RockStrong™ System

Halliburton combines latest-generation impregnated corehead design and advanced BHA modeling technologies in the RockStrong™ system for coring operations in extreme conditions. Designed specifically for high temperature, high pressure environments and hard, abrasive rock where vibration can cause tool damage and compromise coring performance, the RockStrong system incorporates anti-jamming features in a robust coring swivel assembly with no temperature limits and capable of withstanding any pressure regime. Additional vibration mitigation is achieved with advanced BHA modeling that identifies optimum operating parameters for specific applications, while diamond impregnated coreheads deliver high ROP and long life in even the hardest rock, enabling use of longer barrels and longer coring runs.

BEST IN CLASS COREHEAD TECHNOLOGY
The RockStrong system can use any type of corehead, depending on rock strength. In the hardest, most abrasive formations, the system employs Halliburton’s latest generation diamond impregnated coreheads which demonstrate proven ability to achieve fast penetration rates and long life in extreme conditions. Ci3000 series diamond impregnated coreheads have improved ROP four-fold compared to previous products, with ten times longer life, providing the industry’s best in class coring performance.

RELIABLE ANTI-JAMMING DESIGN
Because minimizing vibrations is a key in reducing core jamming, RockStrong anti-jamming design features include a top spacer assembly which acts like a preloaded spring to absorb axial vibrations along the inner assembly. In addition, the double bearing on the shaft keeps the inner barrel in a stable and vibration-free position that helps facilitate smooth core entry.

ENGINEERED VIBRATION MITIGATION
To further ensure smooth performance of the RockStrong system in vibration-inducing environments, Halliburton employs unique BHA modeling programs that model critical vibration RPMs and optimal RPM operating ranges. Based on an advanced understanding of BHA and drillstring dynamics, this advanced capability enables the distance from the bit to be precisely measured and models maximum and minimum vibration levels to achieve optimum coring performance in extreme conditions.