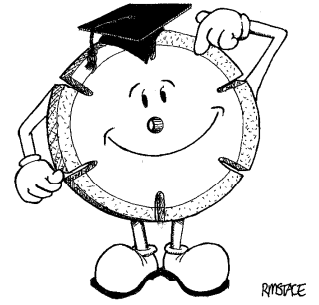


DIAMOND BLADEMAN

DIAMOND TIPS



PRICE vs PERFORMANCE

An increasing number of diamond blade suppliers in the world today sell blades on price. One is led to believe that any 14”(350mm) blade for concrete is the same as any other blade for concrete and that the only value determinant is price. Let's examine this.

Diamond blades have critical components ie. Diamond, metal bonding, steel core, segment moulding system, protective segments, assembly techniques, design objectives and intended tool consistency.

Concretes vary in strength, aggregate hardness, aggregate size, sand and fines, steel concentrations etc.

Diamond blade designers will need to allow for these concrete variables, as well as machine parameters, such as the mechanical condition of the saw.

In the case of a very hard aggregate cured concrete, a diamond blade with structurally unsound diamond will suffer from rapid wear. **Low priced diamond for blades is usually not as structurally tough as a similar sized diamond which costs more.**

Diamonds are available from many sources:- natural diamond and synthetic diamond is available. It varies in price per carat according to size, purity, toughness and other factors.

Bonding metals are available from many sources also. Metals which perform well usually cost more to produce and supply than poor performers. Bonding metals may need to mechanically and chemically hold the diamonds.

Diamond blades can be laser welded together, brazed, sintered or laser formed. Laser welding plant is more costly than brazing equipment and produces a stronger joint which is not affected by dry cutting temperatures.

Diamond blades use special steel cores. These steel cores are required to resist stress and wear in the cutting process. Better steels hold their tension better and support the diamond segments longer and more safely.

Attention to these details can produce a safer more productive diamond blade which lowers cutting costs. The converse is also true.

