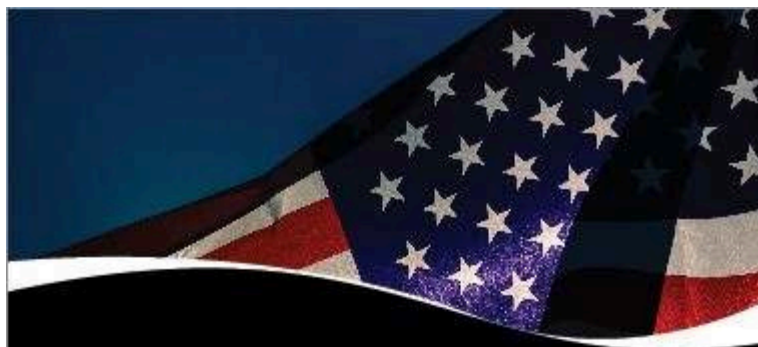




## Casing Driver

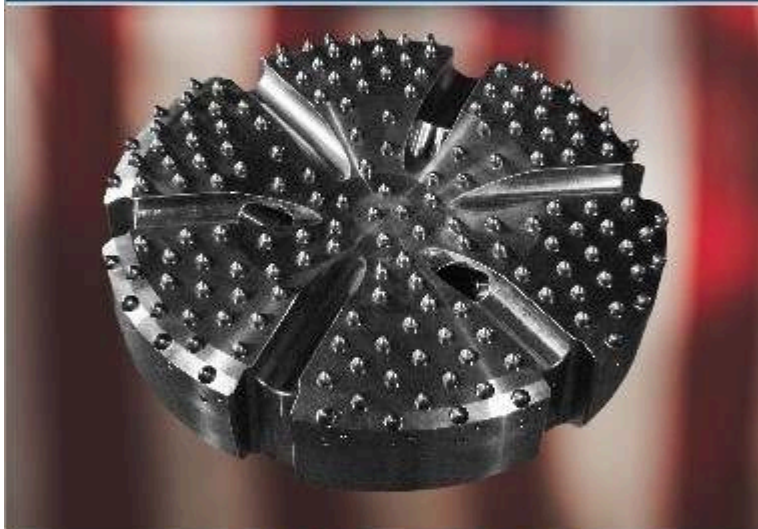
FULL RC SYSTEMS YIELDING OPTIMUM EFFICIENCY DEVELOPED  
OVER 40 YEARS OF RC INNOVATION

**HOLTE**  
**MANUFACTURING**



# 50 YEARS OF SERVING DRILLERS

AMERICAN MADE



AMERICAN LABOR



AMERICAN STEEL





Casing Driver with Bearing Box (for Rigs with thrust bearing) mounted for underground mining.

# TABLE OF CONTENTS

Casing Driver Benefits	2
■ Casing Driver Specs	3
Casing Driver Parts	4
■ Hosing Diagram	5
Options: Accessory Valves and Oiler	6, 7
Other Great Tools	8
Our Facilities	9



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CD140 putting in water well casing

Drill Faster by letting your DHH do it's job

HOLTE Casing Drivers cycle as fast as a down-hole hammer, but being a top-hammer, it has a bigger piston to deliver powerful impacts to drive casing into the ground. In hard-rock conditions, it provides the fastest, and most profitable, way to instal casing.

- Anvils have step seats to fit multiple casing sizes.  
Hydraulic cylinders mount to your Top Head for variable stroke.
- Used with an underreamer, the Casing Driver autofires when the bit advances ~1" past the casing.
- Can turn it off to save air or leave it in autofire mode when your casing install is going smoothly.
- When the Casing Driver autofires, it hammers rapidly (~10 blows in 0.5s), using very little air.
- Around 1000 BPM and oversized pistons keep casing from robbing energy from your hammer.
- Casing drivers to cover all sizes from water well to foundation, RC or Conventional.
- Able to be used with most carousels.





