

Description

The Select A-Tool Model H is designed to allow deployment of data acquisition cables (either thermocouple or fiber optic) housed inside capillary tubing (typically stainless steel) into a carrier tubing to the producing section of the wellbore allowing continuous pressure and temperature monitoring of the production zone(s). The A-Tool Model H is an integral component to production casing. The Select A-Tool is installed on the casing at surface and the capillary line is deployed through the adjustable mechanical pack-off of the A-Tool and pumped to the tubing end using fluid and an expendable pump down plug. The Model H will allow the A-Tool to remain in the well during pump change / refurbishment. The Model H assembly serves as both the BHA for start up and final completion phases. Large OD tubing below the Model H will assist the instrumentation to the toe, especially in long laterals.

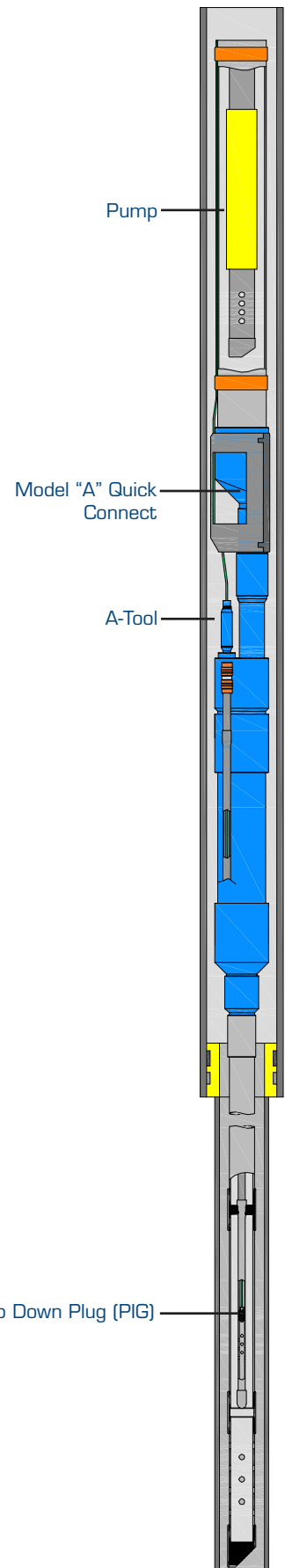
Applications

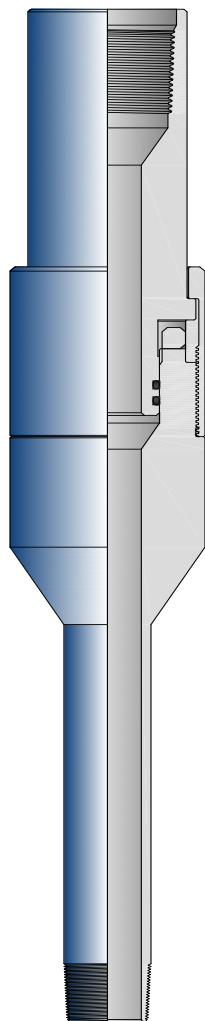
- Well Monitoring
- Typically Used on Producing Wells with ESP or PCP
- Chemical Injection

Feature	Benefit
Allows Running Of Multiple Data Strings	- Improved Monitoring Of Production Formation - Pressure, Temperature and/or Acoustic
No Connection To Pump	- Can Be Used With PC / ES Pumps - Steaming Does Not Commence Until H Completion Is Landed, No Heat Loss
Temperature Expendable Pump Down Pig	- Data Line Pulled To The Toe Of Well - Dissolves In High Temp With No Contamination - Bidirectional Mandrel
4130 Material	- Meets NACE MRO175 Spec
High Temperature Seals	- Used in Thermal Applications (but not limited to) SAG-D or TAG-D
Engineered Design	- Compact (ease of handling on rig floor) - Non-Rotational Quick Connect - Available For Multiple Data Lines (1/4"-5/8")

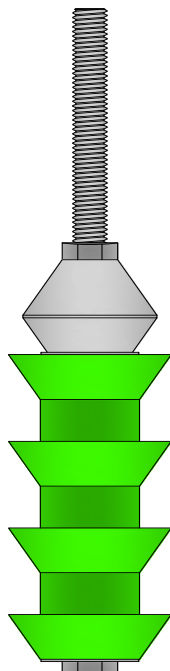
Specifications

Model #	Tubulars (In. / mm)
H3	8-5/8" x 4-1/2" / (219 x 114)
H4	7" x 4-1/2" / (178 x 114)
H5	7" x 3-1/2" / (178 x 89)





Model "A" Quick Connect



Pump Down Plug

Findings

Users have reported the following, results may vary based on well conditions:

- Well efficiency increase of ~30% by regulation of steam injection
- Increased pump life (in excess of 700%) by turning pump off during high temperatures through automation, then restart pump when wellbore conditions return to ideal
- Stability of production, by eliminating down time for pump repairs

MODEL "A" QUICK CONNECT

Description

The Select Model "A" Quick Connector is designed to allow connecting the A-Tool to the bottom of production casing. The "two piece" design features a 12 finger castellated joint to allow "clocking" the A-Tool to align the data acquisition line(s) with the pump and also prevents rotation of the A-Tool in relation to the pump when running in the well. A threaded ring connects and locks the upper and lower subs together.

MELTABLE PUMP DOWN PLUG (PIG)

Description

The Select Pump down Plug provides means for placing data lines, capillary strings, or other spooled lines inside well tubing or casing using the "pump-in" method. Once pumped into place, downhole temperature melts and dissolves the plug allowing ease of retrieving the lines in the future with out swabbing the well.