OptiPac XL extended-length Alternate Path gravel-pack screen
Reach more reservoir rock with fewer wells by enabling long, multizone gravel packs

Applications
Openhole gravel-pack completions with extended length and multiple zones

How they improve wells
OptiPac XL* extended-length Alternate Path gravel-pack screens reduce the number of development wells required to access reserves by enabling long, complete gravel packs through multiple zones using shunt tubes. Alternate Path technology provides a means of bypassing sand bridges that prevent long gravel packs when using conventional screens in difficult conditions such as small fracture windows, poor wellbore stability (hole collapse), presence of reactive shale, or filtercake damage with high leakoff.

Building on the field-proven success of the OptiPac* openhole Alternate Path gravel-pack service, the OptiPac XL screen extends your options into longer, hotter, deeper, multizone, and more complex wells with high-pressure shunt tubes and a high-strength gravel-pack manifold. These changes enable gravel packing in HPHT wells with high-density fluid and high shunt friction. The OptiPac XL screen also increases the rate capability, accelerating gravel-pack operations and thus reducing rig time for sand control pumping.

How it works
OptiPac XL screens use shunt tubes to bypass sand bridges and fill in voids that can occur during gravel packing. The screens are designed with transport tubes that carry the slurry past the screen from joint to joint. Each joint has two packing tubes that tie into transport tubes at the top of the joint via a manifold. As bridges form during the gravel-pack operation, nozzles along the packing tubes divert slurry to the next section of open hole between the screen and wellbore, filling the empty spaces in the unpacked annulus. This process continues until the interval is fully packed.

What it replaces
Conventional sand control screens that limit gravel-pack intervals, pumping rates, or both.

Additional information
With more than 500 well installations in the last 20 years, OptiPac service screens have demonstrated the value of the shunt tube technology for operators around the world.

OptiPac XL screen has an enhanced 2x2 shunt system, the first in the industry rated to 450,000 lbm of proppant and 10,000-psi pressure for extended-length gravel packing. It can be used to pack openhole intervals up to 8,000 ft. It saves time during operations by delivering higher gravel concentrations (lower slurry volumes) and higher flow rates as compared with a conventional circulating pack.

OptiPac XL screens can be optimally integrated with Schlumberger openhole shunted mechanical packers and shunt tube isolation valves to enable full openhole zonal isolation.

Gravel-pack lengths: up to 2,438 m [8,000 ft]
Shunt system pressure rating: 10,000 psi [70 MPa] up to 340 degF [171 degC]
Erosion tested: up to 450,000 lbm [204,000 kg] of proppant at 5 bbl/min [0.8 m³/min]