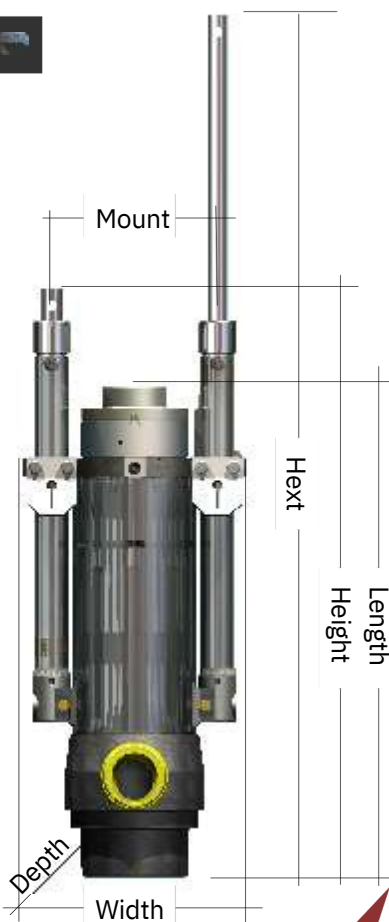
# Casing Driver Specs



Tip: BPM increases with air. If it isn't doing the trick, add more air. Holte Casing Drivers can take air till the back pressure is maxed out. Casing Drivers only fire as many time as it takes for the casing to catch up with the underreamer.

Casing Driver Sizing				
Casing Driver	Casing Size* (in)	Total Weight (lbs)	Height /Hext/ Cyl Stroke (in)	Mount/Length/Width/ Depth (in)
140	6 - 12	650	41/58/17	15.5/45.8/21.0/18.7
350	6 - 14	1794	41/60.5/19.5	19.1/48.0/24.6/15.3
550RC	10 - 20	3570	98.5/64.5/34	26.2/49.0/34.0/28.25
1000RC	>20	4850	108/74/34	32.2/62.8/40.2/34.2

\*Custom, RC/Conv, and Larger Sizes available on request.



## Specifications

Casing Driver	Min CFM @ 250 psi	Piston Weight (lbs)	Piston Stroke* (in)	BPM**
140	450	118	3.3	1080
350	450	346	3.0	TBD
550RC	1000	567	6.8	TBD
1000RC	1000	943	9.3	TBD

Specification subject to change. \*\*Operational BPM @ ~900CFM; max BPM higher. \*Piston stroke not corrected for air cushion.

Conventional casing drivers blew tube doubles as a water diverter. With an RC quill and Anvil, any casing driver can be RC (or vice-versa).

Cutter Wheel Assembly

Call or email Holte for pricing & consulting at +1 541.935.5054 or [sales@drilling.com](mailto:sales@drilling.com).



# CASING DRIVER PARTS

## CYLINDER MOUNTING BLOCK

welds to Top Head Drive for mounting

## PO CHECK VALVE

With near zero leakage, the PO check valve holds the cylinders in position and prevents drift or floating.

## TOP GUIDE BUSHING

A smooth section of drill pipe called a quill is needed to go through the casing driver. This part stabilizes and guides the quill into the seal.

## ELASTIC SEAL & TOP SEAL HOUSING

An easily replaceable thick elastic seal to keep cuttings, mud, and water diverter. It also seals well enough to pressurize your casing if running RC. A hex shape keeps it locked in place while you rotate.

