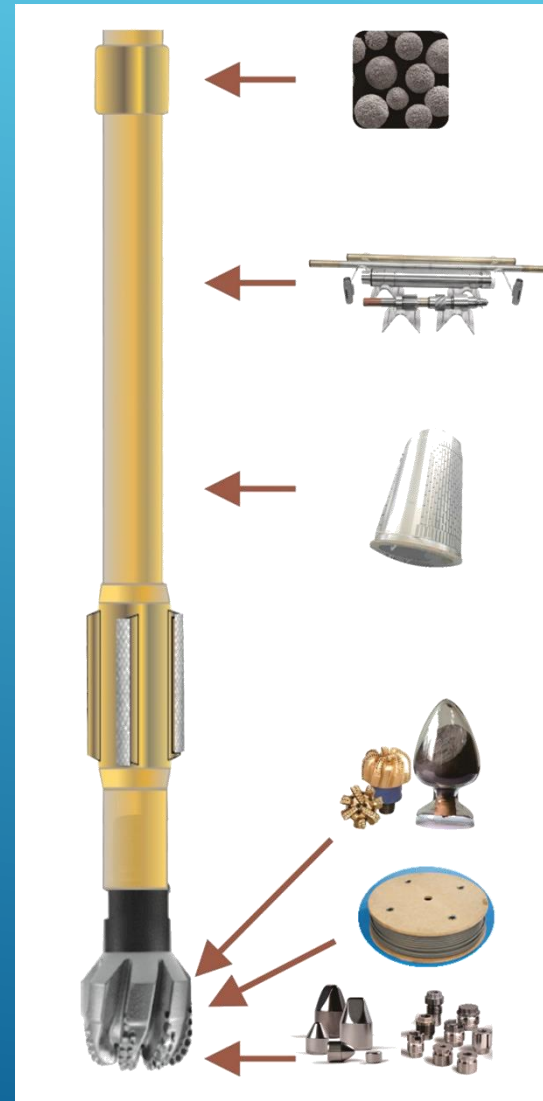




PRODUCTS FOR OIL DRILLING & EXPLORATION

Products for Oil Drilling & Exploration



Hardfacing & Hardbanding material

LWD & MWD Carbide Components

Tungsten Carbide Radial Bearing

Matrix powders

Welding Material for Drill Bits

Carbide Components of Drill Bits

LWD & MWD Carbide Components

Application

The products are mainly used in vertical well drilling tools, pulse drilling tools, hydraulic oscillator, and LWD & MWD with the function of flow diversion, flush resistance and seal of the slurry and indicate the slurry pressure and pulse signal.



LWD & MWD instrument



LWD & MWD Carbide Components



Main products

Mushroom head (main valve core) in LWD & MWD, flow restriction ring, nose cap, flow divider, flow spacer sleeve, pulse valve, rotor, upper and lower bearing sleeve, wear sleeve, and other mechanical parts.

