

# Reslink

Screens and injection and inflow control devices



Versatile,  
robust,  
reliable

Reslink



**Long, horizontal, openhole completions through sand intervals—no two are ever the same. To optimize completion success, you need an all-encompassing approach to your screen strategy.**

This is precisely what you get with Reslink\* screens and injection and inflow control devices. A primary component in the Schlumberger Transcend\* family of solutions for openhole completions, Reslink offers the industry's broadest range of sand screen technology for both production well and injector applications, giving you the versatility to complete virtually any type of interval for optimal production success.

Reslink solutions give you the following:

- a versatile approach in which completion design and screen selection are fit specifically to the well
- robust hardware that can withstand the particularly harsh conditions in long horizontal unconsolidated formations
- an efficient predesigned process that combines engineered reservoir drilling fluid and filtercake removal.

## WIDEST ARRAY OF TECHNOLOGY. HIGHEST LEVEL OF QUALITY

Whether your goal is to perform a stand-alone screen completion or gravel pack or you need the added benefit of inflow or injector control devices, Reslink offerings provide the ideal solution. Our industry-leading range of downhole screens and completion tools means that with Schlumberger you're equipped to achieve success, no matter what kind of well you're drilling, no matter what kinds of sand conditions you're facing.

A big part of that assurance comes from our progressive manufacturing processes. In strategically placed facilities around the world, we use proprietary manufacturing techniques to produce the most robust line of fit-for-purpose screens, and quickly deliver them wherever needed.

Reslink offerings take you to the highest levels of reliability with

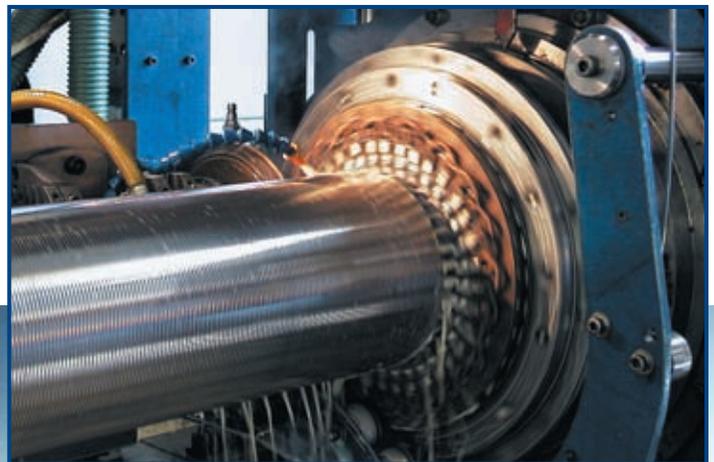
- the industry's most advanced manufacturing machinery—designed, built, and maintained in-house by Reslink engineers and operators
- precisely controlled processes that result in high-precision screen apertures
- Reslink quality management systems that continually improve the flexibility, efficiency, and consistent excellence of our facilities
- thoroughly trained and highly experienced materials engineers and manufacturing personnel working around the clock to meet your immediate needs.

**In strategically placed facilities around the world, we use proprietary manufacturing techniques to produce the most robust line of fit-for-purpose screens and quickly deliver them wherever needed.**



**Above:** The ResGauge\* slot-opening measurement system is a photometric QC device for direct-wrapped sand screens. It measures every slot opening on a screen joint.

**Below:** The Reslink wrapping machine uses proprietary manufacturing technology that is key to delivering the strongest, most precise sand screen available in the industry.



**Reslink—a primary component in the Schlumberger Transcend family of solutions for openhole completions**

# Screens and ICDs—a wide offering

## **PREMIUM DIRECT WIRE-WRAPPED SCREENS. STRENGTH IN ACCURACY.**

Reslink offerings take you far from the days when the sand screen was the weakest link in the completion. LineSlot\* single wire-wrapped sand screens are built to withstand high mechanical forces without affecting slot openings. This means they can be installed the same way as a regular liner, with no special handling procedures or running precautions robbing you of precious time and efficiency.

This unprecedented level of robustness is achieved through the unique Reslink manufacturing process. The screen components are welded to each other, but there is no welding between the screen and the base pipe. This, combined with a unique perforation pattern, ensures that the screen base pipe is not weakened during manufacturing. In fact, extensive testing has shown that the tension, compression, and torque rating of the screen are the same as those of the base pipe. No weakness means no costly delays.

Of course, a successful completion also requires slot consistency. Our proprietary manufacturing process uses engineered wrapping wire along with a unique QC system that measures the accuracy of every single slot. When a LineSlot screen arrives on your site, you can be sure it will perform—both when it goes into the hole and when the well is producing.

## **PREMIUM SINTERED MESH. LONG LIVE YOUR COMPLETION.**

Severe openhole production environments call for a screen that can deliver reliable sand-control performance long term. Endure premium sintered mesh screens are designed to do just that, in both stand-alone and gravel pack applications.

