

## Case Study:

# FloCheck Injection valves help to regulate flow to multi zone completion

FloCheck Injection solution to multizone water injector well requiring different flow rates to each zone.

### Well Data

**Location:** Thailand  
**Well Type:** Water Injector  
**Installation Date:** May 2019  
**Completion Sizes:** 3-1/2"  
**Field:** Nongyao



### Background

A Thailand operator has to complete their water injector wells into 3 separate zones due to the requirement of different flow rates for each zone. To achieve this, the operator utilises isolation packers and sliding sleeves to isolate each zone to enable each to be injected separately at required rates.

### The Challenge

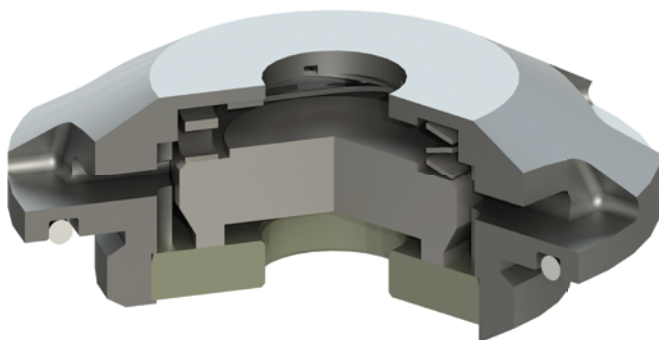
Each of the three zones require different injection rates, resulting in each zone needing to be injected individually periodically. In order to switch to a different zone, intervention is required and the sliding sleeves in each zone needs to be opened/closed. Due to deviation, a wireline tractor is required which is costly and time consuming.

### TAQA Solution

TAQA used their existing experience to come up with a design in a matter of weeks by combining a sliding sleeve assembly with an added outer housing sleeve which housed up to 12 FloCheck valves. Each sliding sleeve was preset with the desired number of valves for the particular zone before running the completion to give the max rate calculated for the zone, meaning all 3 zones could be injected simultaneously at injection different rates.

### Project Results

Two wells have been completed with this technology, giving good results whilst also saving time and cost to the operator. This has removed the need for intervention trips and provided the operator with a lot more flexibility on designing equipment for required injection rates.



FloCheck Injection