Flow Control Device

Tool Type: CDL-FCD
Tool Size: All Tool Sizes

Top Connection

**Inflow, Outflow, and Cyclic Control Devices:**
Inflow Control Device (ICD), Outflow Control Device (OCD), and Cyclic Control Devices (CCD) can vary with custom design. A typical ICD/OCD/CCD may consist of a combination of the following main components: nozzles, shifting sleeves, and sand control.

**Nozzles or Port holes:**
Nozzles or port holes are installed on the mandrel of the FCD. They can be manufactured using different materials to combat against erosion, corrosion, and scaling. The nozzle design itself will be custom designed according to the customer requirements and well geometry. When the FCD is used to inject steam (OCD), the nozzles will be accompanied with some form of blast coupling collars to guard against washing.

**Shifting Sleeves**
Shifting sleeves are used to open, close, or alter nozzles or port holes installed to the outer mandrel. The sleeves are commonly referred to as the inner sliding sleeve. The sleeves will contain spring detent rings, seals, and scraper rings.

**Sand Control:**
Sand control methods are used to retain formation sands from entering the liner. Sand control can come in many different types of media and proppant. Whichever sand control is chosen, it will be custom manufactured and assembled to the FCD.

Bottom Connection

*All tools are custom designed. Customer would receive technical data sheet with actual dimensions, threads and performance data.*