## TOP PLATE & CENTER TUBE

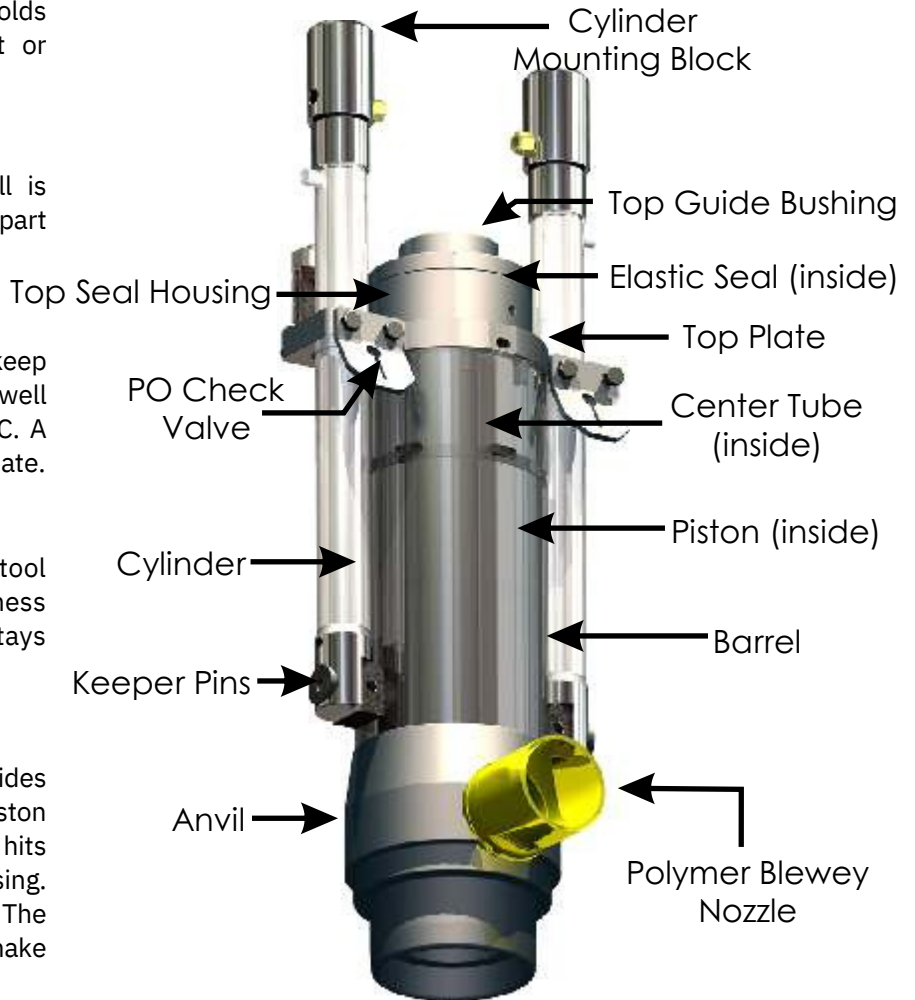
The Center Tube controls the timing of the tool and is made from high strength and toughness N80 carbon steel. The Top Plate ensures it stays centered.

## PISTON, ANVIL, AND BARREL

Hardened and precision machined, the Piston rides on the center tube. Being above ground, the piston is much larger than that for a DHH. The piston hits the Anvil, which transfers the force to the casing. Anvils have step seats for several casing sizes. The barrel keeps it all together. It's important to make sure these parts always have oil.

## POLYMER BLEWEY NOZZLE

Only on conventional models, this serves as a diverter.

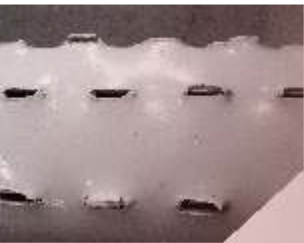


Rigs without a thrust bearing will need an additional bearing box so thrust can be applied to the casing driver. Don't worry, we've done this to many T-3 and TH-60's!