Multiple layers of woven-wire mesh are sintered to form an ultrasilient filter that ensures weld integrity and mechanical stability. This means Endure screens maintain their strength during installation without altering the filter pore openings. The system is engineered to optimize the number of base pipe perforations, and the inner drainage layer and high-flow shroud evenly distribute the flow rates across the full area of mesh. Thus, production and injection processes are able to achieve the results expected from the original completion design—and the hardware holds up to the harsh downhole conditions, so you're able to keep getting those results for an extended period.

**LineSlot direct wire-wrapped sand screens**



**Endure premium sintered mesh screens**



## FLOW CONTROL DEVICES. PERFORMANCE MAXIMIZED

Uniform flow rates are difficult to maintain in formations with variable permeability, yet they are critical to the success of both production and injection operations. ResFlow\* inflow control and ResInject\* injection control devices give you the control you need.

Designed to be used in sync with either our direct wire-wrapped or our sintered mesh screens, these devices balance flow rates across the completion for the entire length of the interval. The ResFlow device dramatically reduces the effect of water and gas breakthroughs when these phases have higher mobility than the desired oil. The ResInject injection control device optimizes injection rates across the full wellbore face despite permeability variations and thief zones. And either device, when combined with the strength and accuracy of LineSlot screens, gives you an intelligently integrated flow management system that regulates itself without the need for downhole telemetry.

Reslink has developed a unique method for designing inflow control device completions. From basic well and reservoir data, an initial nozzle design is determined. With a nodal analysis simulator, the initial nozzle design is evaluated and refined. In an iterative process between the nodal simulator and a full field dynamic reservoir simulator, Eclipse\* software, the completion is optimized for long-term well efficiency.

ResFlow inflow control device



ResInject injection control device

## Premium Screens

LineSlot direct wire-wrapped  
Endure premium sintered mesh

## Flow Control Screens

Inflow control devices  
ResFlow direct wire-wrapped  
ResFlow premium sintered mesh  
Injection control devices  
ResInject direct wire-wrapped

## Specialty Screens

MeshRite compressed mesh  
Dominator direct wire-wrapped  
Extractor wire-wrapped

Screens that deliver  
**reliable** sand control  
performance long term

# Better design from engineering to wellsite implementation

## SPECIALTY SCREENS. APPROPRIATE SOLUTIONS

Completion parameters vary greatly, which is why the Reslink line offers sand screens for more specific applications—allowing Schlumberger to design the solution most appropriate to your well.

### Dominator screen

The Dominator\* direct wire-wrapped screen is designed for shorter and less demanding openhole wells, where tension, compression, and torque operating limits are not as severe.

