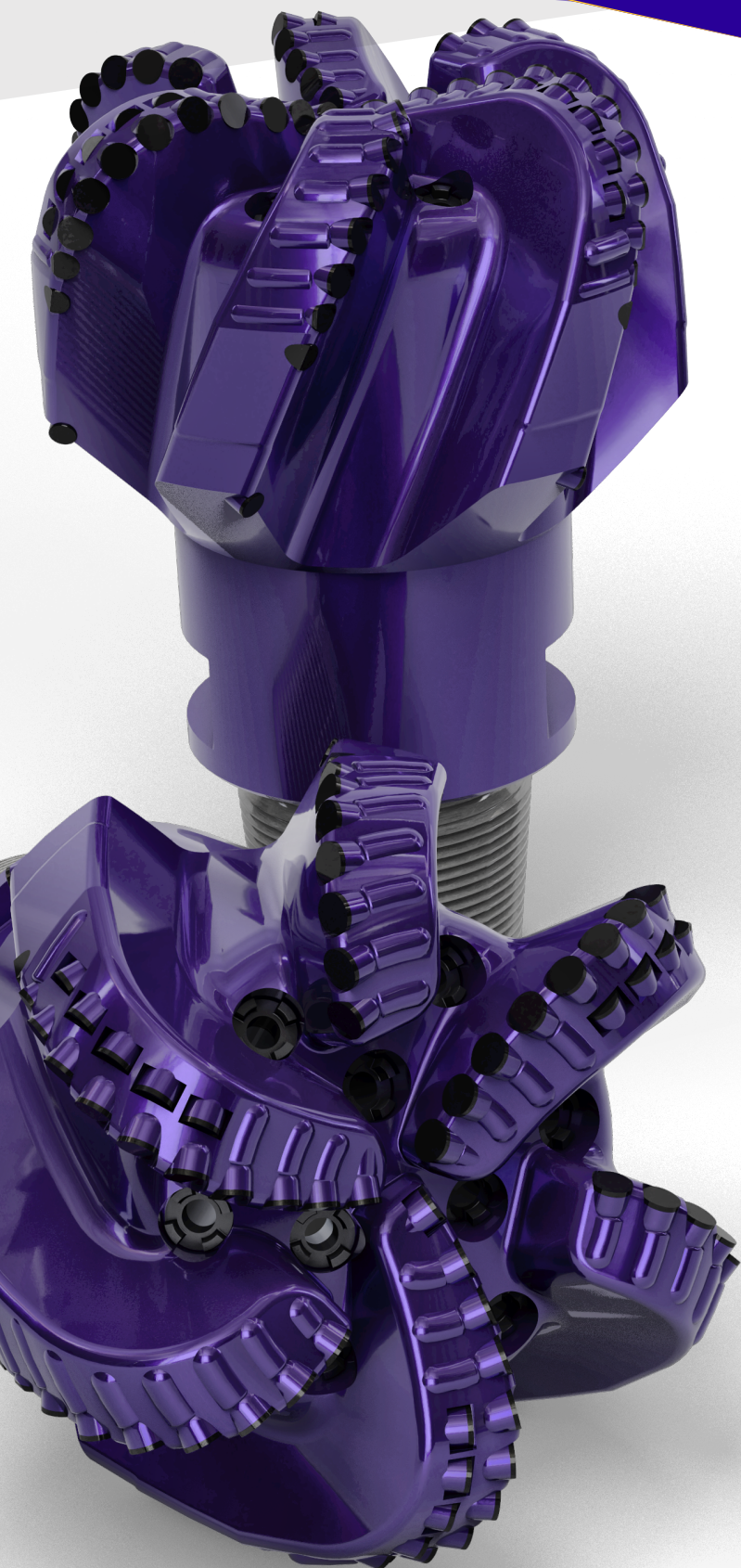


# FUSION+<sup>®</sup>

## Hybrid PDC/Impreg Bit



Drilling with FUSION+ hybrid bits optimizes your performance and avoids a trip change when encountering consolidated sandstones or when moving from softer to harder more abrasive formations. FUSION+ is a highly flexible series that allows materials and design to be quickly adjusted to the requirements of a specific application. Demanding applications are what this hybrid product is designed to conquer.

### Application

- Vertical, Directional, Horizontal, and Tangent.
- For medium to extremely hard formations with high abrasive content.
- For all rotary, motor, and turbine applications.

### Features / Benefits

- Controlled Atmosphere Infiltration reduces oxidation and graphitization to improve bit wear characteristics and durability.
- Pelletization prevents diamond aggregate and reduces areas of low diamond concentration to a more uniform stone distribution within the matrix material.
- Diamond Impregnated HIP Segments undergo a sintering process to achieve reduced porosity and are then placed in the face of the bit in specific patterns determined by SPOT-DN, Varel's proprietary design software.
- Optimum Hydraulics are utilized as each design undergoes extensive computational fluid dynamics evaluation to ensure regrinding and recirculation of cuttings is eliminated.
- Using Force3 Cutters provides for the best cutter for the application. In harder formations as the cutters wear down the HIP segments are exposed to the formation providing a dual cutting action.