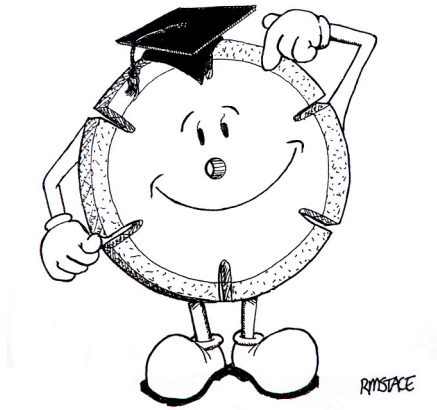




Asphalt cutting techniques for maximum diamond blade life.

Cutting asphalt is easier than cutting cured concrete but diamond blade selection is important if long life is to be achieved.

Asphalt is generally relatively soft. Asphalt cutting can be tricky, not because it is hard to cut, but because it is too easy. Asphalt is composed of more than 90% aggregates and a petroleum based asphalt "glue". Sometimes the aggregate in the asphalt is small (Hotmix -easier to cut-longer blade life potential) sometimes large(Chipseal-harder to cut-shorter blade life potential). Sometimes the aggregate is hard (shorter blade life potential) sometimes it is relatively soft (longer blade life potential)

To further complicate matters asphalt can be very abrasive when cut.

As diamond blades self sharpen by the cutting operation erosion of the metal bond (Matrix) holding the diamonds, the bond can wear quicker than the diamond it is holding. To prevent premature loss of the diamond, and short blade life, the diamond blade manufacturer will offer different asphalt blades with different abrasion resistance to allow maximum life to be obtained in different conditions.

Generally a hard bond (Abrasion resistant) blade will be specified for asphalt versus a soft bond blade for hard cured concrete.

The high abrasion experienced when cutting into the undercoarse scours the diamond blade steel core immediately below the diamond segment, on the joint line, weakening the blade. Special features to resist this steel core

abrasion and increase diamond blade life, and safety, are built in to the asphalt blades according to expected maximum life and or cost/ price issues.
N.b. depth of the asphalt layer can vary greatly making it difficult with small saws to cut only asphalt

Water flushing the diamond blade during cutting is absolutely essential to long blade life and low cutting costs. Large bore water delivery pipes correctly positioned on either side of the blade near the flanges at 12 o'clock are essential. 20 litres approx of water a minute to the blade will result in maximum blade life and efficiency.

There are however other issues such as environmental pollution to consider therefore adequate vacuum slurry removal systems must be in place.

Diamond blademan div

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