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# CASING DRIVER HOISING

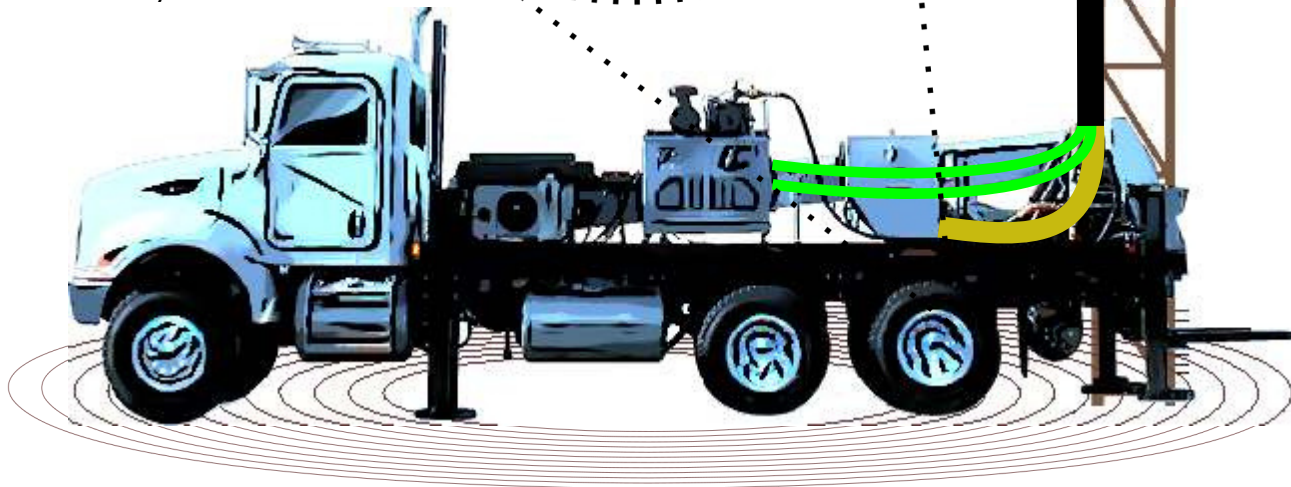
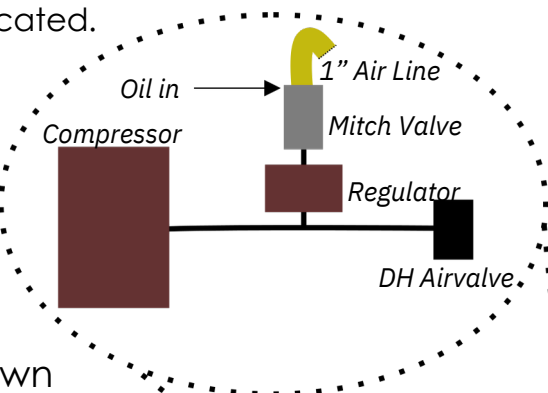
- Connect Air and Hydraulics to Drive Bulkhead with enough slack for the Drive to travel the mast. Ensure there are no kinks in hose bends. Hardline and hard elbows are recommended for going up the mast and to exit the bulkhead to ensure optimum flow. Connect Air and Hydraulic lines from the Drive Bulkhead to the Casing Driver mounted Pressure Operated Check Valve. Air travels from the bulkhead to the Casing Driver Air Inlet.
- While Hardline is recommended, extra hose may be used to travel up the mast. This hose will wear more quickly and it is critical to ensure it does not kink.
