

## Sand control simplified





Cross section of ceramic sand screen

## Advanced ceramic design resists erosion and corrosion – helps reduce workovers, increase production.

Sand screens are commonly used in downhole completions to prevent the spread of formation

sand throughout facilities and pipelines. Many conventional sand screen systems are made of metals that are vulnerable to abrasion, which can affect both system performance and equipment life.

3M<sup>™</sup> Ceramic Sand Screens offer a major improvement over metallic sand screens – utilizing the unique properties of technical ceramics to provide effective downhole sand control, while resisting erosion from sand and corrosion from water and harsh chemicals.



- 10 times the hardness of metallic screens
- Proven to resist wear even under high-velocity flows
- Reduces workovers
- Can control proppant flowback
- Helps extend equipment life

- Can eliminate the need for complex sand control methods
- Suitable for HPHT applications
- Can be used in vertical, deviated and horizontal wells

3M<sup>™</sup> Ceramic Sand Screens are highly effective in unconsolidated reservoirs where sand grains are only loosely packed together, resulting in a significant risk of sand production. These versatile screens can be retrofitted to existing wells that suffer from sand problems as a result of reduced reservoir pressure, or installed in new wells. Retrofitting with the system is possible in almost any prevailing wellbore condition; available configurations include thru-tubing ceramic sand screen, standalone ceramic sand screen and sleeve protector.

## **Collaborating for Success**

The 3M Ceramic Sand Screen Team is committed to working with you to find the best possible sand control solution for your conditions and requirements. All projects are under the supervision of experienced project managers who will monitor and report back frequently and promptly. This process includes a broad range of Sand Control & Test Services, including:

- Particle size distribution (PSD) analysis
- Dry sieve analysis
- Laser particle size analysis (LPSA)
- Sand retention test
- Erosion test





- Corrosion test
- Scanning electron microscope (SEM)
- X-Ray diffractometry

Warranty, Limited Remedy, and Disclaimer: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. User is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application. User is solely responsible for evaluating third party intellectual property rights and for ensuring that user's use of 3M product does not violate any third party intellectual property rights. Unless a different warranty is specifically stated in the applicable product literature or packaging insert. 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR ON-INFRINGEMENT OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE.

If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damages arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

Technical Information: Technical information, recommendations, and other statements contained in this document or provided by 3M personnel are based on tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed. Such information is intended for persons with knowledge and technical skills sufficient to assess and apply their own information. No license under any 3M or third party intellectual property rights is granteed or implied with this information.



3M Advanced Materials Division 3M Center St. Paul, MN 55144 1-800-367-8905 www.3m.com/ceramicsandscreens German (Germany) Europe 3M Technical Ceramics Zweigniederlassung der 3M Deutschland GmbH Max-Schaidhauf-Str. 25, 87437 Kempten, Germany 3M is a trademark of 3M Company. Used under license by 3M subsidiaries and affiliates.

Please recycle. Printed in USA. © 3M 2018. All rights reserved. Issued: 8/18 14484HB 98-0212-4238-7 Rev. D