

## MATERIALS & COMPONENTS FOR PDC MATRIX DRILL BITS

### MATERIALS & COMPONENTS

- BLENDED MATRIX POWDERS (BODY AND FACE)
- CRYSTALLINE TUNGSTEN POWDER (CTP - SHOULDER POWDER)
- CAST TUNGSTEN CARBIDE
- SPHERICAL CAST TUNGSTEN CARBIDE
- MONO TUNGSTEN CARBIDE
- INFILTRATION ALLOYS
- PLIABLE OPTIMUM WEAR (POW)
- CEMENTED TUNGSTEN CARBIDE NOZZLES
- POLYCRYSTALLINE DIAMOND CUTTERS (PDC)
- BRAZE ALLOYS
- THERMALLY STABLE POLYCRYSTALLINE (TSP) INSERTS

### SERVICES

- SUSTAINABILITY
- ASSET MANAGEMENT
- BIT RECOVERY
- PRODUCT DEVELOPMENT
- ENGINEERING TECHNOLOGY

#### Corporate Office:

283 Lockhaven Dr., #300  
Houston, TX 77073  
877.652.8518  
info@diapac.com

#### Sales / Customer Service:

3416 Pinemont Dr.  
Houston, TX 77018  
Phone: 713.715.6300  
Fax: 281.768.7919  
orders@diapac.com

D I A  P A C

DIAPAC.COM



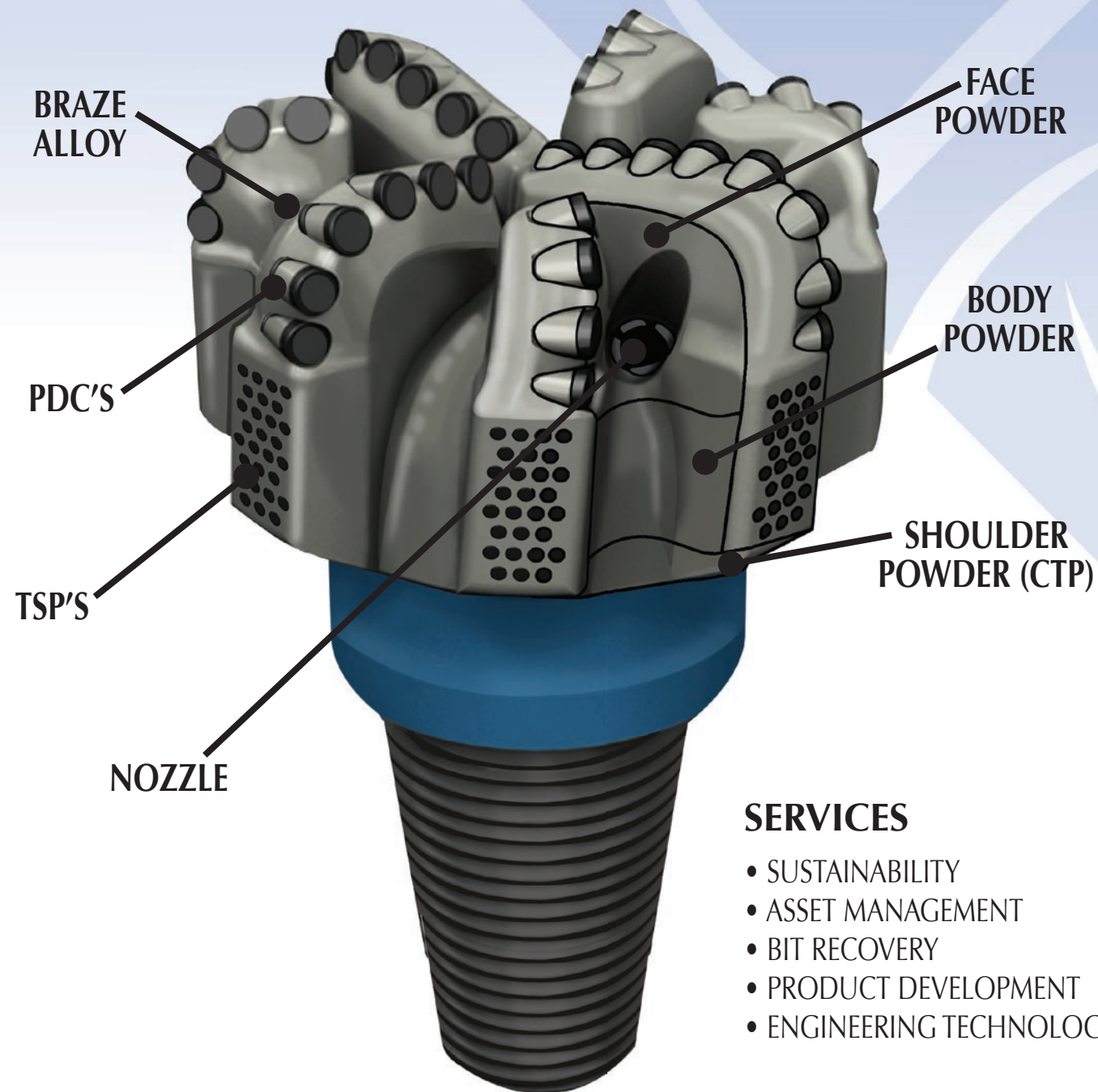
CERTIFICATE NUMBER  
6847



**Proven Performance**

DiaPac™ is an internationally recognized leader in high performance products that include tungsten carbide powders, wear resistant surface coatings and cemented carbides for use in oil & gas production, mining, construction and manufacturing operations.

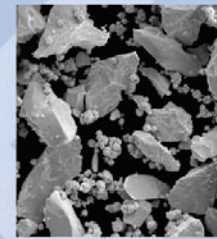
**PDC Matrix Drill Bits**



**SERVICES**

- SUSTAINABILITY
- ASSET MANAGEMENT
- BIT RECOVERY
- PRODUCT DEVELOPMENT
- ENGINEERING TECHNOLOGY

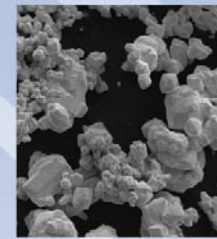
