

In water injection wells, sand production occurs in the period immediately following injection shut-down because of backflow, crossflow between zones or wells, and water hammer effects. Cascade<sup>3</sup> technology provides a unique solution to these by isolating fluid in the completion annulus and locking injection water into the formation to eliminate the transport mechanism for sand production entirely. The result is increased injection reliability providing ongoing waterflooding without costly re-drills or frequent well clean-outs.

## SPECIFICATIONS

	4.500"	5.500"	6.625"
MAXIMUM ID	5.465"	6.465"	7.590"
MINIMUM ID	15.1#	20.0#	24.0#
TENSILE STRENGTH	300,050lbf	396,100lbf	471,750lbf
SCREEN BURST PRESSURE	4150psi	2785psi	2785psi
SCREEN COLLAPSE PRESSURE	5400psi	3600psi	3600psi
TEMPERATURE RATING	400°F		
INJECTION dP AT 40bpd/DEVICE	16psi		
RATE PER FOOT	720 BPD		
CONNECTIONS	As per customer requirements		
METALLURGY	Cascade <sup>3</sup> body 17-4PH SS, Insert Inconel 718, Ball Tungsten Carbide		
SERVICE LIFE	15 years		

## FEATURES AND BENEFITS

- **SIMPLE** design and installation
- **NO EFFECT ON OD / ID** when radially mounted in screen base pipe
- **10,000 BWPD** injection per joint
- **COMPATIBLE** with gravel pack and standalone screen completions
- **ELIMINATES** crossflow reducing screen erosion
- **ELIMINATES** backflow and fines movement into the wellbore
- **PREVENTS** water hammer effects
- **IMPROVES** injectivity and reservoir sweep
- **EXTENDS** water injector life

