration spring speed rating: 3,000 ft/min on Conventional Systems.
- Two styles of manual catchers are available for your particular application
- Design accommodates R24, R27, BX152, BX153 & other custom flanges

**MATERIALS:**

- AISI 4130 / L80 alloy steel forged body
- AISI 4130 low temperature impact resistant flanges
- Improved corrosion resistance in sour and CO2 environments compared to carbon steel
- Rated for 5,500 PSIG working pressure.
- Hydrostatically tested to 7,500 PSIG.
- “Rating is dependent on flange rating
- Temperature rating: -50º to 180º F
- -50º to 82º C
- Welds meet API, ASME and NACE codes
- Designed to meet and exceed API-6A standards

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**10K LUBRICATORS**

**DESCRIPTION:**

The IPS Triple Forged Lubricator is an integral part of the plunger lift system. It contains a heavy-duty spring to absorb the shock of plunger arrival impact. It keeps the plunger in place to allow fluid unloading. A removable Bowen Cap allows access for plunger retrieval and overall inspection.

**APPLICATION & FEATURES:**

- 2 3/8” Plunger Systems Pacemaker, Rapid Drop & Conventional
- Dual flow outlets for increased production in high volume gas and liquid wells
- Rugged forged alloy steel construction for extreme shock and arctic conditions
- Can withstand impact loads from fast-rising plungers due to the high load bearing Bo-wen Cap threads & improved deceleration springs
- Designed to maximize Pacemaker System production with properly spaced separator rods, plunger placement and ball blocker outlets
- Can be easily customized based on your well specifications
- Threaded cap inlet for chemical injection
- Deceleration spring speed rating: 3,000 ft/min on Conventional Systems.
- Two styles of manual catchers are available for your particular application

**MATERIALS:**

- AISI 4130 / L80 alloy steel forged body
- AISI 4130 low temperature impact resistant flanges
- Improved corrosion resistance in sour and CO2 environments compared to carbon steel
- Rated for 10,000PSIG working pressure.
- Hydrostatically tested to 15,000 PSIG.
- “Rating is dependent on flange rating
- Temperature rating: -50º to 180º F
- -50º to 82º C
- Welds meet API, ASME and NACE codes
- Designed to meet and exceed API-6A standards
PACEMAKER SPRING

DESCRIPTION:
The IPS Pacemaker down hole spring is a true heavy duty tool. It combines the typical spring design with an innovative secondary bellville washer kit in the cage. At 70% spring compression the washer pack engages eliminating the out spring from stacking. The same Pacemaker spring can be utilized and set with many different hold downs. In addition the spring can also have a ball installed in the cage to serve as a standing valve. This spring has high flow, tapered gas passages to protect your tubing while maximizing flow through. It is designed for continual run use where durability and fatigue resistance is of the up most importance.

CONVENTIONAL SPRING

DESCRIPTION:
The IPS Conventional Down hole spring is a premium tool and has excellent value. The same spring can be utilized to set with many different hold downs. In addition the spring can also have a ball installed to serve as a standing valve. This tool has high flow, tapered gas passages to protect your tubing while maximizing flow through. It is perfect for conventional use where long lasting durability is of the up most importance.

HD SPRING

DESCRIPTION:
The IPS Heavy Duty Bumper Spring is one of the strongest down hole springs offered in the industry. It utilizes a thicker and stonger compression spring obtaining the leading edge over its competitors. The stronger compression spring eliminates the need of the Bellville washer kit. The Heavy Duty Bumper Spring can be utilized and set with many different hold downs. In addition, the spring can also have a ball installed in the cage to serve as a standing valve. This bumper spring is designed for continous use with high impact and fatigue resistance.
DOWNHOLE COMPONENTS

MULTI STAGE TOOL

DESCRIPTION:
The Multi-Stage system works by running multiple plunger lift stages to optimize well production. The bottom stage assembly is a traditional plunger set up with a bottom hole spring and stop to run a conventional plunger. The bottom stage spring and plunger set up depend on client or technician preference and well characteristics. When the well is opened, the bottom stage moves a column of fluid up the hole. As it moves up the hole, the head gas above it is used as an artificial energy source to help drive the top plunger in the secondary stage. This plunger drives a column of fluid to surface, lifting a lighter load to a shallower depth. The bottom plunger arrives at the Multi-Stage assembly with a load that is staged for the next cycle. This fluid load remains staged due to a standing valve in the Multi-Stage assembly.

PRESSURE RELIEF STANDING VALVE

TUBING STOP

COLLAR Stops

PACK OFF

HOLD DOWNS (1, 2, 3 CUP)
DIFFERENTIAL CONTROLLER

SENSORS
- 3 Wire Sensor
- 2 Wire Sensor
- Rattle Sensor

CONTROLLER
- Basic Controller
- Hi-Lo Controller
- Pacemaker Controller