



Blade Operating Instructions

- Asahi Diamond Industrial's concrete and Asphalt Diamond Blades have been designed to operate at minimum noise levels compliant with current operating practice in the Industry. Noise reduced Blades are available on request. Where necessary, segment protection is achieved by inserting tungsten carbide "slurry disrupters" in Blade gullets at regular intervals. All Blades are designed to operate in a clockwise direction with the tungsten carbide disrupter leading, or where the abrasiveness of the material being cut does not warrant the inclusion of a disruptor an arrow indicating the direction of the rotation is marked onto the Blade.
- Diamond Blade cutting efficiency and life is substantially affected by any spindle run-out of machine vibration during operation. The greater the vibration and run-out in the machine (Blade), the harder the bond material required for satisfactory operation. The cutting rate falls as the bond gets harder and the Diamonds tend to smash as the Blade runs out, the costs of cutting tend to increase.
- Regular checks of the machine and Blade alignment will result in cost savings to the user.
- The optimum machine power required to obtain maximum Blade performance varies according to cutting conditions and the materials to be cut. A smaller Diamond Blade on a medium horsepower machine will require a harder bonding material than a larger diameter Blade in the same material.
- With machine power large enough to use Blades at high cutting rates, hard bonds are required to prevent fast wear under high speed cutting conditions. The same bonds used on low power machines give low rates of cut, generate excessive heat and, in extreme cases, produce centre (Core) cracks at the base of the gullets.
- Flange diameter influences the directional accuracy of saws. The largest possible flanges are recommended. Never use less than 200mm diameter flanges on Blades up to 450mm diameter.
- Insufficient water will inhibit the effective operation of a saw Blade. Use as much water as is necessary to prevent overheating and remove slurry from the cut.
- Regularly check that the machine bearings are in good working order and that when mounted on the spindle there is no Blade radial movement. The horizontal traverse of the saw must be parallel to the plane of the Blade. Your machine handbook will detail permissible tolerances and adjustment instructions.

