

# Filtrex

## The One Trip Remedial Sand Control System

Compressible Open Cell Matrix Polymer regains sand control integrity.

Sand issues can account for up to 10% of all shut-in wells either due to failure of the existing downhole sand control or onset of sand production caused by pressure depletion and/or water production in mature basins.

The challenge to regain sand free production in existing completions without the requirement to perform a workover can be both costly and time consuming using traditional methodologies, with no single methodology offering benefits across all measures. To address this challenge, TAQA designed the Filtrex system.

The Filtrex one trip remedial sand control system provides the flexibility to be installed thru-tubing, through tight restrictions and decompresses to be conformant with a significantly larger inner diameter (ID) of the damaged section.

The first of its kind, Filtrex provides the ability to perform sand clean out during the deployment run providing significant time savings over conventional systems. Once set, the tool requires no further intervention.

Using an open cell matrix polymer (OCMP), the system is run in hole compressed and deployed in well as a slick assembly, complete with high expansion anchor system. Once set, the OCMP expands to conform with the ID of the wellbore. The OCMP is fully protected during deployment and will not be exposed until at the correct depth. The process of expansion aids in the centralisation of the assembly allowing other sections to be easily stacked on top. Filtrex will remain at depth and retain sand whilst allowing fluid flow through the porous filter media during its time in hole. The entire system can be easily retrieved should full bore access be required in the future.

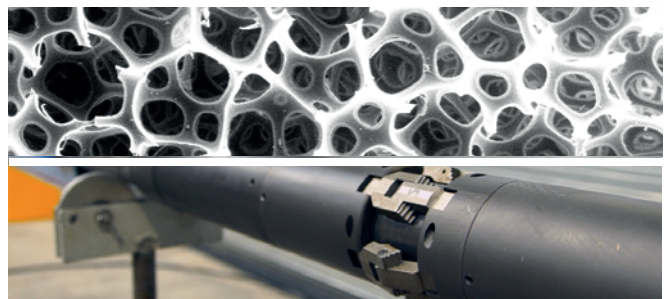
Filtrex system permits the use of larger base pipes to be used maximising productivity, and not impeding flow.

### Features

- High expansion anchor sub rated to 12T
- One trip system - sand clean out and sand control repair
- Open Cell Matrix Polymer - multi-layered porous compressible filter media
- Compatible in reservoirs up to 110°C
- Compatible with common wellbore fluids

### Benefits

- Revives production
- Conforms to damaged section
- Thru-tubing design
- Retrievable
- OCMP sized appropriately to retain formation sands
- OCMP configuration bespoke to reservoir conditions
- OCMP configuration bespoke to wellbore sand composition

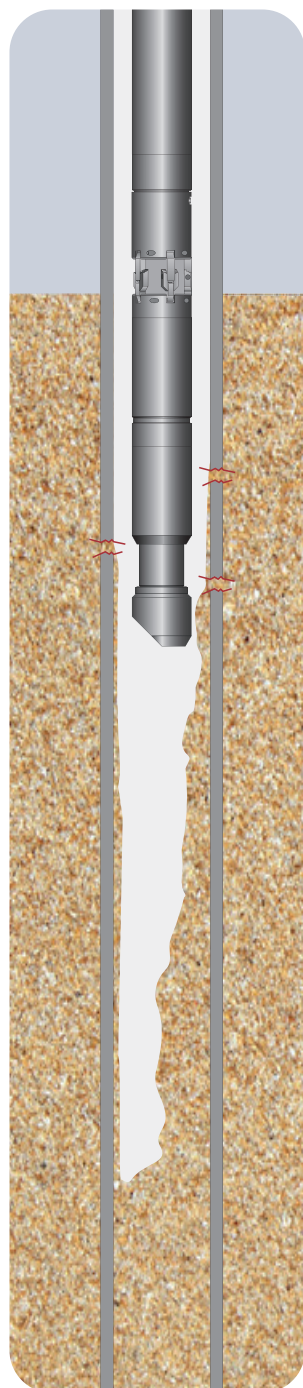
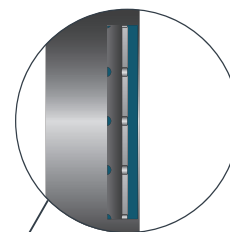


### Technical Specification

Tool OD	2.28"	2.69"	2.75"	3.625"
Min restriction tool passes through	2.313"	2.75"	2.81"	3.688"
Casing/liner setting range	3.50-4.50"	4.00-5.00"	4.00-5.50"	4.50-7.00"
Section length	6ft upwards*			
Max temp	230°F (110°C)			
Metallurgy	L-80			