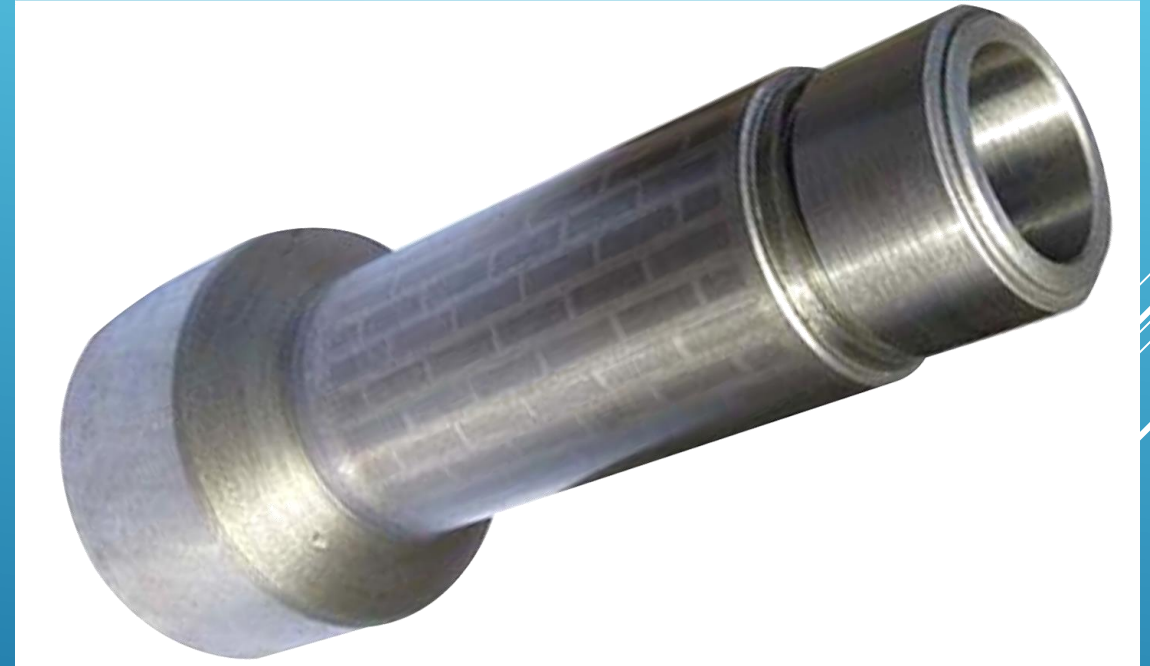
TC Radial Bearing

Application

Mainly used for producing sleeves and axis core where severe wear and corrosion resistance are required. The bearing is made of carbon steel reinforced by carbide tiles and tungsten carbide overlay. The life cycle is increase about 2 to 4 times.

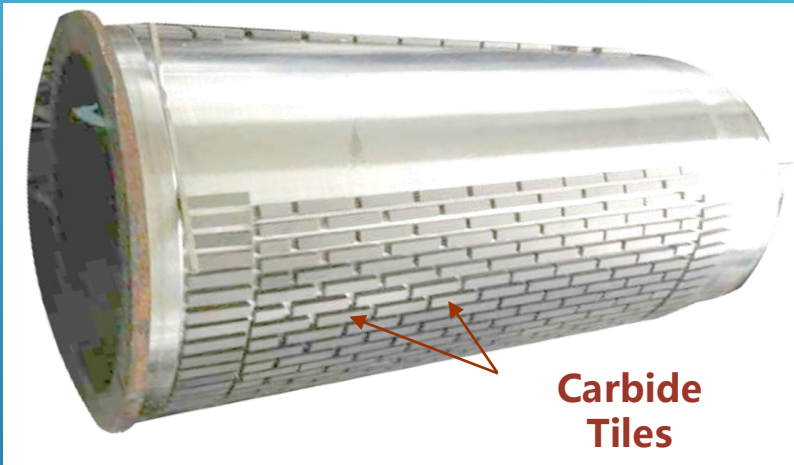
Main products

Cemented carbide tiles, spherical cast tungsten carbide, angular cast tungsten carbide powder



