

## Q-Enforcer™

RGL's Q-Enforcer is a tubing deployed flow control device (FCD) used to maximize production efficiency by improving injection characteristics. The device's flow conditioning extends the injecting zone length, reduces openhole erosion and casing damage, while optimizing custom injection rates with a uniform injection profile.

The Q-Enforcer maximizes injection efficiencies along the well by exit flow conditioning. The device's laminar exit flow extends the thermal reach beyond traditional injecting zones, thus reducing the number of installations required. This increases injection efficiency at the delivery point.

This device offers operational flexibility for controlling the number of exit port numbers. The Q-Enforcer comes with two-position sliding sleeve technology and can be selectively shifted opened or closed.

The Q-Enforcer is manufactured in an API Q1™ Certified facility.

### Features and Benefits

- Two-position shiftable: open or closed
- Superior erosion, corrosion, and scale resistance
- Reduces openhole erosion and casing damage
- Extends injection zones longitudinal to the wellbore
- Maximizes injection efficiencies along the well length
- Selective shifting via coiled tubing
- Bi-directional injection distribution
- Field configurable

### Applications

- Outflow control device for steam, water, or gas injection with inflow control capability
- Ideal for vertical, deviated and horizontal completions
- Suitable for high-temperature, high-pressure service during injection, production, and stimulation

### Options

- RGL NALU™ flow control wellbore modelling and optimization
- Temperature-sensing technology
- RGL patented nozzle technologies
- Inflow control
- Zonal isolation packers
- Hydraulic or mechanical shifting
- Shift-validation technology



## Q-Enforcer<sup>TM</sup>

Technical Specifications				
Description	2.88 in. (73.0 mm)	3.5 in. (88.9 mm)	4.5 in. (114.4 mm)	5.5 in. (139.7 mm)
OD (Maximum)	4.518 (114.8)	5.500 (139.7)	5.900 (149.9)	6.741 (171.2)
ID (Minimum)	2.316 (58.8)	3.500 (88.9)	4.000 (101.6)	4.000 (101.6)
Length	51 (1300)	51 (1300)	51 (1300)	51 (1300)
Number of Nozzles	42 (2 x 21 typ)	30 (2 x 15 typ)	42 (2 x 21 typ)	42 (2 x 21 typ)
Shift Tool Size (Type B)	2.312 (58.7)	2.750 (69.9)	4.000 (101.6)	4.000 (101.6)
Nozzle Options	DS, port	DS, port	DS, port	DS, port

Notes: Specs and illustrations for reference only. Dimensions are subject to change.

### Additional Product Information:

1. End-field connections to suit customer application.
2. 2P tool: assembly is shipped in the CLOSED position, pull UP to open.
3. Shift tooling is the mechanical or hydraulic OTIS 'B' Positioning Tool.
4. Field-configurable: ports can be blanked on site prior to deployment.
5. Tungsten Carbide Nozzles
6. Flow mixing geometry can be included