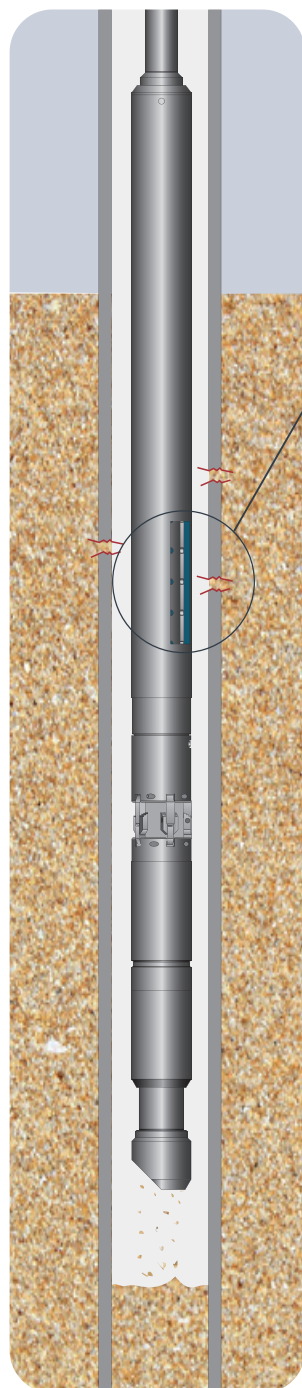
\*Multiple lengths and the ability to stack provides extensive coverage

Filtrex, the One Trip Remedial Sand Control System, provides the flexibility to be installed thru tubing, through tight restrictions and expand into the casing ID filling all annular gaps regaining sand control. The first of its kind, the system provides the ability to perform sand clean out whilst installing the tool in one trip. Once set, the tool requires no further intervention.



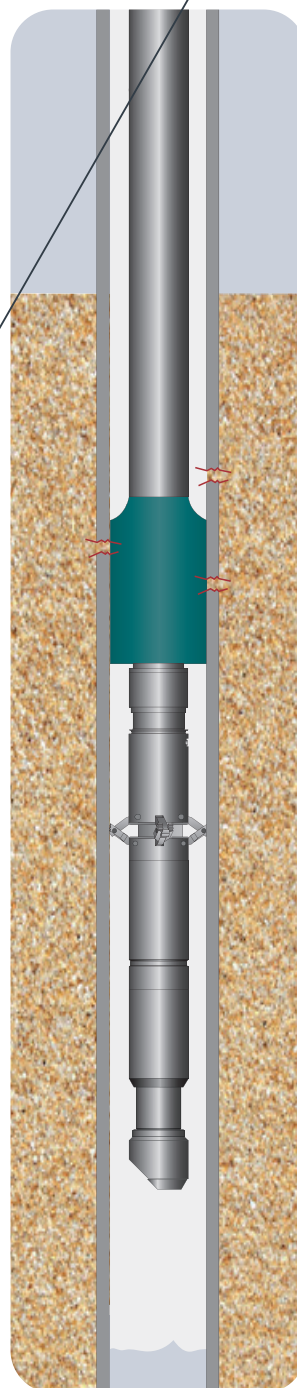
#### Stage 1

An existing screen or perforations can become damaged, and provide a sand breakthrough point. Once damaged, there is no sand control and sand is free to fill the wellbore. This can lead to issues on surface and can result in well abandonment.



#### Stage 2

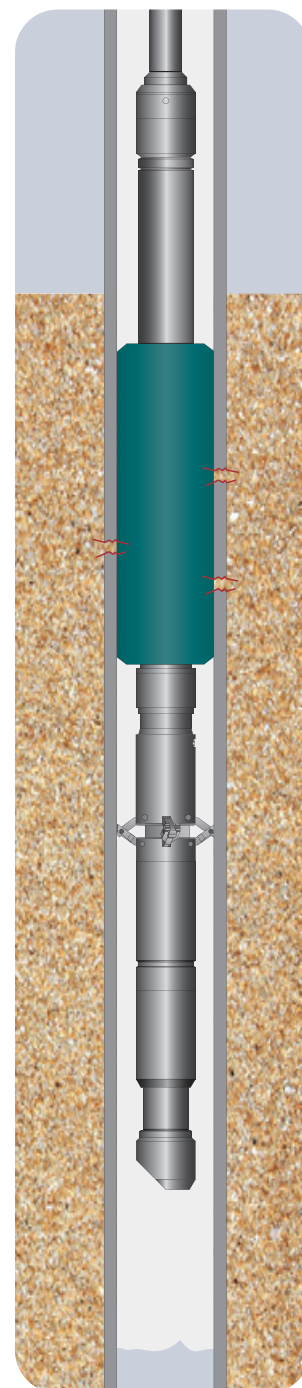
The Filtrex system is run in hole to depth using a running tool with compression outer sleeve. Prior to expansion of the system, the jetting nozzles will activate and commence sand clean out.



#### Stage 3

Sand clean out is complete, and the Filtrex system is ready to be expanded. The anchor sub is activated and locked into the casing.

As the running tool is then pulled from the assembly it removes the outer protecting sleeve, allowing the multi-layer OCMP to expand to conform to the ID of the casing or liner.



#### Stage 4

The running tool is fully removed allowing the full filter section to expand to the damaged section. Anchors are locked in the casing and running tool is pulled out of hole.