TC Radial Bearing

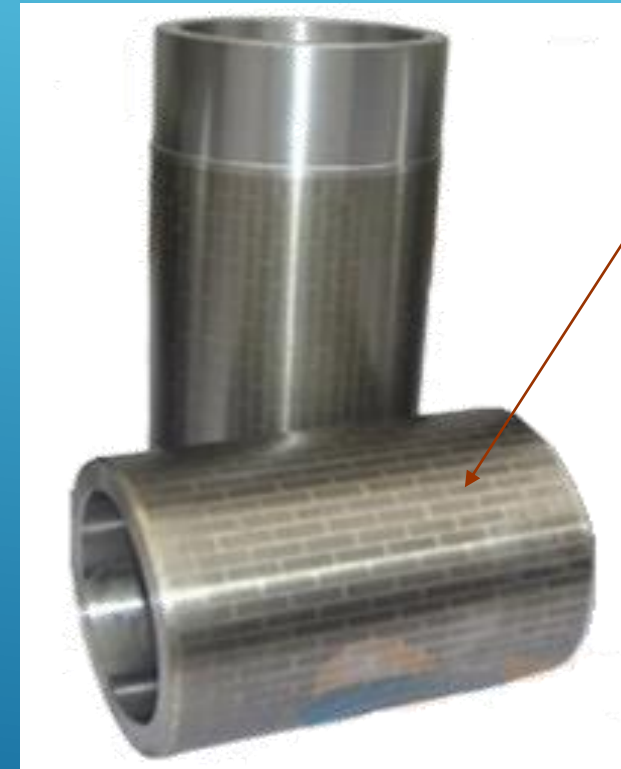
Carbide Tiles



Application

Spherical cast tungsten carbide powder is used to produce PDC matrix powder, premixed powder for Plasma Transferred Arc (PTA) & flame spray, welding rod(wire). These products are widely used to produce PDC drill bits and tools, filtration parts, surface reinforcement by flame spray and PTA process.

Spherical Cast Tungsten Carbide



Carbide Components of Drill Bits

Application

Mainly used to cool bits, flush sediment, clean downhole cuttings and assist hydraulic rock breaking for PDC bits & roller cone bits.



Thread Nozzle

Carbide Components of Drill Bits

Application

Used to produce substrate of diamond cutters used in geological prospecting and oil & gas field exploration.



Substrates of Diamond Cutters

Well Completion Tools

Application

Fracturing nozzle is the key component of hydraulic jet fracturing tool for sandblasting and perforating. It is widely used for fracturing low permeability reservoir well, old well stimulation, shale gas horizontal wells layered and segmented fracturing.

Fracturing Nozzles



Technical level

Ultra fine grain size, high density without porosity, excellent wear resistance, acid resistance, and alkali resistance. High Hardness.: HV10 > 2500



Cemented Carbide Fracturing Nozzle

Carbide axle sleeve for submersible oil pump

Application Field

Cemented carbide axle sleeve is mainly used to provide rotate support, centralize, anti-thrust and seal of motor, centrifuge, protector, separator shaft in submersible pump.

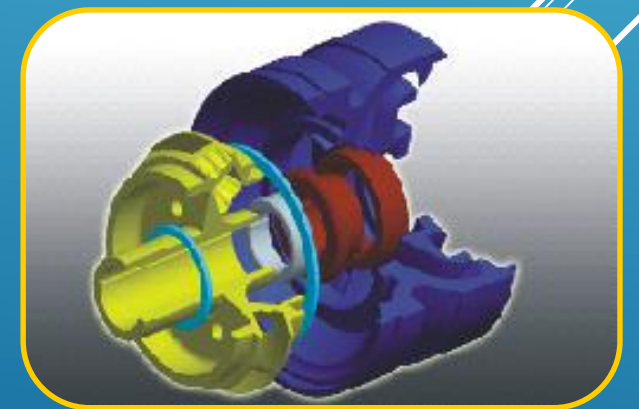


Technical Level

Excellent wear and corrosion resistance with high shape precision. The service life is as long as 20,000 hours.



Electrical Submersible Pump



Assembly sketch

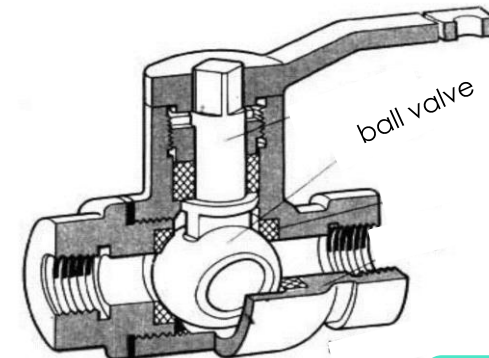
Carbide Valve & Valve Seats

Application

Mainly use for control facility on oil fuel and gas transferring.



Ball Carbide Valve & Valve Seats



Valve material of construction

Carbide Valve & Valve Seats

Gate Carbide Valve & Valve Seats



THANK YOU

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