**Materials & Components for PDC Matrix Drill Bits**



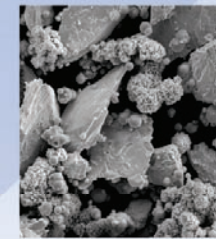
- **Blended Matrix Powders (Body & Face)**  
- Proprietary Blends of Carbide Particulates Tailored for Optimal Combinations of Wear and Strength



- **Infiltration Alloys**  
- Copper Based Alloys Engineered for Optimal Fluidity and Bonding of the Carbide Particles



- **Crystalline Tungsten Powder (CTP - Shoulder Powder)**  
- Machinable Interface between Steel Blank and Matrix Powder



- **Pliable Optimum Wear (POW)**  
- POW Materials are Proprietary Blends of Specific Hard Particles Engineered for Maximum Erosive and Abrasive Wear Resistance



- **Cast Tungsten Carbide**  
- Key Wear Component in Matrix Powder Blends



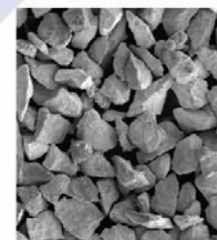
- **Cemented Tungsten Carbide Nozzles**  
- Industry Standard Hex and Castle Top Nozzles Available in all Sizes  
- Custom Sizes and Designs by Request



- **Spherical Cast Tungsten Carbide**  
- Wear Modifier in Matrix Powder Blends



- **Polycrystalline Diamond Cutters (PDC)**  
- A Sintered Layer of Polycrystalline Diamond Bonded to a Tungsten Carbide Substrate



- **Mono Tungsten Carbide**  
- Key Wear Component in Matrix Powder Blends



- **Braze Alloys**  
- Silver Based Alloys in Wire, Rod and Disc Form for Brazing of PDC Cutters



- **Thermally Stable Polycrystalline (TSP) Inserts**  
- Shaped Pieces of Polycrystalline Diamond with High Abrasion Resistance and Thermal Stability up to 1150° C