The Latest Technology. The First to the field.
A BETTER APPROACH TO CUTTER TECHNOLOGY

Ulterra OMEGA™ is a modern process that addresses the inadequate annual cutter launches of the past with cutter development that doesn’t stand still. To achieve this, OMEGA Technology combines the development and allocation process with cutter technology under one house for a turn key solution that keeps up with the fast pace of development in the industry.

This approach runs throughout Ulterra, fostering a culture of industry leading success at lightning speed. As BHA’s evolve with new motor and rig capabilities, this can affect how cutters interact with formation during drilling. Simply put, OMEGA quickly delivers new cutter technology that works.

“OMEGA COMBINES PROCESS AND TECHNOLOGY INTO ONE SOLUTION”

WHAT MAKES A GREAT CUTTER?

ABRASIVE STRENGTH
The foundation of any good cutter is solid abrasive resistance. The right combination of diamond feed design, pressing, and deep leaching processes will perform all the way to total depth.

IMPACT TOUGHNESS
Some applications have extreme conditions that require a greater level of diamond toughness. Special diamond formulations balance multimodal grain sizes to achieve greater impact performance.

THERMAL PERFORMANCE
OMEGA Cutters handle and react to heat build up better than the competition. Using industry leading techniques to channel heat to keep the cutting surface cooler, stay sharper, and deliver reliability.

“OMEGA MEANS DEEP LEACHED CUTTERS”
THE OMEGA PROCESS

COMMUNICATION
Ulterra communicates daily with OMEGA Partner engineers as part of the development feedback loop. To get the latest technology to the field fast, Ulterra engineers quickly provide performance analysis back for the next development in cutter technology.

OMEGA PARTNERSHIP
OMEGA partners make up over 90% of the premium PDC market. Each partner has engineering teams and production cells focused exclusively on Ulterra product development.

“ULTERRA IS #1 IN DEVELOPING AND DELIVERING DRILLING TECHNOLOGY TO THE OIL & GAS INDUSTRY.”
- Sales Director for a Leading PDC Supplier

APPLICATION
There is no single cutter that is the best for everything. To get the very best performance, Ulterra OMEGA engineers develop the right technology for your application. Using lean methodology, new technology reaches the field in under 30 days.

Case Study
In West Texas, OMEGA has continuously improved bit dull grades in hard rock formations on longer and longer laterals. Improving with step by step iterations that raise peak performance.

DIAMOND
Where abrasive and impact resistance starts. Engineered using proprietary grain size distribution and processing techniques.

SUBSTRATE
Improves cutter durability with tungsten carbide grade and interface advancements that balance internal stress with maximum bonding strength.

LEACHING
The finishing touch, licensed deep leaching capabilities match depth to each cutter grade for improved thermal stability and game changing performance.

THE TECHNOLOGY INSIDE
OMEGA delivers continuous improvement on the three most critical characteristics of a cutter; resistance to abrasion, impact, and thermal degradation. Using industry leading technology, real world performance is turned into further improvements in Diamond, Substrate, and Leaching formulations.
ADVANCING TECHNOLOGY
Ulterra is constantly developing innovative bit technology to better adapt to changing operating conditions and specific application requirements.

SPLITBLADE™
Get the most from your premium cutters with better cooling and mechanical rock interaction for improved ROP, steer-ability, and tool control.

COUNTERFORCE®
The unique cutter configuration minimizes bit-reactive torque and vibration, providing more lateral stability and improving drilling efficiency.

ULTERRA IS DEDICATED TO MAXIMIZING THE EFFICIENCY OF OIL AND GAS DRILLING OPERATIONS THROUGH THE USE OF GROUNDBREAKING DRILL BITS AND APPLICATION TECHNOLOGIES. THROUGHOUT THE WORLD’S DRILLING BASINS, WE ARE BUILDING OUR REPUTATION ON PERFORMANCE.

LET ULTERRA SHOW YOU HOW WE CAN IMPROVE YOUR DRILLING EFFICIENCIES AND LOWER YOUR COSTS. VISIT ULTERRA.COM/OMEGA OR CALL 1-844-ULTERRA.