FloExtreme
Inflow Control Valve

The FloExtreme valve dissipates fluid energy downstream of the nozzle to reduce fluid velocity and resultant shear stressed on the completion.

The FloExtreme is designed for Inflow Control Device (ICD) wells where there is a risk of erosion downstream of the ICD due to exiting fluid velocities, e.g. water injection wells, oil production wells, gas production wells requiring high dP across the ICD, or corrosion on the base pipe ID.

Fluid exiting a nozzle-based ICD will form a jet that can result in high shear stresses and consequently erosion of the completion components down stream of the nozzle.

The FloExtreme ICD is installed within a conventional ICD housing and feature a sacrificial tungsten carbide energy dissipation point downstream of the ICD nozzle. The dissipation point diverts the flow into multiple exit points reducing the flow velocity and preventing impingement of the flow on the base pipe for production wells and ICD housing for water injection wells.

Features

- Withstands high rates and high pressure drops
- Can be retrofitted
- FloExtreme nozzle designed for viscosity independent behaviour
- Suitable for moderate viscosity contrasts
- Available for both carbonate and sandstone reservoirs
- Shut-off option - SSD

Benefits

- Reduces erosion/corrosion risk at base pipe (producer wells)
- Reduces erosion/corrosion risk at housing (injector wells)
- Cost-effective