



Case History
STX Packer

Short Bit & Tool Co.
225 Gold St
Garland, Texas 75042
972-205-1011



4 1/2" x 3 5/8" XDS #S-234

Data Report

Packer Type = ?

Made 7"

WOB = unk

ROP = unk

Ran two WC shoes to release packer



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An XDS Diamond-Impreg Burn Shoe

Has a matrix head that has powdered tungsten carbide that is molded and furnace infiltrated at 2150F. About 1/2" of the head has 25% by volume that is Diamond Grit that is 30-40 mesh (about .020"-.025")

The infiltrated matrix has 25% diamond which as a form of carbon does not adhere to other materials. The rest of the matrix is a blend of soft Tungsten W2 and Tungsten Carbide WC (48%) all held together with a Nickel Alloy binder (27%)

That gives the impreg matrix unique properties of being very abrasion resistant because of the diamond grit held in the mix mechanically by the relatively soft W2/WC blend that can wear away to expose fresh grit.

If excessive WOB is run the matrix cannot withstand the compressive force (it is only as strong as brass) and can wear prematurely.

The WOB force we recommend is about 100 to 400 psi as transferred through the area of the head. In the case of a 4 1/2" x 3 5/8" you have about 90% of the 4 1/2" area (15.9) minus the 3 5/8" area (10.3) which is about 5 sq.in., so 500 to 2,000 lbs would be the range we would recommend with the lower part of that range being best.

