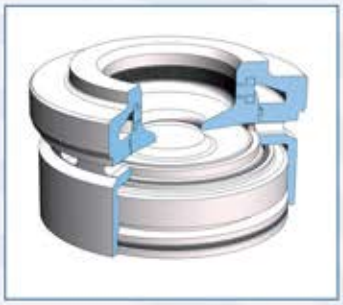
AICV® AUTONOMOUS INFLOW CONTROL VALVE



AICV® - Autonomous Inflow Control Valve - is a patented new technology that will replace the conventional ICD - or Inflow Control Devices - and ensure significant increase in oil production and recovery.

In most oil wells, unwanted fluid production, such as water and/or gas, will occur after a while. The AICV enables an uniform inflow profile and provides a phase filtering that chokes the unwanted phase favors the oil.

Customized design

Different designs of the AICV® technology is necessary for the different applications.
AICV provides solutions for the following cases:

- Oil reservoirs with gas cap. The gas is stopped
- Oil reservoirs with water drive. The water is stopped at a given draw down in order to avoid high WC from 'highway' zones
- Heavy oil with water drive. The water is stopped
- Extra heavy oil (bitumen). The steam is stopped

Features

The AICV design:

- Stops the gas/water completely at breakthrough
- Autonomous, requires no external power or control system
- Reversible, allows the oil to pass after an earlier stoppage
- No limit in number of zones
- Retrofitable, can be installed in new and old wells
- Compatible with standard completion (screens)
- Uncomplicated with low risk of failure
- No separation, transport and handling of unwanted fluids

Inflow Control Technology

Tests have proven that the AICV eliminates the gas and water breakthrough problems. Moreover the tests have proven that the AICV makes it possible to produce the oil far more efficient than ever before.

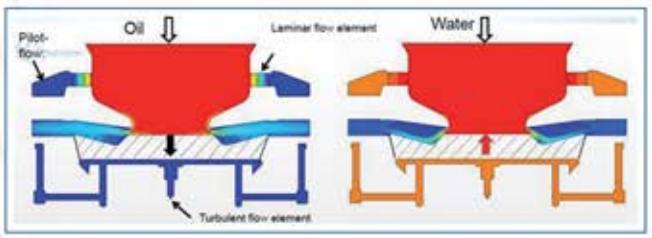
Water Breakthrough

The new AICV closes autonomously and almost completely shut off the water production at water breakthrough. At the same time oil production will continue from the other inflow zones along the well, ensuring optimum oil production and recovery.

Gas Breakthrough

In many oil fields gas cap and gas injection are applied as the recovery mechanism. However, after a while of oil production, gas breakthrough will occur and limits the oil production and recovery. At a gas breakthrough, a conventional ICD will produce much more gas than oil into the well due to the low density and viscosity of the gas. The new AICV will immediately shut off the gas completely. This means that the oil production can continue at undiminished high flow rates in the zones that are not affected by the gas breakthrough.

The AICV® - Autonomous Inflow Control Valve combines the best from AICD and ICV eliminating gas and water breakthrough problems.



inflow control

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