

# FloDual

## Dual inflow control device

FloDual is used for effective chemical treatment of production wells and effective clean-up of water injection wells.

To optimise the performance of some wells both inflow and outflow is required, but a fixed ICD nozzle cannot be used to provide optimised control for both directions.

### Injection

In horizontal water injections wells ICDs can provide important functionality in ensuring effective well clean-up during flowback operations but may provide unnecessary or excessive back pressure during high rate injection operations impacting pump selection or achievable injection rates. In this application, a dual ICD provides an engineered pressure drop during flow in the production direction, but has a higher flow area during injection.

### Production

Conversely in production wells, inflow control may not provide any benefit to overall hydrocarbon production but if the well requires regular treatment to improve flow assurance or extend well life, outflow control can ensure effective distribution of the treatment fluids along the wellbore. In this application, the dual ICD provides little inflow control during production but provides a greater restriction to flow in the injection direction.

### Features

- Field adjustable
- Can be integrated with Tendeka’s sand control portfolio

### Benefits

#### Production wells

- Provides little inflow control during production
- Provides a greater restriction to flow in injection direction but enables effective chemical treatment

#### Injector wells

- Enables effective clean-up of water injection wells
- High flow area during injection
- Provides a greater restriction to flow in production direction with an engineered pressure drop

