



XDS Diamond-Impreg Shoe Options

Plain XDS is set with 30-40 mesh Diamond Grit that is impregnated into the first 1/2" of the shoe face to act as a very tough diamond grinding rock. As work is done individual diamonds will dull from abrasion or impact. They will then be sloughed off from the face and fresh grit will be exposed. They used very light WOB, medium RPM, and create particle sized cuttings.



Our HYBRID XDSC adds 3/8" round carbide chip breaker inserts to each leading edge to take advantage of softer materials such as seal components of packers, mild steel, cement, dehydrated mud.

Our Matrix shoes use powdered tungsten carbide that is compacted into a mold with a central mild steel component around which is packed with these powders. The mass is then furnace heated to 2150F where a binder alloy is melted to flow through the powders by capillary action to bond all components together and to the steel blank. Carbide Inserts will become an integral part of the matrix and will not come out like torch-laid inserts do.



Our HYBRID XDSS adds small sharp Star-Bide carbide inserts that are slightly exposed to help cut certain alloys that work harden such as 13 chrome, 9 chrome, inconel 718, and incology 925