- The air line from your compressor will be feed off to the supplied High pressure regulator before the down hole air valve (see below).
- The Oiler plumbs in to the Mitch Valve to ensure your Casing Driver stays well lubricated.

■ Hardline

■ Air Line (1")

■ Hydraulic Up

■ Hydraulic Down



Bulkhead

Casing Driver

Slack for Drive Travel

Slack for Mast Travel - Ensure no Kinks in Hose

(Only Casing Driver Hoses shown.  
Run CD Hose along existing Hose, matching length)

# ACCESSORY KIT (OPTIONAL)

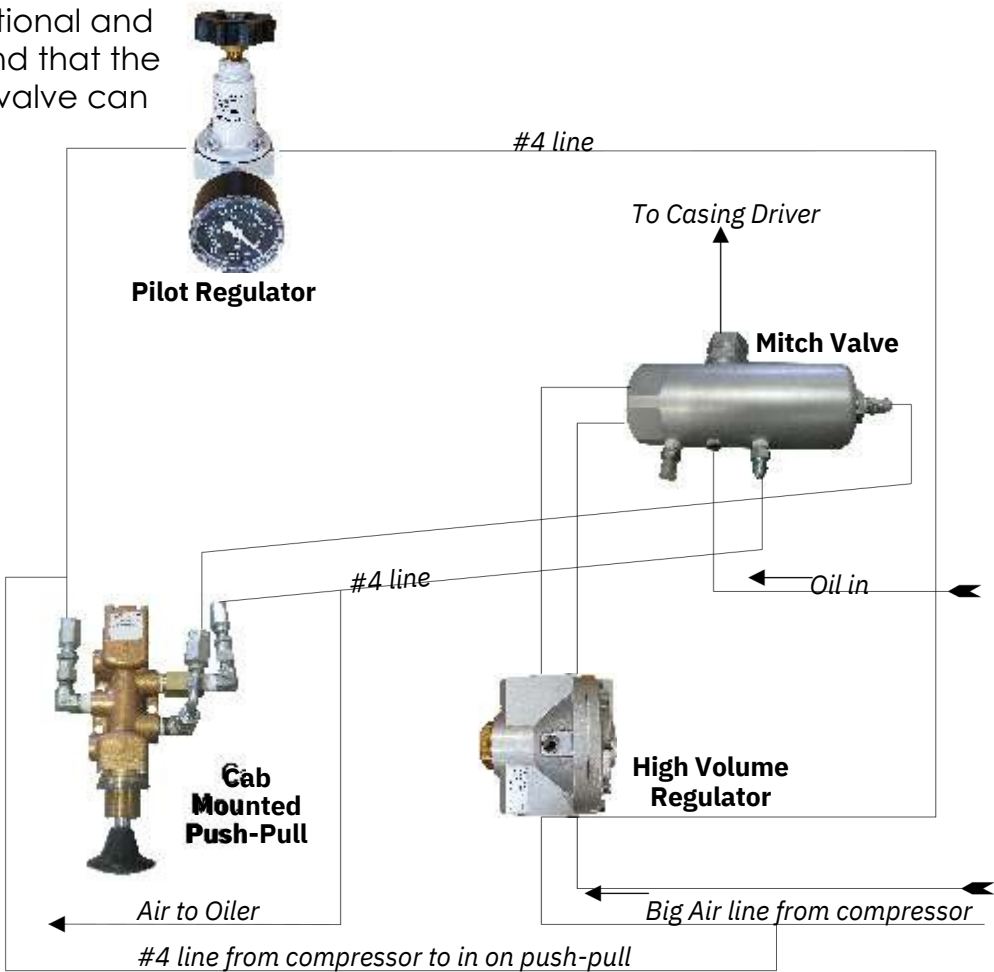
The Casing Driver Accessory Kit is optional and facilitates a cab mounted control and that the Casing Driver stays well oiled. A ball valve can also be used to turn air on/off.



