

Infinite depth. Extreme pressure.  
Brutal heat. Mean corrosion.  
Just the place for a thinner umbilical.



#### Engineered materials.

Sandvik specializes in duplex, super-duplex, hyper-duplex steels and other advanced alloys. They are extremely resistant to corrosion caused by salt and aggressive chemicals otherwise threatening.

#### Introducing Sandvik SAF 3207® HD.

A hyper-duplex stainless steel designed to cope with the most aggressive conditions that any umbilical is likely to confront.

Hyper-duplex means greater yield strength, greater pitting resistance, greater corrosion resistance and superior fatigue properties – compared to Sandvik's acclaimed super-duplex, SAF 2507.

What this means for your umbilical is thinner tube walls and lower weight.

Which in turn makes it possible to reach and operate those ultra-deep wells that until now were too costly or too complex to

exploit. And you can do it with a wider temperature and pressure window – despite the thinner walls.

Simply put, umbilicals made with Sandvik's new hyper-duplex are comfortable in environments where other metals can't survive.

Sandvik created the steel umbilical for deep offshore operations. 15 years and 60 million meters later, we're reinventing the technology once again.

This time with an umbilical that's tougher – and thinner.

Sandvik SAF 3207 HD. An extreme material for extreme umbilicals.