



Mid-Western Machinery Co., Inc.
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Tri-Cone Bits

Steel Tooth Rock Bits

(email us for pricing at info@mwdrill.com)

TR1H (IADC 3-2-1)

Very Hard Formations



Hard, abrasive formations requiring maximum resistance to gage wear are best drilled with the **TR1H** bit. The bit provides the necessary chipping and crushing action on bottom and drills efficiently in formation such as siliceous limestone, dolomite, sandstone and granite. The gage surfaces of the cones have webs joining adjacent heel teeth, which insures great resistance to wear. Inner row teeth are short and closely spaced to withstand maximum stress.

This bit is designed to drill most efficiently in hard formations with weights ranging from 3,000 to 8,000 pounds per inch of bit diameter. Rotary speeds should decrease from 100 to 40 RPM as weight is increased.

TR1T (IADC 3-1-1)

Medium Hard to Hard Formations



The **TR1T** operates best in hard abrasive formations such as hard sandy limestone, limestone interspersed with cherty streaks, broken shale, dolomite, granite, and abrasive sand. This bit is especially constructed to withstand the stresses imposed in drilling hard formations under heavy weights. The gage teeth are "T" shaped and hard faced with tungsten carbide. There are no interruptions on the heel row teeth and the inner row teeth are short and closely spaced for maximum strength. Other features include balanced bearing design and extra thick cone shells. The most economical bit performance is obtained with weights of 3,000 to 8,000 pounds per inch of bit diameter. Corresponding rotary speed should range between 100 and 40 RPM. It is recommended practice that the rotation speed should decrease when increasing drilling weight.

TR74 (IADC 7-4-1)

Medium Hard to Hard Formations



The **TR74** features a minimum offset cutting structure design and all dome shaped tungsten carbide inserts. It is designed to drill hard and abrasive formations such as quartzite, granite, cherty iron ores, and copper porphyry. As with other Throop bit designs, this design features shirrtail hard facing for maximum resistance to bearing wear.

The drilling weights should range from 1,500 to 8,000 pounds per inch of bit diameter. As drilling weights are increased the rotational speed, which ranges from 120 to 50 RPM, should be decreased. Near the bit stabilization is highly recommended for maximum bit life, and pull down drills should be equipped with shock absorbers.

Sealed Roller Bearing Bits



Sealed roller bearing bits, available in **both steel tooth and tungsten carbide designs**, offer extended bearing life to utilize the full life of the cutting structure.

The lubrication system for Throop Sealed Roller Bearing Bits, consists of a grease reservoir with passages to the bearings, a synthetic rubber diaphragm and a steel reservoir cap. The lubrications system equalizes the internal and external pressure across the seal, which serves to increase seal life.

Order Today! 7am - 4pm CST 1-417-624-2400