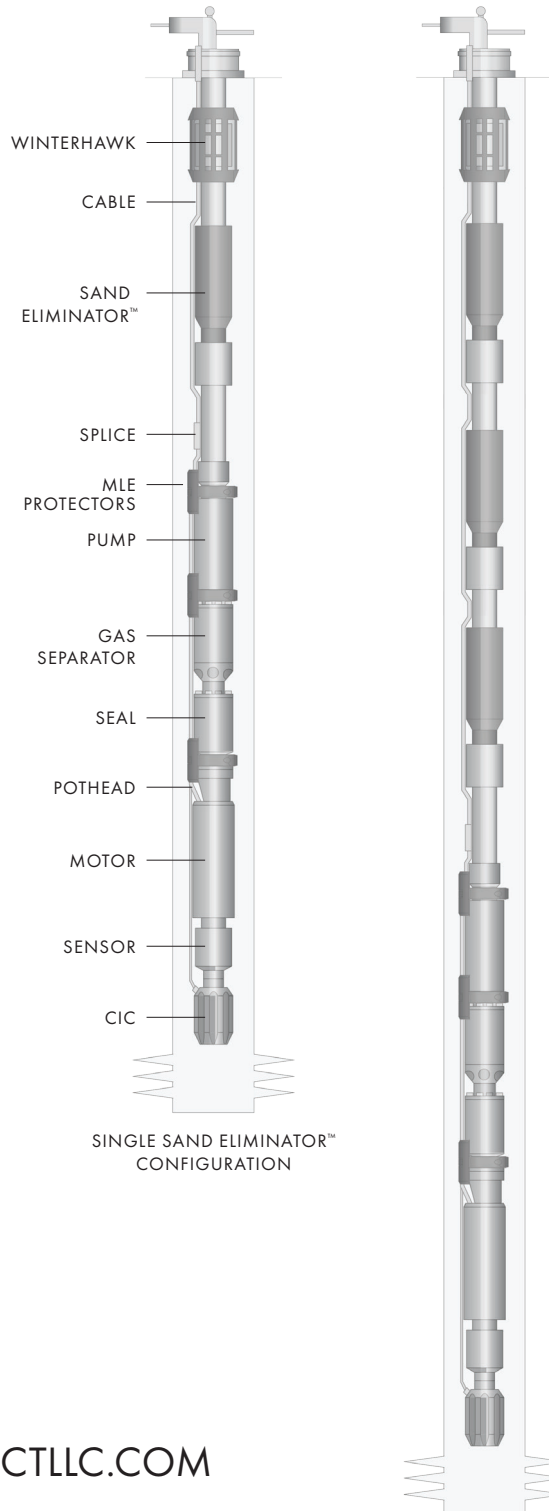


SAND ELIMINATOR™

ESP SAND PROTECTION

(PATENT PENDING)



The ESPCT Sand Eliminator™ is a simple, reliable tool, engineered and manufactured to provide superior protection to the ESP. It is a cost-effective solution that maximizes the run life of the ESP while reducing the risk of premature system failure.

Applications

- Unconventional wells
- High sand production wells

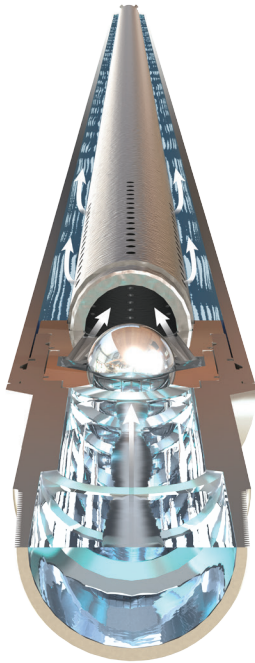
Benefits

- Functions as an abrasive retention device during ESP shutdowns
- Eliminates the normal requirement for a standing valve or check valve to be installed in the tubing string above the ESP
- Prevents sand or other solid accumulation on top of the ESP during shut down or no flow state
- Supports production fluid column and will prevent fluids and abrasives backflow through the ESP
- Effective hydro-jet function to flush and lift the sand immediately after the ESP resumes operation

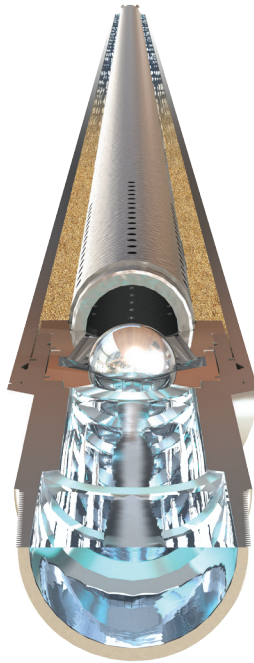
Features

- Multiple units can be installed, distributed along the string for maximum capacity
- Flow coefficient is the same as typical check valve
- Assembles to string just like a standard tubing joint

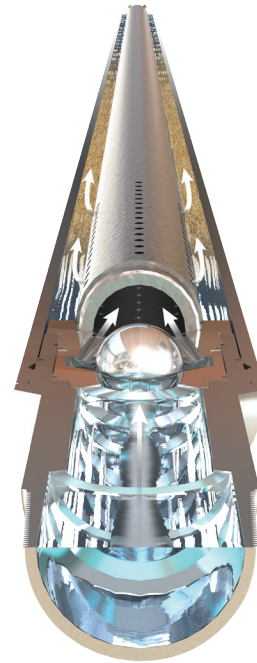
PRINCIPLES OF OPERATION



1. During normal ESP operation, the ESPCT Sand Eliminator™ functions as a regular check valve, with the same flow coefficient.



2. Immediately after an ESP shutdown, the ESPCT Sand Eliminator™ automatically allows for retention of the produced fluids column and prevents fluid and abrasives backflow through the ESP.



3. Upon ESP startup, the Sand Eliminator™, a patent pending hydro-jet function, flushes any abrasives retained via normal production flow, without any pressure losses.

SPECIFICATIONS

Outer Diameter	3.38-in.	4.00-in.	5.38-in.	Larger diameters available
Length	26-ft.	26-ft.	26-ft.	Approximately (with pup joints)
Flow Range	0-1,500 bpd	0-2,500 bpd	0-10,000 bpd	Higher flow rates available
Connections	2-3/8-in. EUE	2-7/8-in. EUE	3-1/2-in. EUE	Other threads available
Materials	Alloy Steel or Stainless Steel	Alloy Steel or Stainless Steel	Alloy Steel or Stainless Steel	Other materials available

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CJES-16-139



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