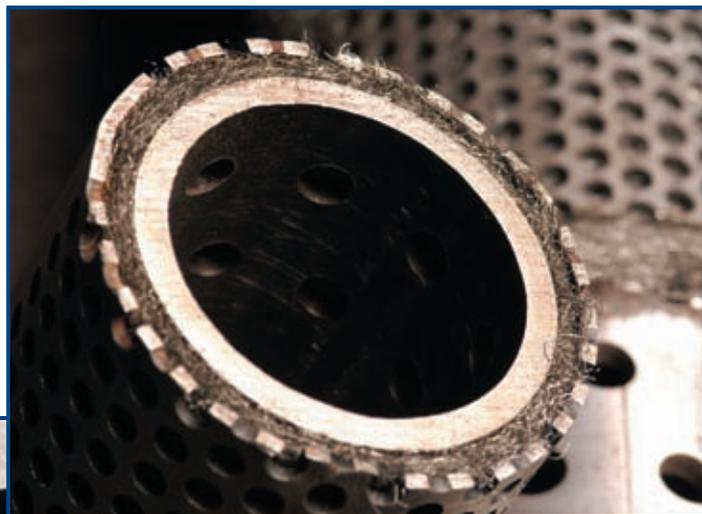
### Extractor screen

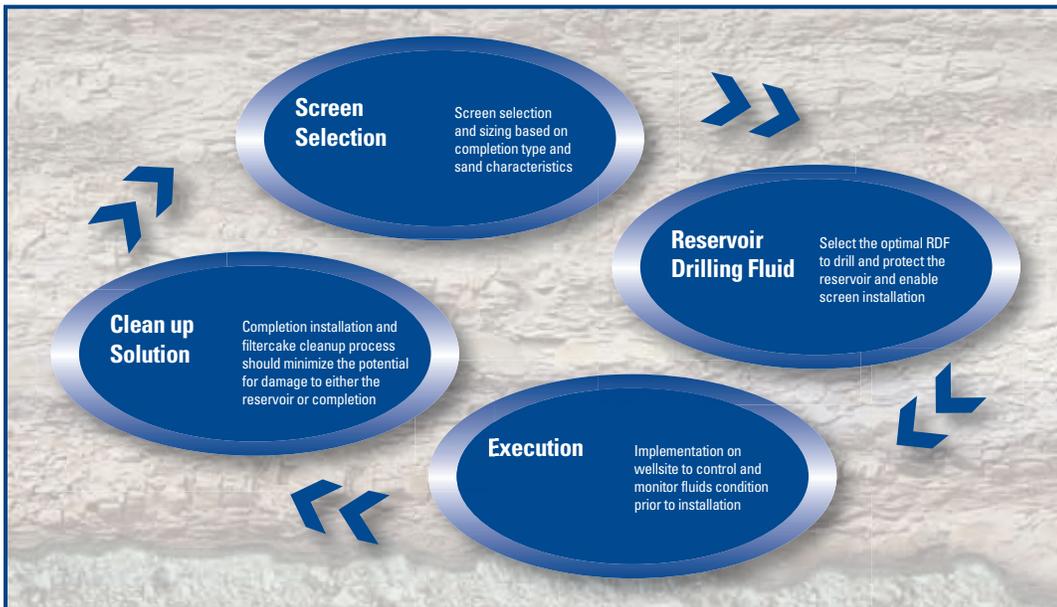
The Extractor\* wire-wrapped screen allows complete customization to provide efficient sand control across a full range of specific well applications. It features an exclusive slip-ring design that isolates the wire-wrap jacket from tension, compression, and torque loads, and the assembly can be outfitted with a protective shroud for standalone applications. These features provide outstanding durability and erosion resistance in a screen that cannot be plugged by fines or produced solids.

### MeshRite screens

The MeshRite\* stainless steel compressed mesh screen patented technology delivers superior sand control performance in the harshest rig site and downhole conditions. A product of extensive research and field testing, MeshRite screens are proven to work with all sand control approaches, including stand-alone, openhole gravel packs, and through-tubing in oil and gas reservoirs and heavy oil applications. These ultrarugged screens can be handled on the rig as though they were tubing or casing. They also produce very low pressure drops and a tortuous flow path to dissipate energy, mitigate screen erosion, and extend completion life.

*The MeshRite screen is a unique sand screen using a patented compressed mesh filter medium construction. Its continuous stainless steel fibers are rolled around the base pipe at a controlled density and compression ratio to form a screen that has one of the highest areas open to flow in the industry.*





*Engineering the interface between the formation, the filtercake, the reservoir drilling fluid, and the screen is key to the success of stand-alone screen completions.*

#### ENGINEERED INTERFACES. BETTER DESIGN, FROM SCREEN AND FLUIDS ENGINEERING TO WELLSITE IMPLEMENTATION.

Another key component in the complete Reslink solution is the engineering of the screen-to-reservoir drilling fluid interaction. The Reslink engineering approach begins when the screens are selected and sized based on the formation sand characteristics. The reservoir drilling fluid parameters are then adjusted to protect the reservoir as well as enable flowback through the screens. The filtercake removal is also optimized by use of unique clean-up processes. The engineers on the wellsite ensure that the wellbore and fluid condition are suitable for a successful installation.

#### ALL THE TOOLS YOU NEED TO GET THE COMPLETION DONE

In addition to our full line of Reslink screen options, Schlumberger will provide whatever tools are necessary to the success of the completion. These include the following:

- accessories for openhole zonal isolation and annular flow restriction
- secondary recovery tools such as punch housings
- screens with protected conduits and deployment systems for continuous conduits
- free rotating centralizers, bullplugs, and reamer shoes in a range of materials, including steel, aluminum, zinc alloy, and polymer.

#### TRANSCEND FAMILY: A HIGHER LEVEL OF COMPLETION SUCCESS

Schlumberger tackles openhole environments with an engineering-driven, total-system approach that features the tools, chemicals, technologies, software, services, and people to extend the life of long horizontal intervals and optimize production.

Design your sand control completion with precision. Mitigate risk up front. Preserve the integrity of the completion. Optimize reservoir recovery. The possibilities are immense with Schlumberger and Reslink openhole screen solutions.



Tackle openhole environments with an **engineering-driven, total-system approach**

# Reslink



## Your trusted advisor

The Transcend family of solutions for openhole completions is supported by Schlumberger's dedicated experts worldwide. With our multidisciplinary industry expertise, we will help you tailor your openhole completions to achieve effective sand control and maximize performance. As a global company, we know the countries, regions, and formations where your projects are located.

As an integral component in the Transcend family of solutions for openhole completions, Reslink openhole screen solutions are one way we build your trust. Contact Schlumberger today.

## Transcend

**In your hands: a full range of openhole sand management services**

- Reslink\* screens and injection and inflow control devices
- AquaPac\* integrated water packing system
- OptiPac\* Alternate Path† system for openhole completions
- IntelliPac\* measurements in real time

[www.slb.com/transcend](http://www.slb.com/transcend)

# Schlumberger