Mitch Valve



Push-Pull Valve



### Components:

1	Push-Pull Valve
1	Mitch Valve (w/fittings)
1	High Pressure Regulator
ft	Air line (by the foot)
ft	Hydraulic hose (by the foot)

### Hydraulic Fittings:

4	Air Line hose ends + Clamps
1	Street-T (1/4" NPT male branch)
3	#4JIC Female (straight)
1	#4JIC Female (elbow)
4	1/4" NPT to #4 JIC (straight)
2	1/4" NPT to #4 JIC (elbow)
1	Brass Check Valve
1	1/4" NPT Male-Female Brass elbow

- The photos above show the recommended way to plumb the Push-Pull Valve and the Mitch Valve. Because each Rig is unique, your optimal configuration may vary from what is shown. The valves are threaded as 1/4" NPT female - which must connect to #4 JIC fittings for hoses.
- Teflon Tape can be used to make fittings easier to replace and limit leaks.
- The Push-Pull valve is usually mounted to the Rig panel. The Brass male-male fitting is a one-way check valve. The arrow on the valve must point the flow away from the Push-Pull. The upper and lower 2 ports of the 3 ports on the right-hand side of the valve are left empty (exhaust).

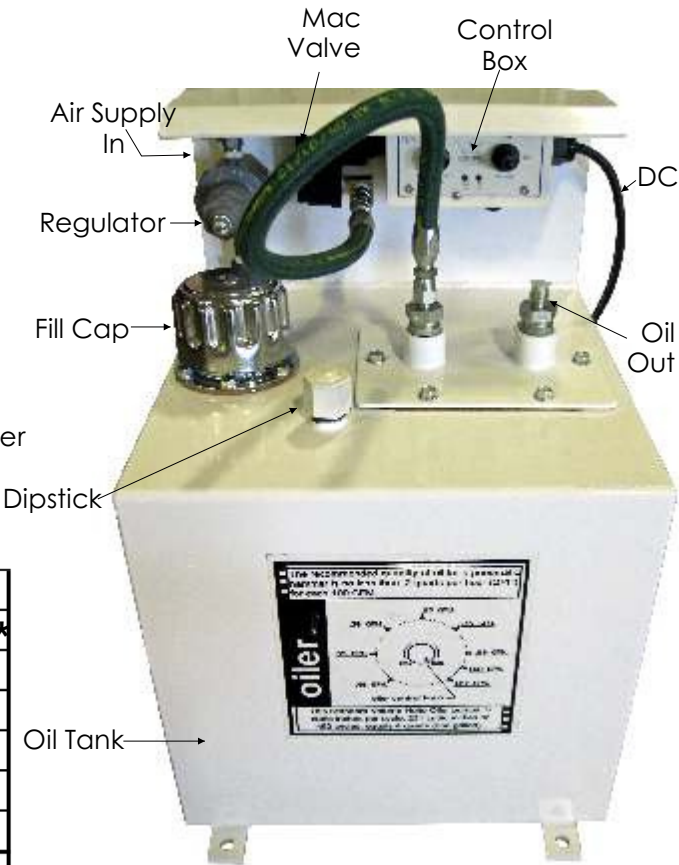


# OILER (OPTIONAL)

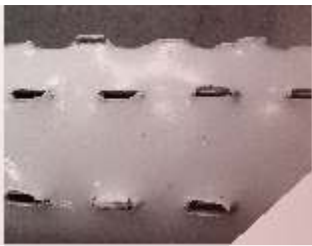
- uLack of Oil is the primary reason Hammers get ruined
- uRig Mounted Variable Automatic Oiler
- uAir Operated (100 psi)
- u7.5 or 15 Gallon Tank
- u12 or 24 Volt Operation
- uStandard or High Volume Output

½ cubic inch of oil per squirt for the standard oiler  
and 1-½ for high volume

Minimum Oil Requirement				
RC	L/hr	qt/hr	GPH*	Refill (hrs)**
7	2.8	2.7	0.7	9.5
10	4.3	4.1	1.1	6.2
14	8.8	8.7	2.3	3.0
20	16	17	4.2	1.7
24	21	22	5.6	1.3
Casing Drivers† CD140-CD350: 2.8 GPH				
Casing Drivers CD600-CD1500: 8.5 GPH				



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## CHECK OUT OUR CASING TOOLS



### Holte Extractor Hammer

Pull Casing safely and quickly. Help get unstuck by vibrating while pushing/pulling/rotating.

Threaded or hung just under your head, the Extractor Hammer uses around 1000 BPM to vibrate stuck casing and tools out of the ground.

The Holte Extractor is available in piston weights of 35-900 lbs for all sizes and depths of casing. Weldable pulling plugs and air inlet shackle adapters make the tool even easier and safer to use!



### Holte Perforator

Perforate down hole to put perforations in at aquifer depth or abandon old wells.

The Holte Perforator is pressure operated (90 psi of air or water) and can perforate a 20 foot section in about 15 seconds.

Available in 3 sizes (4", 6", 10") with adapters to cover casing sizes up to 24" for mild steel (0.25 to standard wall thickness) or PVC casing. We've had drillers use the same Perforator for over 40 years!



### Holte Casing Cutter

Cut down the hole or above ground by applying air pressure (150 psi) to the Holte Casing Cutter and rotating your Top Head Drive for a minute or two. Replaceable hardened cutter wheels are intended to slice through mild steel casing.

Available in 2 sizes (6", 16") with adapters to cover casing sizes up to 30" in 0.25" to standard wall thickness.

Call or email Holte for pricing & consulting at +1 541.935.5054 or [sales@drilling.com](mailto:sales@drilling.com).



USA

**HOLTE Manufacturing**

[www.drilling.com](http://www.drilling.com)

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Veneta

Springfield

Oregon

## ■ Veneta, Oregon

Holte's **manufacturing facility** in Veneta, Oregon is home to the innovating manufacturing team the produces the quality drilling tools which Holte is known for. Veneta is headquarters for our design, machining, inventory, and shipping center as well as the office and support staff. If you project has the need, Holte is set up to manufacture with a rapid and flexible turnaround time for custom projects.

Feel free to schedule a visit for tours or consulting.

## ■ Springfield, Oregon

Holte's **heat treatment facility** in Springfield, Oregon houses over half a dozen industrial ovens, a pit furnace, an endothermic generator and several styles of quench tanks. Careful control throughout the hardening process ensures our final products are the ultimate balance of hardness and durability. We have one of the largest carburizing furnaces in the PNW that can heat treat materials up to 4' wide and 8' tall.

## ■ Veneta, Oregon

Holte's **separate fabrication facility** and storage yard in Veneta, Oregon is for custom and retrofit work on drill rigs, drill pipe assembly, our plywood glue mixer fabrication, and it serves as a product testing grounds for our tooling.

Holte is known for our pride and excellence in workmanship with steel fabrication, welding, hydraulics, and pneumatics.



[www.drilling.com](http://www.drilling.com)  
[sales@drilling.com](mailto:sales@drilling.com)  
+1 541.935.5054  
25310 Jeans Rd.  
Veneta, OR, 97487 USA

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