



# JetStream<sup>®</sup>

## RFID CIRCULATION SUB



### UNLOCK THE POTENTIAL OF YOUR DRILLING OPERATIONS

Unlocking the full potential of your drilling operations relies on two abilities: adjusting operations for unanticipated challenges and completing the job in as few trips as possible. With three positions, multiple applications, and dynamic activation options, the JetStream RFID circulation sub gives you the power to achieve maximum drilling efficiency and operational flexibility.

Unlike most circulation subs on the market, the JetStream sub uses RFID—short for radio-frequency identification—technology. In this way, the sub eliminates bulky balls, seats, darts, and pins for actuation and leaves the inside diameter (ID) at full bore for one of the largest port flow areas in the industry. The result is higher annular velocity and turbulent flow. The sub also saves time by enabling selective, unlimited activation of a series of subs without the need to pull out of hole. Finally, because the sub does not rely on downhole hydraulics for actuation, it is effective in a variety of applications, including low-flow and underbalanced drilling operations.

**1 TOOL WITH  
UNLIMITED ACTIVATIONS**

**CLEAN WELLBORES,  
SPOT REMEDIATION FLUIDS,  
AND JET BOPS IN 1 TRIP**

**3 COMMANDS:  
CLOSED, OPEN, OR SPLIT-FLOW**

The JetStream RFID  
circulation sub **MOVES  
BEYOND OPEN AND SHUT**

### The JetStream Difference



#### INCREASES

efficiency by eliminating  
mechanical limitations



#### IMPROVES

flexibility with the  
power of choice



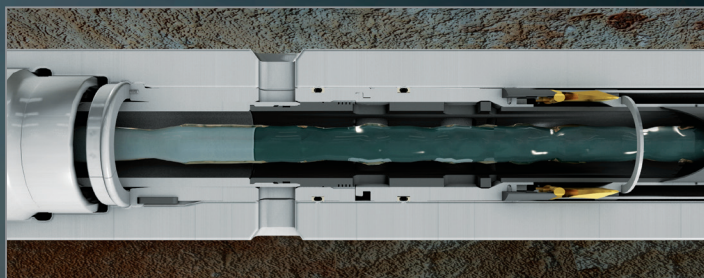
#### ENHANCES

control in  
challenging operations

## CLOSED POSITION

Ports closed, diverter open

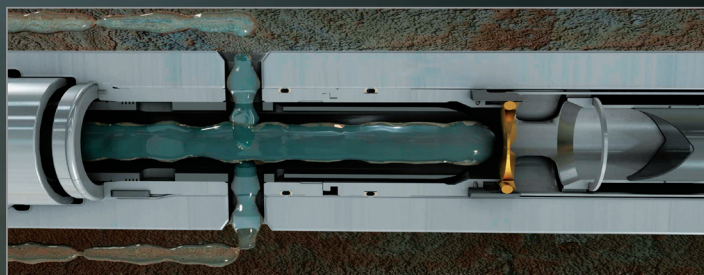
Enables unrestricted, full through-bore flow during drilling



## OPEN POSITION

Ports open, diverter closed

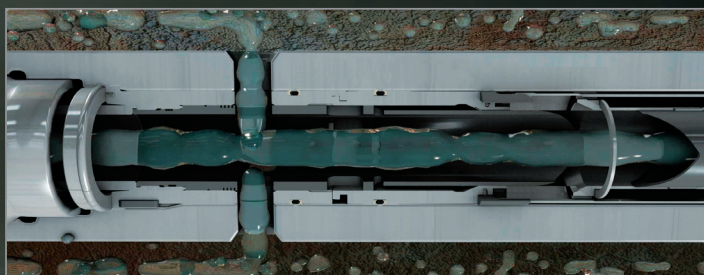
Redirects fluids back to the surface with high-velocity, turbulent annular flow for efficient wellbore cleaning



## SPLIT-FLOW POSITION

Ports open, diverter open

Simultaneously diverts a customizable percentage of the flow through the wellbore and boosts annular velocity, which enables you to clean out cuttings while drilling



## INCREASE EFFICIENCY

The JetStream RFID circulation sub helps you to do more in less time or in fewer trips. Because the sub eliminates internal components associated with traditional activation, you can use it as many times as needed to execute multiple operations.

**PERFORM MULTIPLE OPERATIONS**, such as cleaning wellbores, spotting remediation fluids, and jetting blowout preventers (BOPs), on the same trip

**SPEED UP HOLE CLEANUP** with a full-bore ID for tubular flow and faster debris removal

**COMBINE WITH OTHER RFID DRILLING TOOLS**, such as the RipTide® reamer, for greater efficiency



## IMPROVE FLEXIBILITY

Our JetStream RFID circulation sub helps you adapt to your well challenges. Using three different positions—including closed, open, or split-flow—as well as its full-bore ID, the sub adds to your functionality so you can perform various applications.

**RUN UP TO 16 SUBS** at once at strategic points along the drillstring

**CLEAN WELLBORES AND BOPs** at the same time

**CIRCULATE OUT DRILL CUTTINGS** in drilling-with-liner and low-flow operations

**ACCESS OTHER TOOLS** in the lower bottomhole assembly



## ENHANCE CONTROL

The JetStream sub gives you more downhole control for predictable operations. By using RFID technology, you can have greater command over your subs, activations, and results.

**INDIVIDUALIZE COMMUNICATION** to tandem JetStream subs

**ADJUST THE TOTAL FLOW AREA** with numerous nozzle configurations

**ENSURE ACTIVATION** with a backup pressure cycling sequence

**RETRIEVE AND DISPLAY DATA** using onboard memory logging

