

# WWT Isolating Circulation Sub (ICS)<sup>™</sup>

**Isolates sensitive BHA components during pumping operations.**

**Allows multiple pressure-activated tools to work together without damaging each other.**

The WWT Isolating Circulation Sub<sup>™</sup> is a flow rate activated tool that can be configured to be normally closed or normally venting.

When configured to be normally closed, the WWT ICS isolates the BHA below the tool from centerline fluid when pumping at high rates. It is typically used on

multilateral well bores where indexing lateral tools are required for entering the lateral to perform pumping operations.

When pumping below its activation rate, the WWT ICS will pass through all centerline

fluid to the lateral tool below it.

Once the correct lateral is entered, activation of the WWT ICS enables the operator to pump at high rates and freely move

the coiled tubing while isolating the indexing lateral tool.

When configured to be normally venting, the WWT ICS isolates the

BHA below the tool by diverting all centerline fluid to the annulus until the activation rate is achieved. The tool then shifts and supplies the lower BHA with all centerline fluid.



- **Allows the operator to coordinate the function of multiple pressure-activated tools.**
- **Adjustable activation rates.**
- **Manufactured from corrosion-resistant materials, suitable for acid stimulations.**
- **Facilitates the use of WWT Tractors<sup>™</sup> with other hydraulically powered tools.**

- **Length: 18"**
- **OD: 3.50"**
- **Max. Flow Rate: 2.0 bpm**
- **Connection: 2-3/8 PAC**

Houston, Texas, USA • Al-Khobar, Saudi Arabia • Quito, Ecuador • Aberdeen, Scotland • Dubai, UAE • Rio De Janeiro, Brazil

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

